

## UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

#### LUCKNOW

Petition No. 988/2014

#### DETERMINATION OF AGGREGATE REVENUE REQUIREMENT (ARR) AND TARIFF FOR FY 2015-16

AND

#### TRUE-UP OF ARR AND REVENUE FOR THE FINANCIAL YEAR FY 2012-13

FOR

#### MADHYANCHAL VIDYUT VITRAN NIGAM LIMITED

ORDER UNDER SECTION 62 & 64 OF

THE ELECTRICITY ACT, 2003

June 18, 2015



# TABLE OF CONTENTS

| 1. | BACKG        | ROUND 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:1  | 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 1  | 17 |
| 3. | PUBLIC       | HEARING PROCESS   | 18 |
|    | 3.1          | OBJECTIVE:  | 18 |
|    | 3.2          | PUBLIC HEARING:   | 19 |
|    | 3.3<br>TARII | VIEWS / COMMENTS / SUGGESTIONS / OBJECTIONS / REPRESENTATIONS ON TRUE-UP / ARR /<br>FF PETITION | 19 |
|    | 3.4          | TIME OF DAY TARIFF  | 20 |
|    | 3.5          | REGULATORY SURCHARGE 2  | 25 |
|    | 3.6          | LOAD FACTOR REBATE  | 28 |
|    | 3.7          | KVAH BILLING  | 29 |
|    | 3.8          | TARIFF HIKE   | 30 |
|    | 3.9          | SINGLE POINT BULK SUPPLY  | 34 |
|    | 3.10         | T&D LOSSES AND AT&C LOSSES  | 37 |
|    | 3.11         | PRE-PAID METERING4  | 17 |
|    | 3.12         | TARIFF REVISION FOR LMV-1 CATEGORY  | 18 |
|    | 3.13         | TARIFF FOR LMV-10 CATEGORY5   | 50 |
|    | 3.14         | QUALITY OF POWER AND ROSTERING5   | 52 |
|    | 3.15         | COMPLAINCE OF DIRECTIVES5   | 54 |
|    | 3.16         | MINIMUM CONSUMPTION CHARGES5  | 55 |
|    | 3.17         | FIXED CHARGES AND ENERGY CHARGES5   | 58 |
|    |              |   | 52 |



|    | 3.19  | HIGH COST OF POWER PURCHASE                                   | 63 |
|----|-------|---|----|
|    | 3.20  | TARIFF FOR TAJ TRAPEZIUM ZONE                                 | 66 |
|    | 3.21  | RECOVERY OF ARREARS   | 67 |
|    | 3.22  | METERING AND BILLING  | 69 |
|    | 3.23  | REDUCED SUPPLY HOURS  | 78 |
|    | 3.24  | OPEN ACCESS   | 79 |
|    | 3.25  | AUDIT OF ACCOUNTS   |    |
|    | 3.26  | CROSS SUBSIDY AND CROSS SUBSIDY SURCHARGE                     | 81 |
|    | 3.27  | TARIFF FOR TELECOM TOWERS                                     | 83 |
|    | 3.28  | TARIFF STRUCTURE  | 85 |
|    | 3.29  | PUBLIC PARTICIPATION  | 87 |
|    | 3.30  | SUB STATION CAPACITY  |    |
|    | 3.31  | ENCOURAGING RENEWABLE ENERGY                                  |    |
|    | 3.32  | OTHER GENERAL ISSUES  |    |
| 4. | TRUIN | G UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2012-13          | 93 |
|    | 4.1   | INTRODUCTION  | 93 |
|    | 4.2   | POWER PURCHASE EXPENSES                                       | 93 |
|    | 4.3   | TRANSMISSION CHARGES  |    |
|    | 4.4   | O&M EXPENSES  |    |
|    | 4.5   | INTEREST AND FINANCE CHARGES                                  |    |
|    | 4.6   | DEPRECIATION  |    |
|    | 4.7   | PRIOR PERIOD EXPENSES   |    |
|    | 4.8   | PROVISION FOR BAD AND DOUBTFUL DEBTS                          |    |
|    | 4.9   | RETURN ON EQUITY  |    |
|    | 4.10  | REVENUE SUBSIDY FROM GOUP                                     |    |
|    | 4.11  | ADDITIONAL SUSBIDY REQUIREMENT                                |    |
|    | 4.12  | REVENUE SIDE TRUING UP  |    |
|    | 4.13  | REVENUE FROM SALE OF POWER                                    |    |
|    | 4.14  | ARR AND REVENUE GAP/ (SURPLUS) FOR FY 2012-13 AFTER TRUING UP |    |
| 5  | ANNU  | AL REVENUE REQUIREMENT FOR 2015-16                            |    |



| 5.1  | INTRODUCTION  | . 124 |
|------|---|-------|
| 5.2  | CONSUMPTION PARAMETERS: CONSUMER NUMBERS, CONNECTED LOAD, SALES       | . 124 |
| 5.3  | DISTRIBUTION LOSSES AND ENERGY BALANCE                                | . 143 |
| 5.4  | ENERGY AVAILABILITY   | . 150 |
| 5.5  | POWER PROCUREMENT FROM STATE GENERATING STATIONS                      | . 152 |
| 5.6  | POWER PROCUREMENT FROM CENTRAL GENERATING STATIONS                    | . 159 |
| 5.7  | POWER PROCUREMENT FROM IPPS / JVs                                     | . 169 |
| 5.8  | POWER PROCUREMENT FROM OTHER SOURCES                                  | . 172 |
| 5.9  | POWER PROCUREMENT FROM BILATERAL SOURCES                              | . 174 |
| 5.10 | FUEL & POWER PURCHASE COST ADJUSTMENT SURCHARGE (FPPCA)               | . 177 |
| 5.11 | SUMMARY OF POWER PURCHASE   | . 190 |
| 5.12 | APPROVED MERIT ORDER DISPATCH   | . 197 |
| 5.13 | ANNUAL REVENUE REQUIREMENT OF MVVNL FOR FY 2015-16                    | . 200 |
| 5.14 | POWER PROCUREMENT COST  | . 201 |
| 5.15 | TRANSMISSION AND SLDC CHARGES   | . 203 |
| 5.16 | ESCALATION INDEX  | . 204 |
| 5.17 | O&M EXPENSES  | . 205 |
| 5.18 | GFA BALANCES AND CAPITAL FORMATION ASSUMPTIONS                        | . 208 |
| 5.19 | FINANCING OF THE CAPITAL INVESTMENT                                   | . 213 |
| 5.20 | DEPRECIATION EXPENSE  | . 215 |
| 5.21 | INTEREST AND FINANCING COST   | . 220 |
| 5.22 | PROVISION FOR BAD AND DOUBTFUL DEBTS                                  | . 225 |
| 5.23 | OTHER INCOME  | . 228 |
| 5.24 | RETURN ON EQUITY  | . 229 |
| 5.25 | CONTRIBUTION TO CONTINGENCY RESERVE                                   | . 229 |
| 5.26 | APPORTIONMENT OF O&M EXPENSES AND INTEREST & FINANCE CHARGES OF UPPCL | . 230 |
| 5.27 | GoUP SUBSIDY  | . 231 |
| 5.28 | ADDITIONAL SUBSIDY REQUIREMENT  | . 232 |
| 5.29 | REVENUE FROM SALE OF ELECTRICITY                                      | . 234 |
| 5.30 | APPROVED ARR SUMMARY, REVENUE FROM TARIFFS AND RESULTANT GAP          | . 235 |



| 6. | OPEN         | ACCESS CHARGES   |
|----|--------------|--|
|    | 6.1          | BACKGROUND:  |
|    | 6.2          | OPEN ACCESS CHARGES  |
|    | 6.3          | WHEELING CHARGES   |
|    | 6.4          | CROSS SUBSIDY SURCHARGE  |
|    | 6.5          | ADDITIONAL SURCHARGE   |
|    | 6.6          | OTHER CHARGES  |
| 7. | TARIF        | PHILOSPHY  |
|    | 7.1          | CONSIDERATIONS IN TARIFF DESIGN  |
| 8. | REVEN        | IUE AT REVISED TARIFF AND REVENUE GAP:   |
|    | 8.1          | REVENUE FROM SALE OF POWER AT APPROVED TARIFF  |
|    | 8.2          | AVERAGE COST OF SUPPLY   |
|    | 8.3          | REGULATORY SURCHARGE   |
|    | 8.4          | TREATMENT OF REVENUE GAP / REGULATORY ASSET ADMITTED IN THIS ORDER   |
| 9. | DIREC        | TIVES  |
|    | 9.1          | DIRECTIVES PROVIDED BY COMMISSION AND THEIR COMPLIANCE BY LICENSEE   |
| 10 | . APPLIC     | CABILITY OF THE ORDER  |
| 11 | . ANNE>      | KURES  |
|    | 11.1         | COMMISSION FORECAST OF CONSUMPTION PARAMETERS FOR FY 2015-16   |
|    | 11.2         | RATE SCHEDULE FOR FY 2015-16   |
|    | 11.3         | SCHEDULE OF MISCELLANEOUS CHARGES  |
|    | 11.4         | LIST OF POWER FACTOR APPARATUS   |
|    |              | LIST OF PERSONS WHO HAVE ATTENDED PUBLIC HEARING AT SITAPUR, GHAZIABAD, ORAI AND<br>AKHPUR IN RESPECT OF PROCEEDINGS FOR ARR & TARIFF DETERMINATION FOR FY 2015-16 378 |
|    | 11.6         | FUEL AND POWER PURCHASE COST ADJUSTMENT SURCHARGE  |
|    | 11.7<br>ORD  | ACTION TAKEN REPORT ON THE DIRECTIONS ISSUED BY THE COMMISSION IN THE ARR / TARIFF<br>ER FOR FY 2015-16  |
|    | 11.8         | ANNEXURE: ORDER DATED MAY 11, 2015 ON FIXATION OF TARIFF FOR PRE-PAID METERING 398   |
|    | 11.9<br>CHAI | ANNEXURE: ORDER DATED MAY 29, 2015 ON PROVISIONAL BILLING AND FACILITATION RGES  |



# LIST OF TABLES

| TABLE 3-1: SCHEDULE OF PUBLIC HEARING AT VARIOUS LOCATIONS OF THE STATE  | 19        |
|--|-----------|
| TABLE 4-1: BULK SUPPLY TARIFF AS COMPUTED BY THE PETITIONER FOR FY 2012-13   | 93        |
| TABLE 4-2: DETAILS OF POWER PURCHASE COST AND PGCIL CHARGES SUBMITTED BY THE PETITIO<br>FY 2012-13                           |           |
| TABLE 4-3: POWER PURCHASE COST AS COMPUTED BY PETITIONER FOR FY 2012-13  | 94        |
| TABLE 4-4: COMPUTATION OF O&M EXPENSES OF UPPCL AS SUBMITTED BY PETITIONER FOR FY 2  | 012-13.96 |
| TABLE 4-5: ALLOCATION OF O&M EXPENSES IN THE RATIO OF INPUT ENERGY AS SUBMITTED BY PE<br>FOR FY 2012-13                      |           |
| TABLE 4-6: ENERGY BALANCE AND BULK SUPPLY TARIFF APPROVED FOR FY 2012-13   | 97        |
| TABLE 4-7: ALLOWABLE POWER PURCHASE COST FOR FY 2012-13  | 99        |
| TABLE 4-8: ALLOWABLE TRANSMISSION CHARGES FOR FY 2012-13   |           |
| TABLE 4-9: ESCALATION INDEX  |           |
| TABLE 4-10: O&M EXPENSES AS APPROVED BY THE COMMISSION FOR FY 2012-13 (Rs. Crore)  |           |
| TABLE 4-11: CAPITAL INVESTMENTS IN FY 2012-13 (Rs. CRORE)  |           |
| TABLE 4-12: CONSUMER CONTRIBUTIONS, CAPITAL GRANTS AND SUBSIDIES RECEIVED AS ALLOWE<br>COMMISSION FOR FY 2012-13 (Rs. Crore) |           |
| TABLE 4-13: FINANCING OF THE CAPITAL INVESTMENTS AS APPROVED BY THE COMMISSION FOR F (Rs. Crore)                             |           |
| TABLE 4-14: INTEREST ON LONG TERM LOAN FOR FY 2012-13 (Rs Crore)   |           |
| TABLE 4-15: ALLOWABLE FINANCE CHARGES FOR FY 2012-13 (Rs. CRORE)   |           |
| TABLE 4-16: INTEREST ON WORKING CAPITAL FOR FY 2012-13 (Rs. CRORE)   | 110       |
| TABLE 4-17: ALLOWABLE INTEREST AND FINANCE CHARGES FOR FY 2012-13 (Rs. CRORE)  | 110       |
| TABLE 4-18: DEPRECIATION CLAIMED BY LICENSEE FOR FY 2012-13 (Rs. CRORE)  | 112       |
| TABLE 4-19: DEPRECIATION EXPENSES FOR FY 2012-13 (Rs. CRORE)   | 113       |
| TABLE 4-20: PRIOR PERIOD INCOME FOR FY 2012-13 (Rs. Crore)   | 114       |
| TABLE 4-21: PROVISION FOR BAD AND DOUBTFUL DEBT FOR FY 2012-13 (Rs. CRORE)   | 118       |
| TABLE 4-22: COMPUTATION OF SUBSIDY REQUIREMENT FOR FY 2012-13 (Rs CRORE)   | 120       |
| TABLE 4-23: REVENUE FOR FY 2012-13 (Rs. CRORE)   |           |
| TABLE 4-24: ARR, REVENUE AND GAP SUMMARY FOR FY 2012-13 (Rs. Crore)  | 121       |
| TABLE 5-1: CONSUMPTION PARAMETERS SUBMITTED BY THE PETITIONER FOR FY 2015-16   | 125       |



| TABLE 5-2: CONSUMPTION NORMS FOR UNMETERED CATEGORIES   | 125     |
|---|---------|
| TABLE 5-3: CONSUMPTION NORMS IN URBAN AREA SUBMITTED BY UPPCL   | 128     |
| TABLE 5-4: PROJECTED HOURS OF SUPPLY AS SUBMITTED BY THE PETITIONER FOR FY 2015-16  | 129     |
| TABLE 5-5: HOURS OF SUPPLY FOR A MONTH BASED ON PROJECTED HOURS OF SUPPLY SUBMITTED BY THE PETITIONER         2015-16             |         |
| TABLE 5-6: CONSUMPTION PARAMETERS APPROVED BY THE COMMISSION FOR FY 2015-16   | 130     |
| TABLE 5-7: NUMBER OF CONSUMERS: HISTORICAL TREND AND APPROVED VALUES FOR FY 2015-16.  | 132     |
| TABLE 5-8: CONNECTED LOAD (KW): HISTORICAL TREND AND APPROVED VALUES FOR FY 2015-16   | 133     |
| TABLE 5-9: ENERGY SALES (MU): HISTORICAL TREND AND APPROVED VALUES FOR FY 2015-16   | 134     |
| TABLE 5-10: NUMBER OF UN-METERED CONSUMERS AS SUBMITTED BY MVVNL  | 137     |
| TABLE 5-11: NUMBER OF UN-METERED CONSUMERS OF FOUR DISCOMS (DVVNL, MVVNL, PUVVNL PVVNL)   |         |
| TABLE 5-12 : ADDITIONAL CONSUMER ADDITION TARGET FOR FY 2015-16   | 141     |
| TABLE 5-13: ADDITIONAL CONSUMER ADDITION AND LOAD ENHANCEMENT UNDERTAKEN BY THE<br>LICENSEES THROUGH VARIOUS DRIVES IN FY 2014-15 | 142     |
| TABLE 5-14: DISTRIBUTION LOSS PROJECTED BY THE DISTRIBUTION LICENSEES FOR FY 2015-16  | 144     |
| TABLE 5-15: SUMMARY OF DISTRIBUTION LOSSES  | 145     |
| TABLE 5-16: DISTRIBUTION LOSS APPROVED BY THE COMMISSION FOR FY 2015-16 FOR DVVNL & KES   | CO147   |
| TABLE 5-17: DISTRIBUTION LOSS APPROVED BY THE COMMISSION FOR FY 2015-16   | 147     |
| TABLE 5-18: APPROVED ENERGY BALANCE FOR FY 2015-16  | 148     |
| TABLE 5-19: ASSUMPTIONS FOR POWER PURCHASE FROM UPRVUNL AS CONSIDERED BY THE DISTRI<br>LICENSEES                                  |         |
| TABLE 5-20: ASSUMPTIONS FOR POWER PURCHASE FROM UPJVNL AS CONSIDERED BY THE DISTRIBULICENSEES                                     |         |
| TABLE 5-21: DETAILS OF POWER PURCHASE COST FROM UPRVUNL STATIONS FOR FY2015-16 AS SUB<br>BY DISTRIBUTION LICENSEES                |         |
| TABLE 5-22: DETAILS OF POWER PURCHASE COST FROM UPJVNL STATIONS FOR FY2015-16 AS SUBM<br>DISTRIBUTION LICENSEES                   |         |
| TABLE 5-23: ASSUMPTIONS FOR POWER PURCHASE FROM UPRVUNL AS CONSIDERED BY THE COMM   |         |
| TABLE 5-24: ASSUMPTIONS FOR POWER PURCHASE FROM UPJVNL AS CONSIDERED BY THE COMMIS  | SION157 |
| TABLE 5-25: APPROVED COST OF POWER PURCHASE FROM UPRVUNL STATIONS FOR FY 2015-16  | 158     |



| TABLE 26: APPROVED COST OF POWER PURCHASE FROM UPJVNL STATIONS FOR FY 2015-16  |
|--|
| TABLE 5-27: ASSUMPTIONS FOR POWER PURCHASE FROM NTPC STATIONS AS CONSIDERED BY THE         DISTRIBUTION LICENSEES                            |
| TABLE 5-28: ASSUMPTIONS FOR POWER PURCHASE FROM NHPC STATIONS AS CONSIDERED BY THE         DISTRIBUTION LICENSEES                            |
| TABLE 5-29: ASSUMPTIONS FOR POWER PURCHASE FROM NPCIL STATIONS AS CONSIDERED BY THE         DISTRIBUTION LICENSEES                           |
| TABLE 5-30: DETAILS OF POWER PURCHASE COST FROM NTPC STATIONS FOR FY2015-16 AS SUBMITTED BY         DISTRIBUTION LICENSEES                   |
| TABLE 5-31: DETAILS OF POWER PURCHASE COST FROM NHPC STATIONS FOR FY2015-16 AS SUBMITTED BY         DISTRIBUTION LICENSEES                   |
| TABLE 5-32: DETAILS OF POWER PURCHASE COST FROM NPCIL STATIONS FOR FY2015-16 AS SUBMITTED BY DISTRIBUTION LICENSEES                          |
| TABLE 5-33: ASSUMPTIONS OF POWER PURCHASE FROM NTPC AS CONSIDERED BY THE COMMISSION 165  |
| TABLE 5-34: ASSUMPTIONS FOR POWER PURCHASE FROM NHPC STATIONS AS CONSIDERED BY THE COMMISSION  |
| TABLE 5-35: ASSUMPTIONS FOR POWER PURCHASE FROM NPCIL STATIONS AS CONSIDERED BY THE COMMISSION   |
| TABLE 5-36: APPROVED COST OF POWER PURCHASE FROM NTPC STATIONS FOR FY 2015-16  |
| TABLE 5-37: APPROVED COST OF POWER PURCHASE FROM NHPC STATIONS FOR FY 2015-16  |
| TABLE 5-38: APPROVED COST OF POWER PURCHASE FROM NPCIL STATIONS FOR FY 2015-16   |
| TABLE 5-39: ASSUMPTIONS FOR POWER PURCHASE FROM IPPS / JVs AS CONSIDERED BY THE DISTRIBUTION         LICENSEES         169                   |
| TABLE 5-40: DETAILS OF POWER PURCHASE COST FROM IPPS / JVs STATIONS FOR FY2015-16 AS SUBMITTED         BY DISTRIBUTION LICENSEES         170 |
| TABLE 5-41: ASSUMPTIONS FOR POWER PURCHASE FROM IPPS / JVs AS CONSIDERED BY THE COMMISSION   |
| TABLE 5-42: APPROVED COST OF POWER PURCHASE FROM IPPS / JVs FOR FY 2015-16   |
| TABLE 5-43: POWER PURCHASE COST: STATE CO-GENERATION FACILITIES, SOLAR AND OTHER SOURCES FOR         FY 2015-16                              |
| TABLE 5-44: APPROVED COST OF POWER PURCHASE FROM STATE CO-GENERATION FACILITIES AND SOLAR         ENERGY SOURCES FOR FY 2015-16              |
| TABLE 5-45: DETAILS OF POWER PURCHASE COST FROM INTER SYSTEM EXCHANGE (BILATERAL & PXIL) / UI<br>AS SUBMITTED BY DISTRIBUTION LICENSEES      |



| TABLE 5-46: APPROVED COST OF POWER PURCHASE FROM INTER SYSTEM EXCHANGE (BILATERAL UI               | -        |
|--|----------|
| TABLE 5-47: SUMMARY OF POWER PURCHASE COST AS SUBMITTED BY THE DISTRIBUTION LICENS                 | EES 190  |
| TABLE 5-48: SUMMARY OF APPROVED POWER PURCHASE COST FOR FY 2015-16                                 | 194      |
| TABLE 5-49: APPROVED MERIT ORDER DISPATCH FOR FY 2015-16   | 197      |
| TABLE 5-50: APPROVED PGCIL CHARGES FOR FY 2015-16  | 202      |
| TABLE 5-51: APPROVED CONSOLIDATED BULK SUPPLY TARIFF   | 202      |
| TABLE 5-52: POWER PROCUREMENT COST FOR MVVNL FOR FY 2015-16  | 203      |
| TABLE 5-53: INTRA STATE TRANSMISSION CHARGES FOR FY 2015-16  | 204      |
| TABLE 5-54: O&M EXPENSES FOR FY 2015-16 (Rs. Crore)  | 207      |
| TABLE 5-55: CAPITAL INVESTMENT PLAN PROPOSED BY THE PETITIONER FOR FY 2015-16 (RS. CRC             | ORE) 208 |
| TABLE 5-56: CAPITALISATION & WIP UP TO FY 2015-16 (Rs. CRORE)                                      | 213      |
| TABLE 5-57: CONSUMER CONTRIBUTIONS, CAPITAL GRANTS AND SUBSIDIES CONSIDERED UP TO F<br>(Rs. Crore) |          |
| TABLE 5-58: FINANCING OF THE CAPITAL INVESTMENTS UP TO FY 2015-16 (Rs. Crore)                      | 215      |
| TABLE 5-59: GROSS FIXED ASSETS FOR FY 2015-16 (Rs. Crore)  | 217      |
| TABLE 5-60: APPROVED DEPRECIATION FOR FY 2015-16 (Rs. CRORE)                                       | 219      |
| TABLE 5-61: INTEREST ON LONG TERM LOANS UP TO FY 2015-16 (Rs. CRORE)                               | 221      |
| TABLE 5-62: INTEREST COST ON WORKING CAPITAL LOANS FOR FY 2015-16 (Rs. CRORE)                      | 222      |
| TABLE 5-63: INTEREST ON SECURITY DEPOSITS FOR FY 2015-16 (Rs. CRORE)                               | 224      |
| TABLE 5-64: INTEREST AND FINANCE CHARGES FOR FY 2015-16 (RS. CRORE)                                | 225      |
| TABLE 5-65: OTHER INCOME FOR FY 2015-16 (Rs. Crore)  | 228      |
| TABLE 5-66: ADDITIONAL SUBSIDY REQUIREMENT FOR FY 2015-16 (Rs. CRORE)                              | 233      |
| TABLE 5-67: EXISTING & APPROVED TARIFF REVENUES: FY 2015-16 (Rs. CRORE)                            | 234      |
| TABLE 5-68: ARR, REVENUE AND GAP SUMMARY FOR FY 2015-16 (Rs. CRORE)                                | 235      |
| TABLE 6-1: WHEELING & RETAIL SUPPLY ARR FOR FY 2015-16 (Rs. CRORE)                                 | 240      |
| TABLE 6-2: WHEELING CHARGES FOR FY 2015-16   | 240      |
| TABLE 6-3: APPROVED VOLTAGE-WISE WHEELING CHARGES FOR FY 2015-16                                   | 241      |
| TABLE 6-4: COST OF SUPPLY APPROVED BY THE COMMISSION FOR FY 2015-16                                | 245      |
| TABLE 6-5: CROSS SUBSIDY SURCHARGE APROVED BY THE COMMISSISON FOR FY 2015-16                       |          |



| TABLE 8-1: REVENUE FROM SALE OF POWER AT APPROVED TARIFF FOR FY 2015-16 FOR MVVNL (F   |            |
|--|------------|
| TABLE 8-2: ESTIMATION OF ARR GAP/SURPLUS AT REVISED TARIFF FOR FY 2015-16 (Rs. CRORE)  | 263        |
| TABLE 8-3: REVENUE REALIZED AS % OF ACOS   | 264        |
| TABLE 8-4: REVISED REVENUE GAP FOR FY 2014-15  | 274        |
| TABLE 8-5: SUMMARY OF CONSOLIDATED REVENUE GAP FOR 4 STATE OWNED DISTRIBUTION LICE<br>ADMITTED BY THE COMMISSION (Rs. Crore) |            |
| TABLE 8-6: REGULATORY SURCHARGE FOR FY 2015-16   | 276        |
| TABLE 8-7: LINKING OF PERFORMANCE OF THE LICENSEES TO REGULATORY SURCHARGE OF FY 2   | 016-17 278 |
| TABLE 9-1: STATUS OF COMPLIANCE OF DIRECTIVES OF TARIFF ORDER DATED MAY 31, 2013   |            |
| TABLE 9-2: STATUS OF COMPLIANCE OF DIRECTIVES OF TARIFF ORDER DATED OCTOBER 1, 2014 .  | 292        |
| TABLE 9-3: DIRECTIVES ISSUED UNDER THE PRESENT TARIFF ORDER  |            |
| TABLE 11-1: COMMISSION'S APPROVAL OF NUMBER OF CONSUMERS FOR FY 2015-16  |            |
| TABLE 11-2: COMMISSION'S APPROVAL OF CONNECTED LOAD (KW) FOR FY 2015-16  |            |
| TABLE 11-3: COMMISSION'S APPROVAL OF ENERGY SALES (MU) FOR FY 2015-16  |            |
| TABLE 11-4: APPROPRIATION OF APPROVED POWER PURCHASE FOR FY 2015-16: FPPCA   |            |



Before

## UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

Petition No. 988/2014

#### IN THE MATTER OF:

Determination of Aggregate Revenue Requirement and Tariff for FY 2015-16 and True up for FY 2012-13 of Madhyanchal Vidyut Vitran Nigam Limited (MVVNL)

And

#### IN THE MATTER OF:

Madhyanchal Vidyut Vitaran Nigam Limited (MVNNL)

Before

## UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

## <u>ORDER</u>

The Commission having deliberated upon the above Petition and the subsequent filings by the Petitioner, and the Petition thereafter being admitted on March 23, 2015 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 June 18, 2015. 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 to 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 2015-16 and True up Petition for FY 2012-13 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 8, 2014 (Petition No. 988 / 2014).
- 2.1.3 The Commission observed that the Licensee had submitted the audited accounts for FY 2012-13 and provisional accounts for FY 2013-14 along with the calculations of revenue gap for FY 2015-16 and the projected revenue for FY 2015-16 based on current tariff in its ARR Petition. However, the ARR Petition did not contain the Supplementary Audit Report of the Accountant General of Uttar Pradesh and 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 January 2, 2015.

## 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 15, 2015 directing the Licensee to submit the Supplementary Audit Report of the Accountant General of Uttar Pradesh and 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 January 24, 2015.
- 2.2.3 The Distribution Licensee vide letter dated January 29, 2015 submitted that since most of the information desired by the Commission vide its Deficiency Note has to be furnished by the respective field units, it would not be able to



submit the information sought by the Commission in the stipulated time period of 10 days and requested the Commission to grant a time period of 10 more days for compliance.

- 2.2.4 The Distribution Licensee submitted the replies to the Deficiency Note on February 9, 2015. Based on the reply submitted by the Licensee, the Commission issued a second deficiency note which included all the pending queries along with few additional queries; vide e-mail dated February 27, 2015 whereas the hard copy of the same was sent on March 2, 2015. The Commission also directed the Licensees to submit its replies within 7 days. A reminder vide letter dated March 10, 2015 was sent to all the State owned Distribution Licensees to submit the replies at the earliest.
- 2.2.5 The Distribution Licensee submitted the replies to the second deficiency note on March 13, 2015.
- 2.2.6 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 2012-13 (i.e., year just prior to the previous year) has been considered for the current proceedings in the matter of approval of Annual Revenue Requirement and Tariff Determination of FY 2015-16.

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

2.3.1 The Commission through its Admittance Order dated March 23, 2015 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 2012-13, ARR Petition for FY 2015-16, 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 / subcategory 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.

2.3.2 The Commission also directed the Petitioner to inform the public at large vide the Public Notice about the Staff Papers prepared by the Commission containing salient features of the Petition available on the Commission's website www.uperc.org.

## 2.4 PUBLICITY OF THE PETITION

2.4.1 The Public Notice detailing the salient features of the True-up Petition for FY 2012-13 and ARR Petition for FY 2015-16 was made 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 26, 2015 |
|---|--------------------------|------------------|
|---|--------------------------|------------------|

- Pioneer (English) : March 27, 2015
- Hindustan (Hindi) : March 26, 2015
- Amar Ujala (Hindi) : March 26, 2015
- Dainik Jagaran (Hindi) : March 27, 2015

## 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 April 9, 2015 at Sitapur, April 15, 2015 at Ghaziabad, April 21, 2015 at Orai and on April 27, 2015 at Gorakhpur.

# 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 2015-16. 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 from April 9, 2015 to April 27, 2015 as per details given below:

| S.No | Date           | Place of<br>Hearing | Hearings in the matter of          |
|------|----------------|---------------------|------------------------------------|
| 1.   | April 9, 2015  | Sitapur             | PuVVNL, PVVNL, MVVNL, DVVNL,KESCO, |
| 2.   | April 15,2015  | Ghaziabad           | NPCL, UPPTCL                       |
| 3.   | April 21,2015  | Orai                |                                    |
| 4.   | April 27, 2015 | Gorakhpur           |                                    |

#### Table -: SCHEDULE OF PUBLIC HEARING AT VARIOUS LOCATIONS OF THE STATE

- 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 has attempted The to capture the summay 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 2012-13, ARR and Tariff for FY 2015-16.
- 3.3.3 The list of the consumers, who have submitted their views / comments / suggestions / objections / representations, is appended as Annexure 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 TIME OF DAY TARIFF

## A) Comments/Suggestions of the Public

3.4.1 Mr. Rama Shanker Awasthi submitted that the ToD slots proposed by the Licensees are illogical as the slots should coincide with the work shift of the industries. He submitted that the Licensees have failed to provide 24 hours supply to all the consumers and change in ToD slab is only a another route to increase the tariff of industrial consumers. He also submitted that the Proposal of Licensees to increase the peak hours from 5 hours to 9 hours is without any merit and should be rejected by the Commission.



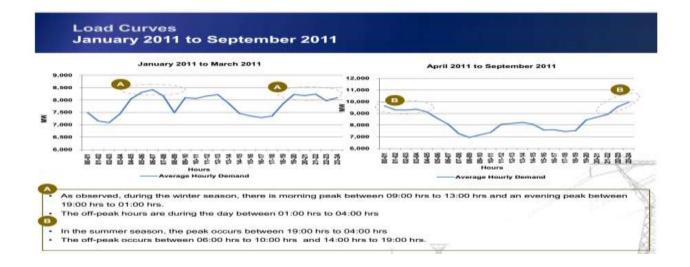
- 3.4.2 Mr. K.L Aggrawal, Chairman, Associated Chambers of Commerce & Industry of U.P, and Mr. Bhuvesh Kumar Aggrawal, National Chamber of Industries and Commerce, UP, submitted that TOD charges should be completely removed and one simple rate of energy should be approved or Energy charges for standardized chart of TOD hours should be rescheduled from present -7.50% and +15.00% to -10.00% and +10.00%. He also submitted that the TOD charges for summer and winter will create confusion. He submitted that increase in the number of peak hours and reduction in number of off-peak and normal hours will increase the burden on the consumers.
- 3.4.3 Mr. S.B Agrawal, Adviser, Associated Chambers of Commerce & Industry of U.P, submitted that proposed change in TOD timings from uniform day hours for whole year to summer and winter will result in enhancement of overall rates. He submitted that Power at discounted rates (i.e. 7.5% below normal rates) is reduced from 8 hours to 6-7 hours and supply at normal rates is reduced from 11 hours to 8-9 hours. He therefore submitted that this is unfair proposition for industrial consumers in LMV-6 and HV-2 Categories.
- 3.4.4 Mr. Vijay Bansal, President, Udyogik Asthan Vikas, submitted that TOD charges will put extra burden on the public.
- 3.4.5 Mr. Ghanshyam Khandelwal, Managing Director, B.L Agro Oil's Ltd, submitted that, TOD Tariff proposed is highly impractical as it is difficult for industries to change their production schedules.
- 3.4.6 Mr. D.S. Verma, Indian Industries Association, submitted that KESCO is often violating Orders of the Commission. He submitted that the most serious part is non- implementation of TOD pattern of billing for industrial consumers under LMV-6 tariff category who are compelled to pay extra tariff of 20 paisa for every unit of energy. He suggested that, KESCO should be penalized heavily including refund of extra amount with interest rate at 18% to respective industrial consumers.
- 3.4.7 Mr. Mohan K. Kejriwal, ,MD, Mohan Steels Ltd., submitted that, premium on peak hours and discount on off peak hours for consumption of electricity should be levelized at 10% with similar number of hours for peak and off peak consumption.



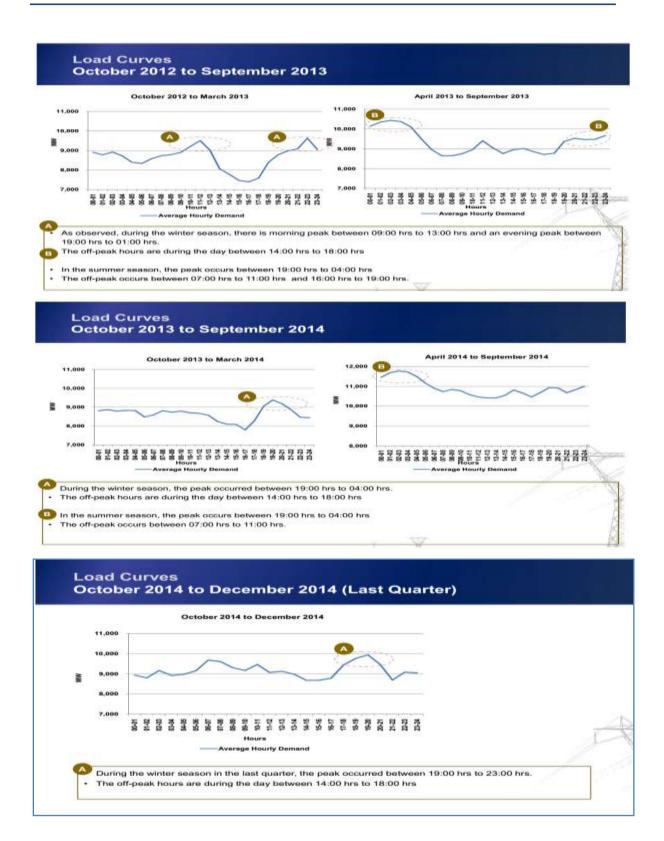
3.4.8 Mr. Vishnu Bhagwan Aggrawal, Chairman, National Chamber of Industries and Commerce, UP and Mr. P.K Maskara, Director, The Mahabir Jute Mills Ltd., submitted that, this change in structure of TOD was proposed by the Discoms earlier also which was rejected by the Commission. Thus, they requested the Commission not to accept the proposal of Licensee for FY 2015-16.

## B) Petitioner's Response

3.4.9 The Licensees submitted that the system conditions and availability of supply have been considered while proposing the concession and penalty for offpeak and peak timings in TOD structure. The Licensees further submitted that the Time of Day tariff (ToD) is a widely accepted Demand side Management (DSM) measure for energy conservation by price as it encourages the Distribution Licensees to move towards separation of peak and off-peak Tariffs which helps in reducing consumption as well as costly power purchase during the peak time. The Licensees further submitted that the TOD Tariff is set in such a way that it inherently provides incentives and disincentives for the use of electricity in different time periods and while the basic objective of implementing Time of Day Tariff is to flatten the load curve over a period of a day resulting in reduction in the peaking power requirement it also enhance power requirement during off-peak period. The pattern of load of UP over the last 4 years as submitted by the Licensees is depicted in the following graphs:









- 3.4.10 The Licensees submitted that from the above load curves it is clear that the system is experiencing peaks during evening and night hours and the reasons behind peaks during night hours is because UPPCL has endeavoured to supply energy to domestic consumers as much as possible during the night hours so that they are able to rest and sleep peacefully after hard days' work. The Licensees submitted that this would however require extra supply to domestic consumers during night hours, which can be achieved by having some kind of control on the industry and accordingly, in view of the already existing peaks and the need to supply more power to domestic consumers during night hours, the Licensees have proposed that the existing TOD structure be reviewed and existing peak rebate during night hours should be removed and in place of that a mark-up may be considered on consumers covered under the TOD Rate Schedule.
- 3.4.11 The Licensees further submitted that from the load curves provided by the SLDC, it may further be seen that system has slightly shifted in peak and off peak hours during summer and winter seasons. The Licensee submitted that based on above facts, UPPCL has proposed separate TOD structures for the summer and winter seasons as given below:

| <b>TOD Structure Proposed by Lice</b> | ensee for FY 2015-16: |
|---------------------------------------|-----------------------|
|---------------------------------------|-----------------------|

| 1.1.1.1 Off Peak Hours |         |
|------------------------|---------|
| 04:00 hrs - 10:00 hrs  | (-)7.5% |
| Normal Hours           |         |
| 10:00 hrs – 19:00 hrs  | 0%      |
| Peak Hours             |         |
| 19:00 hrs – 4:00 hrs   | (+) 15% |

## TOD Rates: For Summer Season (April to Sept):

| Off Peak Hours        |         |
|-----------------------|---------|
| 13:00 hrs - 20:00 hrs | (-)7.5% |
| Normal Hours          |         |
| 1:00 hrs – 9:00 hrs   | 0%      |
| Peak Hours            |         |



| 9:00 hrs – 13:00 hrs | (+) 15% |
|----------------------|---------|
| 20:00 hrs – 1:00 hrs | (+) 15% |

#### **Existing TOD Structure:**

#### TOD Rates (% of Energy Charges):

| Off Peak Hours        |          |
|-----------------------|----------|
| 22:00 hrs – 06:00 hrs | (-) 7.5% |
| Normal Hours          |          |
| 06:00 hrs – 17:00 hrs | 0%       |
| Peak Hours            |          |
| 17:00 hrs – 22:00 hrs | (+) 15%  |

## C) The Commission's view:

- 3.4.12 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 wherein the commission has also introduced an optional TOD structure.
- 3.4.13 Further, with regard to the implementation of TOD Tariff for LMV-6 consumers of KESCO, the Commission vide letter no. UPERC / Secy. / D (Tariff) / 15-274 dated May 07, 2015 has directed KESCO that metering and billing of all LMV-6 consumers must be strictly done as per the Tariff Order of the Commission. In compliance to the above direction, the Licensee vide letter no. 100 / PA(C) / UPERC / 60 dated May 18, 2015 confirmed that that TOD billing for LMV-6 consumer has been implemented in the billing cycle of May 2015.

## 3.5 **REGULATORY SURCHARGE**

## A) Comments/Suggestion of the Public

3.5.1 Mr. K.L Aggrawal, Chairman, Associated Chambers of Commerce & Industry of U.P, Mr. D.S Verma, Indian Industries Association, Vidyut Upbhogkta Sangh submitted that, imposition of additional burden of regulatory surcharge against previous year's losses is unjustified. Hence, losses of past years of the



Discoms should be met by State Government directly through the subsidy. He also submitted that in the new proposed tariffs regulatory surcharge has increased from 2.84% to 5.22%, which unnecessarily burden the consumers.

- 3.5.2 Mr. Rajprakash Sharma, Mr. Vijay Bansal, Mr. Ghanshyam Khandelwal, Managing Director, B.L Agro Oil's Ltd. and Members of RWA Federation, Ghaziabad submitted that regulatory surcharges should be removed as it is unjustified.
- 3.5.3 Mr. S.B Agrawal, Adviser, Associated Chambers of Commerce & Industry of U.P, Mr. Vishnu Bhagwan Agarwal, Chairman, Agra Chapter, ASSOCHAM, and Mr. Bhuvesh Kumar Aggrawal, National Chamber of Industries and Commerce, UP, submitted that while issuing tariff orders for FY 2014-15, Commission had approved regulatory surcharge to be recovered up to March 31, 2015 to cover up the trued up deficits for FY 2007-08 to FY 2011-12. These were linked with performance targets of FY 2014-15 and if the targets were not meet then the surcharge will be reduced by 10% for 2015-16. He submitted that in the ARR submitted by UPPCL, the losses for 2012-13 and 2013-14 have been shown as 29.01% and 26.56% respectively and for 2014-15 the quantum of these losses is yet submitted. He also submitted that as Discoms / UPPCL have failed to meet these targets; hence the regulatory surcharge should be discontinued.
- 3.5.4 Mr. Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad, submitted that, the Commission has not kept its commitment of reducing the regulatory surcharge with effect from April 1, 2015, based on performance based tariffs. As a result, there is a huge disappointment among consumers. He submitted that, in view of the above, the Consumer Forum had filed an application with the Commission, the decision for which is pending.
- 3.5.5 Mr. D.S Verma, Indian Industries Association submitted that, in the last public hearing of Commission in Kanpur, it was assured by the Commission, that tariff revisions in future shall be based on performance of the licensees. He added that in KESCO, there is no performance audit and consumers are not heard at the grievance redressal forums.
- 3.5.6 Further, he also requested the Commission that CAG audit of UPPCL should be conducted. He submitted that the Line losses submitted by the Licensees to State Legislative Assembly for five years depicts that the Distribution losses for FY 2012-13 is 27.21% and for FY 2013-14 is 25.89% which clearly depicts there



has been very less reduction in losses since last five years. He further submitted that the reply sent to the Govt. from Director (Finance), Power Corporation regarding electricity price reduction based on the formula as suggested by the Consumer Forum, states the actual distribution loss as 28.72% for FY 2012-13. He also added that the submission made by the Licensees to the Commission on March 31, 2015, stating reduction in regulatory surcharge shows distribution loss for FY 2012-13 to be 29.01% and distribution loss for FY 2013-14 to be 26.56% after reduction of 2.44% from previous year i.e. FY 2012-13. Based on the above submission he requested the Commission to reduce regulatory surcharge from 2.84% to 0.34% and 10% reduction in regulatory surcharge for FY 2015-16.

3.5.7 Mr. Rama Shankar Awasthi, submitted that, regulatory surcharge should be removed from PVVNL consumers as Licensee has made a profit of Rs 767.64 Crore.

## B) Petitioner's Response

3.5.8 The Licensee submitted that Clause 6.12 of the UPERC (Terms and Conditions of Distribution Tariff) Regulations, 2006 provide:

"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."

3.5.9 The Licensees submitted that regulatory asset had been created by the Commission towards unrecovered gap pursuant to the final True-up for FY 2000-01 to FY 2007-08 based on Audited Accounts and thereafter for FY 2008-



09 to FY 2011-12 vide Order dated October 1, 2014. Thus, the regulatory surcharge is valid as per law and is in accordance with the Distribution Tariff Regulations, 2006 which is being charged as per the Orders of the Commission.

- 3.5.10 The Licensees mentioned 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 2012-13. Such audited accounts and AGUP reports have already been published on the website of the Licensees.
- 3.5.11 With regard to the submission made by Mr. Avadhesh Kumar Verma, the Licensees submitted that without prejudice to the Appeal pending before the Hon'ble APTEL, the Commission has linked regulatory surcharge with the line losses.
- 3.5.12 With regard to the contentions raised by the Mr. R.S Awasthi the Licensees submitted that they have already filed an appeal before the Hon'ble APTEL against the referred matter. Since, the matter is sub-judice before the Hon'ble ATE, hence it would be inappropriate to comment on it at this point of time. The same shall be reviewed based on the Judgment of the Hon'ble ATE in this regard.

## C) The Commission's view:

3.5.13 The matter of Regulatory surcharge is of great concern to the Commission and accordingly it has issued a separate Order on April 22, 2015 in the matter of "Applicability of Regulatory Surcharges for the State Distribution Licensees for FY 2015-16 as per the Commission Orders dated June 6, 2014 and October 1, 2014". Accordingly, the Commission has also issued appropriate directions in this regard as detailed subsequently in this Order.

## 3.6 LOAD FACTOR REBATE

A) Comments/Suggestion of the Public



- 3.6.1 Mr. K. L. Aggrawal, Chairman, Associated Chambers of Commerce & Industry of U.P submitted that, load factor rebate for HV-2 category of consumers should be restored.
- 3.6.2 Members of Jan Shakti Morcha, submitted that, Discoms should ensure that load factor should be maintained at residences. He submitted that some consumers are exceeding their load limits whereas others do not use even half the quantity of load allotted.

# B) Petitioner's Response

3.6.3 The Licensees submitted that Load Factor rebate was approved by the Hon'ble Commission in the tariff order for FY 2001-02 with a view to encourage better load utilization to HV-2 consumers above 50% utilization and 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 Licensees have 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 has proposed to abolish the load factor rebate.

## C) The Commission's view:

3.6.4 The Commission after detailed deliberation on this issue has abolished the Load Factor Rebate in the last Tariff Order.

## 3.7 KVAH BILLING

## A) Comments/Suggestion of the Public

3.7.1 Mr. V.B Aggarwal, Chairman, Agra Chapter, submitted that, the Commission has directed billing on kWh basis for consumers below 10kW load. However, other small consumers below 20kW load are being billed on kVAh basis, but owing to limited means, they are unable to control power factor



automatically. So, he requested the Commission not to penalize these consumers.

3.7.2 Mr. K. L. Aggrawal, Chairman, Associated Chambers of Commerce & Industry of U.P and Mr. D.S Verma, Indian Industries Association submitted that, Commission designed the tariff for billing on kVAh lead and lag basis. In HV-2 the lead PF from 1.00 to 0.95 will be taken as 1.00 PF and within this range of power factor, kVAh will be equal to kW. But, the meters provided by Discoms are designed such that, in the slot of 0.95 to 1.00 P.F, kVAh is not equal to kWh. The reading is always higher than reading in kWh. This is against principles and spirit of Commission, and hence this anomaly should be rectified.

# B) Petitioner's Response

3.7.3 The Licensee has submitted that the kVAh based billing is being done as per the Tariff Orders of the Commission. Further, it is submitted that in case KVAh billing is adopted for load beyond 20 kW, the licensee is of the view that consumers between 10 to 20 kW will not care to improve their power factor, leading to more reactive drawl, which may cause instability in the network. Therefore the lower limit for sanctioned load which is 10kW for kVAh based billing does not require any change.

## C) The Commission's view:

3.7.4 With regard to kVAh billing of the consumers the Commission feels that kVAh billing is a better way of billing than kW 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.

## 3.8 TARIFF HIKE

# A) Comments/Suggestion of the Public

3.8.1 Mr. K.L Aggrawal, Chairman, Associated Chambers of Commerce & Industry of U.P, submitted that, proposed hike of 0.35 paisa in energy charges for H-2



category is totally unjustified as the Line losses of the Discoms have reduced and Losses at industrial feeders are negligible.

- 3.8.2 He also submitted that due to substantial increase in energy rates, electricity duty, and regulatory surcharges since September 13, 2012 large number of heavy, medium industries has been completely closed down or reduced their productions. He also requested the Commission to take note of the suggestions by ASSOCHAM to Sh. Akhilesh Yadav, CM UP Govt. in Letter no 2015/25 dated March 28, 2015, regarding various problems faced by industries. He submitted that instead of increasing the rates, the rates should be reduced keeping in mind the comparative rates in the neighbouring states.
- 3.8.3 He further submitted that there has been regular tariff hikes from 2012 onwards, i.e. in September 13, 2012 electricity duty was increased from 0.09 paisa per unit to 7.5% of energy and fixed charges. Then from November 1, 2012 tariff was further increased by 45 to 50% and from June 10, 2013, 3.71% of fixed and energy charges were added as regulatory charges. Further, on October 12, 2014, tariff was hiked by 12 to 15%. Due to these regular tariff hikes industries of UP are suffering as compared to industries in neighbouring states. He added that many units have curtailed their load, which resulted in decrease in their productions.
- 3.8.4 In this regard, certain submissions were made by the ASSOCHAM, such as data from industries should be collected and analyzed with immediate effect, Electricity duty at 7.50% should be stopped and Regulatory Surcharge should be discontinued.
- 3.8.5 Mr. Rajendra Kumar Jain, Secretary, Western U.P Chambers of Commerce & Industry, submitted that, electricity prices are rising since September 13, 2012, due to which small and medium scale industries are incurring huge losses and are on the verge of closure. He added that if these industries gets shut down then U.P may face huge financial losses. Hence, he requested the Commission to look into the matter.
- 3.8.6 Mr. V.B Aggrawal, Chairman, Agra Chapter, Associated Chamber of Commerce and Industry submitted that application of surcharges and rates of cost of electricity for LMV-6 have gone upto Rs 10/- per unit on minimum. He



submitted that if these categories are charged demand penalty and overloading charges, then rates will further escalate.

- 3.8.7 Mr. Vipin Basal, Gram Pradhan, Chutmalpur, submitted that Chutmalpur is a rural area but the electricity charges for this area are similar to charges in the urban areas. He requested the Commission to reduce the charges considering the situation that residents of this area are very poor and do not have the capacity to pay.
- 3.8.8 Dr. Kirit Somaiya, Chairman, Parliamentary Committee on Energy, submitted that, recently prices of crude oil have come down from 140 dollar per barrel to 50 dollar per barrel. Similarly, prices of coal have also come down drastically. He submitted that Discoms should have reduced the electricity prices six months back, instead of increasing the prices. So, he requested the Commission to take the necessary corrective actions.
- 3.8.9 Association of Steel Rolling mills and furnace and President of Association of Steel Rolling Mills and Furnaces submitted that, regular tariff hikes in U.P, is posing problems in the production of steel and iron, due to increased production costs. Since, these industries are vital for UP, it is necessary to provide relief in tariffs like UP should be allowed to purchase electricity through exchanges as done in neighbouring states.
- 3.8.10 Mr. Vishnu Bhagwan Aggrawal, President, Agra Chapter, Associated Chamber of Commerce and Industry of U.P submitted that almost 23% of electricity supply is given to rural areas where recovery is only 7% which is the main reason in hike of tariffs. Further, theft, pilferage and line losses add to the increasing cost of electricity.
- 3.8.11 Mr. Pratap Chandra, Rastriya Rastra Vadi Party submitted that, six months back electricity prices were hiked so, another hike should not be allowed within a year.

## B) Petitioner's Response:

3.8.12 The Licensee has 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.

- 3.8.13 The Licensee has 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 have already been submitted to the Commission. It is evident that the licensee is not getting cheap power from the generators.
- 3.8.14 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.
- 3.8.15 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.
- 3.8.16 The Licensee submitted that 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.

## C) The Commission's view:

3.8.17 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 Tariff Philosophy and Rate Schedule provided in this Order.



# 3.9 SINGLE POINT BULK SUPPLY

## A) Comments/Suggestion of the Public

- 3.9.1 Ratan Planet Residents, Kanpur submitted that in Ratan planet there is a single point meter and each flat owner is paying fixed charges of Rs. 250 / KW / month and energy charge of Rs. 6.60 / kWh along with 2.23% regulatory surcharge and 7.5% electricity duty. He added that in addition to the above charges, 15% service tax is charged, which is illegal and against tariff and rules of Electricity Supply Code. Moreover they are denied the bifurcation of the amount which is being charged through pre-paid metering. He further contended that, instead of LMV-1, they are being charged under HV-1 category.
- 3.9.2 Mr. A.K Sarkar, Deputy General Manager, HAL, submitted that energy charge per kWh for FY 2014-15 for consumers under LMV-1(b) supply at single point for bulk loads, is much higher than the rate applicable to LMV-1 (c). He further submitted that, in township of HAL, domestic consumers are charged at Rs 4.73 per kVAh, as they are bulk consumers. Hence, he requested the Commission to review and offer discounts on electricity prices.
- 3.9.3 Mr. Govind Shukla, Goverdhan flat Owner's Association submitted that, in urban areas there is a lot of variation in tariff in domestic category for multipoint and single point bulk supply connection even though the consumer type is same. He submitted that Discoms encourage only single point supply as it is easier to supply at single point and recover the dues
- 3.9.4 Further, he submitted that the multipoint billing is in kVAh whereas in single point it is in kWh which alone accounts for rates to be 1.35 times more. He requested the Commission to consider these issues.
- 3.9.5 Mr. Lalit Kumar Gupta submitted that, electricity connection in multi-storied building developed by builder / promoter is given under Electricity Supply code under clause no. 4.9 which is as follows:

"Electricity Connection in Multi-storey Building / Multiplex/Marriage Halls / Colonies to be developed by Development Authorities and / or Private Builders / promoters / colonizers / Institutions / Individual applicants (approved by Licensed Electrical Inspectors):



a) Electricity Connection at single point of supply with single point metering shall be provided to new domestic / non domestic multistoried buildings / Multiplex / Marriage Halls / Cooperative Group Housing Societies / Colonies, with load exceeding 25kW. However, this shall not restrict the individual owner from applying for individual connection and the licensee shall sanction the connection to such applicant at L.T."

3.9.6 Indian Developers Association submitted that, in multi storied buildings Discoms should provide different single point connection for residential and commercial consumers. He added that electricity bills for residential / domestic should be as per domestic tariff slab.

#### B) Petitioner's Response:

3.9.7 The Licensee submitted that Clause 4.9 (a) of supply code 2005 provides:

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

3.9.8 The Licensee submitted that it is clear from above that for domestic / nondomestic 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 v. Manbodhan Lal Srivastava. Such an interpretation that "when a statute uses the word shall, prima facae it is mandatory" has been adopted by Hon'ble Supreme Court in catena of cases such as State of UP v. Babu Ram Upadhya, Sainik Motors, Jodhpur v. State of Rajasthan, Govindlal Chagganlal Patel v. 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 us to a certain extent, in mitigating our problem of scanty meter-reading and billing resources.



- 3.9.9 The Licensees further added that, recently number of grievances relating to individual inhabitants of these multi-storied buildings came in the notice of Licensees as well as Commission. An understanding was evolved that a first-hand ground survey would be conducted and some kind of feasible solution will be worked out with in the legal framework, which would address majority of concerns.
- 3.9.10 The Licensees 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.
- 3.9.11 The Licensees added that compilation of the suggestions received during the above meeting from Resident Welfare Associations is in final state and another meeting with Resident Welfare Association is also being planned at Lucknow. Based on suggestions received a comprehensive report will be submitted for the consideration of the Commission. However, unless a proper methodology is worked out, trying to come out with any simplistic solution may not address to multi-fold problems of these consumers, ranging from commercial to legal agreement related issues and the same may further deteriorate the situation, which could not be the intention of either Commission or the Licensees.
- 3.9.12 Further, the Licensee also submitted that, regarding single point bulk supply, the Commission has directed to submit the detailed design / methodology on the tariff to be charged from the end consumers of single point bulk load and further also proposed a new methodology for billing of such consumer. The methodology proposed by the Commission having practical problem in implementation therefore licensee in accordance with direction of the Commission conveyed a meeting of RWA at NOIDA on May 9, 2015 to further have at first hand discussion with all the stake holders. In this meeting officers of the licensee and Commission were present. The detailed report is awaited which will be submitted soon.

## C) The Commission's view:

3.9.13 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. In compliance to the above direction, PVVNL vide its Letter No. 2056 MD / PVVNL / MT / Com / ARR submitted the status of action requesting the Commission that all field units have been asked to study the associated problems and a detailed proposal related to the above matter shall be submitted to the Commission in due course of time. Considering the complexity of the issue, the Commission may issue an appropriate Order in this regard and other important matters subsequently.

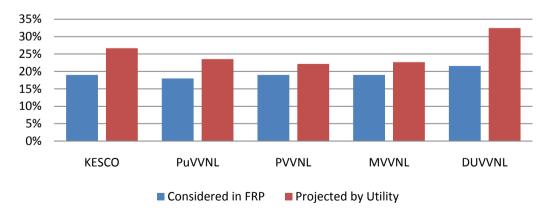
## 3.10 T&D LOSSES AND AT&C LOSSES

- 3.10.1 Mr. K. L. Aggrawal, Chairman, Associated Chambers of Commerce & Industry of U.P, submitted that line losses on national level are 26% then how and why it is 40% in UP. He added that the average production of power station in U.P is only 60% against average of 78% in other states. He added that the question arises why line losses in Kannauj area are about 76% and it is more than 50% in Rampur, Mainpuri and Azamgarh area." Hence, he raised the following issues that, whether there is any mechanism approved by the Commission on the basis of which Discoms / UPPCL arrives at their distribution line losses percent, whether the line losses are verified by any independent audit authorities.
- 3.10.2 Mr. Rajprakash Sharma, Mr. Devendranath Mishra, Mr. Rajkumar Vajpayee and Members of RWA Federation, Ghaziabad submitted losses incurred due to power theft should not be charged to consumers. Instead measures should be taken to curb theft. They also submitted that electricity meters should be installed in residence of electricity companies' employees.
- 3.10.3 Mr. Harjeet Singh, Hartech Plastics Pvt. Ltd. submitted that, line losses in UPPCL are very high, i.e. approximately 40%, whereas in NPCL (Noida Power Company Limited), Greater Noida, line losses are almost negligible. He added that due to overall losses in U.P, consumers of Noida are getting penalized.
- 3.10.4 Mr. Vishnu Bhagwan Agarwal, Chairman, Agra Chapter, ASSOCHAM, U.P, suggested some steps to control line losses and power theft, such as transformers should not be in capacity excess of 20% of the contracted load



and inbuilt audit meters should be provided to identify theft, LT lines may be converted to underground lines to prevent hooking, prepaid meters should be installed, various incentives must be given to theft information provider and areas of more than 50% line loss should be given reduced supply.

- 3.10.5 Mr. D.S Verma, Indian Industries Association, submitted that, T&D losses are not being controlled by Discoms despite the directives issued by the Commission every year. In the ARR for FY 2015-16, certain Discoms have projected loss figures as high as 25.50% and 32.47%. In some specific areas, losses are as high as 50% which shows that Discoms are not inclined in reducing losses and burdening them on consumers is unjustified. He requested the Commission to incentivize Discoms, where T&D losses are less. Similarly, till Discoms brings down the losses to less than 15% strict actions may be taken against them, and no tariff hike should be allowed.
- 3.10.6 Mr. Rami, Prabandhak, Global care Organization, submitted that, line loss figures submitted by Discoms are not correct. Even after taking charges, meter is not installed for some consumers. He further suggested for setting up a separate committee for complete investigation of line losses and quality of power.
- 3.10.7 Mr. Ritesh Kumar Singh, Energy Manager, Indus Tower Ltd, submitted that, Distribution Licensees inability to curtail losses is the main reason for tariff hikes in UP. He has submitted a comparison between losses approved in FRP (Financial Restructuring Plan) with those claimed by distribution utilities for FY 2015-16.





- 3.10.8 He submitted that, DVVNL has the highest projected loss figures and no efforts have been made by the Licensees to reduce these losses. He requested the Commission to come up with a plan to decrease the power distribution losses for UP and not approve such high losses, which are not supported by authentic numbers.
- 3.10.9 Members of Jan Shakti Morcha, submitted that, currently losses are almost 60% which if controlled can prevent revenue loss, and also bring down tariffs.
- 3.10.10 Mr. Vivek Singh, Vidyut Upbhogkta Sangh, Members of RWA Federation, Ghaziabad and Mr. Vimal Kumar Khemani, Transparent Reliable Accountable People's Movement (TRAP) submitted that, electricity theft is named as line loss and financial loss and the same being passed on to honest consumers. Gains are passed on to consumers residing in VIP areas like Itawa, Kannauj, Azamgarh, Auraiya, Old Lucknow etc. where theft percentage is very high, almost 60%.
- 3.10.11 Vidyut Upbhogkta Sangh, further submitted that, losses are almost 25.38% which results in loss of around Rs 10,000 Crore. Net revenue collected from consumers is approximately Rs 10,000 Crore. So, even if losses are reduced by 5%, then it will result in equivalent tariff reduction by 25%.
- 3.10.12 Mr. Vishnu Bhagwan Aggrawal, President, Agra Chapter, ASSOCHAM, submitted that, in areas where line losses are high, cables should be placed underground and wherever there is no line loss, electricity should be supplied without interruption.
- 3.10.13 Mr. Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad, submitted that, in the data gaps and information pertaining to ARR FY 2015-16, the Commission had asked UPPCL to submit information regarding AT&C losses. In response, power companies submitted that the data gaps on AT&C losses have nothing to do with ARR. Further, they requested the Commission to accept the ARR proposal and make the tariff schedule for FY 2015-16 applicable. He requested to the Commission not to accept their proposals until and unless data gaps for AT&C losses are complied.
- 3.10.14 Mr. Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad, submitted that line loss reduction target submitted to Supreme Court on affidavit by special secretary (Energy) Govt of UP could not be achieved which



resulted in huge revenue loss and consequently putting on tariff burden to the consumers.

3.10.15 Mr. Rama Shanker Awasthi requested the Commission to examine the AT&C loss level in the State and also he suggested the Commission to specify voltage wise losses in tariff orders.

# B) Petitioner's Response

- 3.10.16 The Licensee has submitted that is 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, which has already been submitted to the Commission.
- 3.10.17 The Licensees further submitted that 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. The infrastructure is sufficient to cater for supply to all consumers. However to cater for future growth, action is being taken for addition of matching infrastructure. The Commission has already issued directions to the Licensees to initiate base line loss estimation studies for assessment of technical and commercial losses. The distribution companies would be appointing consulting firms for undertaking the said studies. 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 break-downs also.



- Periodic checking of all static and tri-vector meters.
- Special drive to check the cases of theft/unauthorized use of electricity/checking of excess load being carried out in all distribution division.
- 3.10.18 The Licensee submitted that 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 detect theft of energy / Katiya connections.
- 3.10.19 The Licensee submitted that District wise list of AT&C Losses was provided to SLDC with the instructions that rostering of districts is to be done according to their percentage of AT&C losses, in a decreasing manner. Districts with maximum AT & C losses first, then districts with minimum AT&C Losses in the end. Such a directive was also issued by the Regulatory Commission in its Tariff Order for FY 2003-04 and Tariff Order for FY 2004-05. However, UPPCL, being an instrumentality of the State, within the meaning of Article 12 of Constitution of India, have to look beyond the above mentioned commercial norm in different circumstances.
- 3.10.20 The Licensee submitted that, in view of the decision of *Electricity Board*, Rajasthan vs Mohan Lal the Electricity Board / Company has come within the meaning of "State" as defined in Article 12 of the Constitution. The proposition of law laid down in that case was followed in Sukhdev Singh v Bhagatram. Thus, a public authority to convert it into a "State" shall be a body which has public or statutory duties to perform and which performs those duties and carries on its transactions for the benefit of the public and not for private profit. The ratio in Sukhdev Singh's case was followed in Ramana v I.A. Authority of India, B.S. Minhas v Indian Statistical Institute and P.K. Ramachandra Iyer v Union of India. Having established that UP Power Corporation Limited or Electricity Distribution Companies qualify within the meaning of "State", it becomes imperative that such an institution has to serve many social / cultural / administrative aspirations expected from a State Instrumentality for which executive instructions are issued. To explain the rationality of these decisions, where categorical departure from commercial



norms of more rostering at places of higher AT &C losses, may be executed are detailed below:

- Firstly, Lucknow, is provided 24 Hours of supply on account of the fact that it is the capital city of Uttar Pradesh, encompassing Raj Bhawan, Vidhan Sabha, Lucknow Bench of High Court other important institutions like State Level University, Medical Colleges, Research Centers, other Centers of Excellence etc. as well as residence of His Excellency – The Governor, Hon'ble Chief Minister, Hon'ble Ministers, Hon'ble Judges of Lucknow Bench of High Court, Chief Secretary etc. so as to ensure smooth functioning of the offices of these dignitaries as well as institutions.
- 2. 24 hours of supply is being provided to Noida and Ghaziabad towns as these are not only parts of NCR but also the industrial hubs for the State. All Mahanagar towns and commissionaires are provided with extended hours of supply to the tune of approximately 17 to 18 hours considering the commercial importance of these areas and also the fact that many regional level offices and institutions are located in these cities. Any curtailment/reduction in supply to these areas on account of direction of equal supply will cripple the activities of these regional level institutions, thus affecting large chunk of the population in the State. Further, reduction in supply hours would also lead to downward trend of commercial activities in these major towns, thus not only affecting the economy of these towns but also that of neighbouring smaller districts, which thrive on the commercial activities of these major towns. These Mahanagar have special significance as these provide job and livelihood to neighbouring satellite towns.
- 3. District head quarters are the hub of all administrative activities. In fact, it is these centres from where all national / state level programmes / schemes get implemented thereby requiring almost all functional activity coordinating offices/ institutions. Electricity supply to the tune of roughly 15 hours is provided to these district head-quarters to ensure smooth functioning of the administrative machinery and establishing better connect with the general public at large.



Maximum possible hours of supply, in given situation, is extended to these areas so that the economy of these district centres does not get affected adversely.

- 4. It is unbounded responsibility of the instrumentality of the state to ensure that resources and its disposal are utilized in a manner so as to reduce the imbalance in the development across the state. It is in pursuance to this objective that applicant is supplying roughly 20 hours of electricity to the undeveloped Bundelkhand region as a whole, which is way above than remaining areas of the state. It is responsibility of the state to ensure that more electricity is provided in those areas, which are rain deficient and have very low water levels so as to promote alternate means of irrigation and other means of economy. It is with this justification that applicant is ensuring higher supply hours to undeveloped Bundelkhand region.
- 5. Similarly, extended hours of supply is given to places of religious importance such as Chitrakoot, Varanasi, Deoband etc, Railways, Hospitals, Defence Establishments etc. to promote communal harmony as well as to ensure social security and well being of the public at large. 24 hours uninterrupted supply, on independent feeder, is provided to all district courts to ensure that the judicial work is discharged in the most effective manner. As per orders of Hon'ble Supreme Court of India passed on 10.04.1996, 10.05.1996, 13.08.1996, 04.09.1996 and 10.09.1996 the Taj Trapezium Zone is provided uninterrupted 24 hours of supply. This order was passed with a view that there may be complete restriction on running of diesel generating sets in this area to minimize ecological damage to the monumental Taj. Similarly, the holy city of Allahabad is, unfailingly, provided with 21 to 22 hours of supply in view of the orders of Hon'ble High Court dated 22.09.2005 and 18.10.2005 in Writ Petition No. 46120 of 2005.
- 6. Apart from ensuring supply to important areas of State it is also the endeavour of the Licensees to provide extended hours of supply, to the extent possible, in case of any exigency, special activity or festivity e.g. extra hours of supply is being presently provided to various parts of the State in view of month of Ramzan. Similarly, no curtailment of



supply is being done during night hours i.e. from 6 pm to 6 am on all feeders feeding the Kanwar Yatra path in the districts of Ghaziabad, Hapur, Meerut, Muzaffarnagar and Saharanpur. You may appreciate that even in a shortage situation the exigencies are to be met so as to ensure smooth functioning of law and order.

7. Like all bonafide classifications, as detailed above, which pervade and meander through development, economic & commercial considerations, social security concerns, social harmony requirements, requirements related to festivity, defence & medical requirements and most importantly compliance of judicial pronouncements, honour of judicial status, it becomes imperative upon an instrumentality of the State to ensure security to individuals in general and to persons of importance in particular through whom the society is served on a holistic basis. Important individuals related to all three pillars of Constitution viz the legislature, the judiciary and the executive, who not only serve the common man in its daily life but are also responsible for upholding the basic frame work of law and order system, are of paramount importance for the society. Their safety has to be ensured at all cost within the constraints. In this realm, it becomes the undivided responsibility of the applicant to ensure supply to the areas, which are frequently visited or inhabited by these dignitaries. Under this consideration also, extended hours of supply is being provided to Lucknow, capital city, city encompassing Raj Bhawan, Vidhan Sabha, Lucknow bench of High Court other important institutions as well as residences of His Excellency - The Governor, Hon'ble Chief Minister, Hon'ble Ministers, Hon'ble judges of Lucknow bench of High Court, Chief Secretary etc; the district of Allahabad, which is judicial epitome of the state as well as residential place of Hon'ble High Court Judges and other respected members of legal fraternity; cities like Etawah, Kannauj, Mainpuri, Rampur Town, Raibareily and Amethi, which are the constituencies of important state level and national level leaders thereby witnessing frequent visits and stays of not only these leaders but also that of other important legislatures and dignitaries and holding of important political and social functions depending on their itinerary or otherwise, where a small miss may cost dearly as far as



security of these important dignitaries is concerned. It also needs to be underlined that if these areas are so frequently visited by eminent people that 15 to 20 days out of a month one has to ensure uninterrupted supply for their security concerns then it becomes implausible for the system to schedule supply differently on an "off and on" basis and for the health of system, it become advantageous that a permanent schedule of extended hour of supply is applicated on these areas.

- 8. Reduced hours of supply to the tune of 10 hrs are being provided to rural areas but at the same time it is ensured that their agricultural requirements are effectively met with the level of supply within the constraints. It needs to be mentioned here that rural categories are normally unmetered and highly subsidized & cross- subsidized. Accordingly, keeping in view our supply constraints, commercial prudence, requirements of agrarian economy and also the lifestyle of rural people, supply is being ensured at required hours so that the needs of rural people are satisfied.
- 3.10.21 The Licensees submitted that, accordingly, the rationale of providing differential power supply to different areas has been detailed above. It submitted that emanating out of judicial pronouncements, social, religious, and security concerns, there are different classes within the overall class of State of U.P. It is an admitted position under the Constitution that discrimination may be provided among different classes however, once a subclass is defined based on above considerations then within that sub-class more rostering will be resorted at places, where the loss is higher.
- 3.10.22 The Licensees submitted that in case Commission does not accept the rationality of our classifications or our administrative authority to issue such directions then the Commission is requested to order a detailed framework for rostering schedule that should be effected on different districts of Uttar Pradesh keeping in view our technical constraints.
- 3.10.23 With reference to tariffs in Noida, the Licensee has submitted that, 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.



- 3.10.24 With regard to circle wise AT&C loss the Licensee has submitted that it has submitted the data gap responses subsequent to which the Commission has admitted the ARR petitions filed by the Discoms.
- 3.10.25 With regard to contention raised by Mr. Avadhesh Kumar Verma regarding reduction target submitted to Supreme Court, the Licensee submitted that the ARR is prepared as per the methodology provided in the Distribution Tariff Regulation 2006. The Regulations provide that all the expenses are projected on the normative basis and losses are approved on that basis. ARR or tariff hike is not approved based on the actual loss as alleged by the stakeholder. However, the licensee is making concerted efforts to reduce line losses which may be technical as well as commercial.
- 3.10.26 The Licensee has 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 projecting the tariff all these issues require to be taken into account. The Licensee 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.

## C) The Commission's View:

- 3.10.27 The Commission recognises the fact that the Licensee has 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 Licensee 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.
- 3.10.28 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.

# 3.11 PRE-PAID METERING

# A) Comments/Suggestion of the Public

- 3.11.1 Mr. Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad, submitted that, the tariff for pre-paid consumers must be designed in such a way that it is easily implementable and transparent in nature. He also requested the Commission to increase the rebate.
- 3.11.2 Mr. S.B Agrawal, Adviser, Associated Chambers of Commerce & Industry of U.P, submitted that according to Electricity Act, 2003 consumers opting for prepaid meters should not be charged any security deposit. He also added that, despite directives from the Commission, Discoms are not providing prepaid meters to the consumers.

## B) Petitioner's Response:

- 3.11.3 The Licensee submitted that the Commission at its own initiative, considering the complexities involved in directly adopting the tariffs / tariff structure prescribed in the tariff order for different category of consumers with normal meters and also to iron out the practical difficulties, has constituted a Committee. On the basis of broad suggestions made by the Committee with respect to implementation of tariffs for consumers with pre-paid meters, a Petition was filed before the Commission on 24.04.2015. Further, a meeting was held in the office of Commission on dated 28.04.2015 on a Petition for fixing the tariff of prepaid meters. The replies of the issues raised during the meeting were submitted to Commission vide this office letter No. 2453/RAU/Petition dated 30.04.2015.
- 3.11.4 The Licensee submitted that the Commission vide order dated May 11, 2015 has already issued an order for the fixation of Tariff for Pre-paid Metering, as such all issues raised in the representation have been resolved.



3.11.5 The Licensee submitted that prepaid meters are being procured and will be installed at consumers' premises. The details regarding the procurement and installation of prepaid meters are being regularly informed to the Hon'ble Commission.

# C) The Commissions View:

3.11.6 The Commission in its earlier Orders has repeatedly directed the Distribution Licensees regarding expedition of process of introduction of Pre-paid meters. Further, with regard to the above matter, the Commission has issued a separate Order in the matter of "Fixation of Tariff for Pre-paid Metering" on May 11, 2015.

# 3.12 TARIFF REVISION FOR LMV-1 CATEGORY

- 3.12.1 Mr. G.P Satstangi, Secretary, Radhasoami Satsang Sabha, Agra submitted, that Radhasoami Satsang Sabha is a religious and charitable society, that provides electricity to its residents. It purchases power in bulk from DVVNL (now TPL) at 33kV for which it has obtained connection under LMV-1 (b) (ii) category. He submitted that it is the fourth time during last three years period that the tariff would be increased. He further suggested that State Govt. should conduct energy audit on the analogy to Statutory Audit prescribed by Central Government in Delhi.
- 3.12.2 Dr. Pradeep Garg, submitted that, all metered consumers of LMV-1 having consumption up to 100 units per month and sanctioned load 1 kW are charged with rates approx equal to lifeline consumers schedule and it is of special significance when average consumption of these consumers is only 75 unit / kW / month which implies LMV-1 category is similar to lifeline consumers, which is incorrect and results in loss of revenue. Similarly, rural consumers who are well off are paying fewer tariffs.
- 3.12.3 Mr. Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad, submitted that lowering of the consumption norms for Lifeline consumers to 50 units is unconstitutional.



### B) Petitioner's Response:

- 3.12.4 The Licensee submitted that the Annual Revenue Requirement is being determined in accordance with the Tariff Regulations framed by the Hon'ble 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 projecting the tariff all these issues require to be taken into account.
- 3.12.5 The Licensees submitted that the tariff for lifeline consumers has been proposed to with the following objectives:
  - Consumption norms for Lifeline/BPL Category Consumers are in alignment with other States and in Compliance with Tariff Policy. Attempt to move towards 50% of the Cost of Supply as envisaged in NTP.
  - According to, Clause 8.3(1) of the Tariff Policy, 2006 "In accordance with the National Electricity Policy, consumers below poverty line who consume below a specified level, say 30 units per month, may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply. This provision will be re-examined after five years."

## C) The Commissions View:

3.12.6 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 various other States. Further, the detailed approach as considered by the Commission for approving the Tariff for various categories has been discussed subsequently in this Order.



## 3.13 TARIFF FOR LMV-10 CATEGORY

- 3.13.1 Mr. S.B Agrawal, Adviser, Associated Chambers of Commerce & Industry of U.P, and Mr. Bhuvesh Kumar Aggrawal, National Chamber of Industries & Commerce, UP, submitted that consumption pattern of LMV-10 is somewhat equivalent to LMV-1. They submitted that installed loads for different class of employee's may be 2 kW, 5 kW and 7.5 kW and submitted that fixed charges should be Rs. 180, Rs. 450 and Rs. 675 but fixed charges are varying from Rs. 160 to Rs. 600 per month. Hence, they suggested that the fixed charges should be levied as 2 kW for class III employees, 5 kW in case of JE and AE and 7.5 kW in case of EE and above. They also suggested that normative energy charges should be worked out and concession should not be given to departmental employees at the cost of common consumers.
- 3.13.2 Mr. Vishnu Bhagwan Agarwal, Chairman, Agra Chapter, ASSOCHAM, U.P, submitted that there is no satisfactory progress in installing meters specifically of LMV-10 consumers. Fixed charges of this section should be increased in line with the charges applied in LMV-1 and LMV-2. He submitted that there should be three categories for charging for charging fixed charges i.e. 2kW, 5kW and 7.5kW.
- 3.13.3 Mr. J.M.L Vaish, President, Vidyut Pensioner's Parishad, submitted that, Vidyut Pensioner's Parishad is the representative of the pensioner's who retired either as employees of erstwhile U.P State Electricity Board or while working as employees of U.P Power Corporation or in its subsidiary Distribution / Transmission Companies or in U.P Rajya Vidyut Utpadan Nigam Ltd or U.P Jal Vidyut Nigam. He requested the Commission, not to determine the tariff for this category, i.e. LMV-10, and leave the determination to the respective employees will be a component of "employee cost" and obviously form part of base rate submitted in ARR, by respective Distribution Companies / Transferees.
- 3.13.4 He submitted that, tariffs for LMV-10, is increased by 45% whereas for residential consumers, LMV-1, tariff increase is only 10%. So, since tariff is



already hiked for LMV-10, there should not be further hikes for this category. He further stated that, tariff of LMV-10 should not be advertised, as it is decided on by the company, and its determination is different from determination of tariff for residential categories.

3.13.5 Mr. Lalit Kumar submits that, as per clause 4.1.1, only LMV-10 consumers are allowed single connections in multistoried buildings. This facility should be applicable for all residential consumers in HV-1.

# B) The Petitioner's Response

- 3.13.6 The Licensees submitted that Rate Schedule of LMV-10 (Departmental Employees and Pensioners) provides two options and per the present practice Departmental Employee residing in multi-storied building are billed as per option-2 i.e. metered category and energy consumed by them as recorded in their sub-meter, is deducted from the gross energy recorded by the single point meter.
- 3.13.7 The Licensee submitted that, Section 23 (7) of 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 same spirit has been echoed under first provision 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 electricity", which means concession in rate of electricity to the extent it is not inferior to what was existing before 14<sup>th</sup> January, 2000. The terms and conditions of supply have been proposed in strict adherence of above statutory provisions and the increase in rates and charges are proposed proportionality with LMV-1 category.
- 3.13.8 The tariff hike has been proposed in view of the revenue gap. The Licensee submits that the Annual Revenue Requirement is being determined in accordance with the Tariff Regulations framed by the Hon'ble Commission. The tariff is being proposed to recover the gap between the Annual Revenue Requirement and the revenue at current tariffs.

## C) The Commission's View



3.13.9 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 Rate Schedule provided subsequently in this Order.

# 3.14 QUALITY OF POWER AND ROSTERING

- 3.14.1 Mr. Yogesh Sethia, Sethia Oil Industries Ltd. (SOIL) and Mr. Vijay Kumar Bansal of Udyogik Asthan, submitted that the electric department is demanding to make an agreement to charge against protective loading in 33kV independent industrial feeder despite the earlier assurance that if they shift from 11 to 33kV, they will be provided 24 hours supply. Further, there is an issue of high voltage where voltage is more than 6% and touches up to 9% due to which forced shutdown becomes necessary to protect the equipments.
- 3.14.2 Members of Jan Shakti Morcha, and Rakesh Goel, President, Matadhkri Sangh submitted that, the quality of power supply is intermittent and poor. So, consumers have to install inverters, generators as electricity is not reliable.
- 3.14.3 Mr. B.N Gupta, Secretary, Associated Chambers of Commerce & Industry of U.P, and Mr. Vishnu Bhagwan Aggrawal, President, Agra Chapter, ASSOCHAM, submitted that, every transformer should have an audit meter, transformer capacity should not be more than accepted load and LT lines should be underground to minimize losses and improve quality. Open tenders should be floated for getting electrical work done without any political interference. Further, no tariff revision should be allowed until check meters on transmission points and 100% metering in department employees premises is done.
- 3.14.4 Mr. Lokesh Kumar Aggrawal, Uttar Pradesh Udyog Vyapari Mandal, submitted that, transformers are usually overloaded, which results in voltage fluctuations and difference in power factor in meter.
- 3.14.5 Mr. Navin Kumar Singh, University Engineer, University of Allahabad submitted that, Allahabad University is a central university getting power supply on 33kV at its 33 / 11kV sub-station through independent feeder and it comes under LMV-4(A) (b) category. The protective load charges for this is 25% of base



demand charges fixed per month. Since, sanctioned load is >75kW, the billing is done in Rate Schedule HV-1. For this also protective load charges is 25% of base demand charges fixed per month. But, inspite of repeated letters and requests by the stakeholder, the current protective load charges is 100% of base demand charges.

3.14.6 Mr. Sanjay Chaubey submitted that High capacity transformers should be installed in areas of low voltage and ABC conductor cable should be used to stop pilferage.

## B) The Petitioner's Response

- 3.14.7 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.
- 3.14.8 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 stated 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.
  - 3.14.9 The Licensees submitted that they are adopting various measures for the prevention of theft and such measures are listed below:
    - For proper accounting of energy & reducing chances of theft, double metering system is being implemented & 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 break-downs and has resulted in better quality of supply & consumer satisfaction.



- Provision of periodic checking of all static and tri-vector 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.
- 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.
- 3.14.10 The Licensees submitted that the Commission has embarked upon the glorious intention of 100% metering in the state of UP. In view of the same, a target of metering of 25 lakh consumers was given to the Discoms in the Tariff Order for FY 2014-15. Subsequent to the directions of the Commission, the Discoms started an extensive drive to meter the un-metered consumers. The Discoms under the said drive metered around 24 lakh consumers. Thus, it is demonstrated that the Discoms are duty bound to achieve 100% metering and are strictly following the instructions of the Commission.

## C) The Commission's view:

3.14.11 The Commission has taken note of the objections / suggestions made by the stakeholders in this regard. The Commission is also concerned about the above issue of quality of supply and would take appropriate steps to guide the Licensee in improving the same. Further, the Commission also directs the Licensee to strictly adhere to the stipulated timeframe as specified in UPERC (Multi Year Distribution Tariff) Regulations, 2014 for submission of its business plan / capital expenditure in this regard.

## 3.15 COMPLAINCE OF DIRECTIVES

## A) Comments/Suggestion of the Public

3.15.1 Mr. K. L. Aggrawal, Chairman, Associated Chambers of Commerce & Industry of U.P, submitted that, for determination of ARR and tariff for PVVNL, for FY 2014-15, clause 11.1.11 states that, *"While according a final opportunity to the distribution licensees directing them to ensure that all unmetered consumers* 



get converted into metered connection by 31<sup>st</sup> March 2015 beyond which, the tariff for unmetered category shall be discontinued." In this regard, he requested the Commission to submit the implemented status for the same.

- 3.15.2 Mr. S.B. Agrawal, Adviser, Associated Chambers of Commerce & Industry of U.P, submitted that, Commission had been regularly directing for installing meters, including Departmental Employees and Pensioners who are covered under LMV-10 category. He also submitted that persistent defiance in compliance of this directive is seen in case of the Discoms.
- 3.15.3 Mr. D.S. Verma, Indian Industries Association and Members of RWA Federation, Ghaziabad submitted that, Licensees are to submit compliance audit of performance every quarter and liability index in prescribed format to the Commission and nothing has been submitted so far in this regard.

## B) The Petitioner's Response:

3.15.4 The Commission has embarked upon the glorious intention of 100% metering in the state of UP. In view of the same, a target of metering of 25 lakh consumers was given to the Discoms in the Tariff Order for FY 2014-15. Subsequent to the directions of the Commission, the Discoms started an extensive drive to meter the un-metered consumers. The Discoms under the said drive metered around 24 lakh consumers.

### C) The Commission's View:

3.15.5 As regards 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 Licensee and new directives issued by the Commission have been discussed subsequently in this Order.

### 3.16 MINIMUM CONSUMPTION CHARGES



- 3.16.1 Mr. S.B Agrawal, Adviser, Associated Chambers of Commerce & Industry of U.P, and Mr. Bhuvesh Kumar Aggrawal, National Chamber of Industries and Commerce, UP, submitted that in case of LMV-2, it has been proposed to levy Rs 700/kW per month. This was disallowed by the Commission on persistent objections from the consumers. Hence, it is unjustified to levy them again.
- 3.16.2 Dr. Pradeep Kumar Garg, Garg Nursing home & Ray Clinic, submitted that, at present a consumer has to pay minimum charges for using 3 to 4 hours on full load. Based on this, there is neither any proof that ordinary consumer ever uses load for 3-4 hours on full load.
- 3.16.3 Director, Tulsiani Construction and Developers Ltd, submitted that a consumer residing in multi-storey buildings has to pay higher rates. Further, minimum consumption charges for temporary category are very high. Hence, this should be considered by the Commission.
- 3.16.4 Mr. Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad, submitted that minimum charge proposed by the Licensee for LMV-2 category should not be accepted by the Commission.

## B) Petitioner's Response

- 3.16.5 The Licensee has 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 further 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 Licensee 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.
- 3.16.6 In respect to minimum charges for commercial categories, the Licensee clarified 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 added 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."

3.16.7 The Licensee submitted that, therefore these charges are logical and necessary.



### C) The Commission's View:

3.16.8 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.

## 3.17 FIXED CHARGES AND ENERGY CHARGES

### A) Comments/Suggestion of the Public

3.17.1 Mr. S.B Agrawal, Adviser, Associated Chambers of Commerce & Industry of U.P, and Mr. Bhuvesh Kumar Aggrawal, National Chamber of Industries and Commerce, UP, submitted that it has been proposed to increase fixed charges from Rs 75 to Rs 90 / kW / month in case of LMV-1 and from Rs. 200 / kW / month to 225 / kW / month in case of LMV-2. The existing slabs for energy charges from LMV-1 and LMV-2 are also proposed to be revised, from existing four slabs to three slabs, by clubbing existing two slabs (from 0-150 and 151-300). This will also increase the rates for consumers who consume less power, as depicted below:

| LMV-1       |                    |        |  |  |  |
|-------------|--------------------|--------|--|--|--|
| 0-150       | Rs 4.00 to Rs 4.75 | 18.75% |  |  |  |
| 151-300     | Rs 4.50 to Rs 4.75 | 5.55%  |  |  |  |
| 301-500     | Rs 5.00 to Rs 5.50 | 10.00% |  |  |  |
| 501 onwards | Rs 5.50 to Rs 5.75 | 4.55%  |  |  |  |
| LMV-2       |                    |        |  |  |  |
| 0-150       | Rs 6.00 to Rs 6.70 | 11.67% |  |  |  |



| LMV-1    |                    |       |  |  |  |
|----------|--------------------|-------|--|--|--|
| 151-300  | Rs 6.50 to Rs 6.70 | 3.08% |  |  |  |
| 301-1000 | Rs 6.80 to Rs 7.10 | 4.41% |  |  |  |
| >501     | Rs 7.10 to Rs 7.25 | 2.11% |  |  |  |

- 3.17.2 In view of the above, he requested the Commission to reject the proposed change in energy charges slab structure for LMV-1 and LMV-2.
- 3.17.3 Mr. Vijay Bansal, President, Udyogik Asthan Vikas, submitted that demand charges should be as per electricity supplied. After supply for only 12-14 hours, demand charge should not be levied again.
- 3.17.4 Dr. Pradeep Garg, Garg Nursing home & Ray clinic, submitted that, sanctioned load is not well defined in Electricity Act, 2003 and Distribution Code. Provisions of fixed charges are not well defined, and its implementation lies in sole discretion of Commission. He submitted that sanctioned load based charges are levied from ordinary consumers. Earlier, in IE Act 1910, sanctioned load charges were imposed to protect the system for overloading. This is not required as of now, due to various technical improvements. Further, he submitted that contracted and sanctioned load allocation is forced by authorities and ratio of load based fixed charge and unit based charge in bills have increased a lot.
- 3.17.5 Mr. Ghanshyam Khandelwal, Managing Director, B.L Agro Oil's Ltd, submitted that, in the proposed tariff for HV-2, there is no increase for Fixed Charges for any type of Voltage Supply but, if fixed charges are compared with the rates for 2008-09, higher increments in fixed charges for higher voltages was observed.
- 3.17.6 He also submitted that, in the proposed tariff for HV-2, per unit charge for all voltage levels was increased by 35 paisa per unit. It was observed that there are higher increments in energy charges for higher voltages. For higher voltages T&D losses are less, there is no possibility of theft and the consumer has to bear the costs of construction of the substation also. So, the charges should be less comparatively.



- 3.17.7 Mr. D.S Verma, Indian Industries Association submitted that, clause 16 of the petition states to withdraw demand benefit to consumers having contract load of 10kW who are using DSM (Demand Side Management) measures is completely unjustified.
- 3.17.8 Mr. D.S Verma, Indian Industries Association, submitted that, two part i.e. fixed charges, energy charges and TOD tariffs, is justified for consumers with load above 1 MW because supply to such consumers are on a continuous basis. In SMEs (loads of LMV-6 & HV-2), supply of power is hardly 12-14 hours a day. Moreover, supply and consumption hours do not match. So, fixed charges levied are distributed on energy units consumed in only 4-6 hours per day.
- 3.17.9 Members of Jan Shakti Morcha ,Vidyut Upbhogkta Sangh, Members of RWA Federation, Ghaziabad and Mr. Vishnu Bhagwan Aggrawal, President, Associated Chambers of Commerce and Industry of U.P, Chapter Agra, submitted that, fixed charges should be stopped completely, only energy charges should be levied because people do not get supply of electricity for 6-8 hours continuously even on demand. If this is not possible, then if demand of consumer is not met then, fixed charges should be reduced by 35% for every kW.
- 3.17.10 Mr. Vidyadhar Malviya, Samajvadi Party, Loktantra Rakshak Senani submitted that, fixed charges should be fixed at Rs 200 per kW, and energy charges should be removed. There should be provision of submission of bills at shops, like mobile recharges.
- 3.17.11 Dr. Pradeep Kumar Garg, Dr Garg Nursing Home & Ray Clinic, submitted that, depreciation is allowed and added in the unit cost is consumed for repayment of loans. Further he submitted that, the tariff order neither decides nor denies that system loading charges/ assessment of bills and other miscellaneous charges are not incorporated in the petition.

# B) Petitioner's Response:

3.17.12 The Licensee has submitted that the modifications in the Electricity Supply code are not within the scope of the current ARR and Tariff determination proceedings.



- 3.17.13 Two part tariff towards fixed charges and energy charges is proposed as fixed charges are towards the network cost and operations and maintenance cost and energy charges are recovered towards cost of power purchase.
- 3.17.14 The Licensees submit that fixed 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. 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."

3.17.15 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."



3.17.16 The Licensees submitted that the fixed charges 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 :

3.17.17 The Commission has taken note of the above objections / suggestions made by the stake holders in this regards. Fixed / Demand Charge is meant to defray the capital related and other fixed costs. A distribution Licensee requires machinery, plant equipment, sub-stations, and transmission lines etc., all of which need a large capital outlay. Laying down the said infrastructure requires funds which are raised either through debt or equity; both of which come at a cost. Further debt funds are to be repaid and equity has to be serviced through return. 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. The Commission has, only after considering the interest of consumer as well as of the Licensee, approved the hike in fixed charges as it reflects cost of supply.

## 3.18 ELECTRICITY DUTY AND SECURITY DEPOSIT

## A) Comments/Suggestion of the Public

3.18.1 Mr. S.B Agrawal, Adviser, Associated Chambers of Commerce & Industry of U.P, submitted that security deposit should be taken from consumers for one month or 45 days only and not for two months. Association of Steel Railing mills and furnace submitted that, from September 13, 2012 onwards, electricity duty increased from 0.09 paisa to 55 paisa, i.e. by 75%. As a result, duty increased by 6 times. It is further, suggested that, electricity duty should be reduced, to make the industrial units viable.



### B) Petitioner's Response

- 3.18.2 The Licensee submitted that electricity duty is payable to State Government and its chargeability and rates are not governed by the Tariff Order.
- 3.18.3 The Licensee further submitted that interest on consumer security deposit is being given to consumer as per the Order 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.
- 3.18.4 However, in case any specific discrepancy is brought to the notice of the licensee, it is immediately rectified and consumer is credited with the interest on consumer's security deposit.

### C) The Commission's View:

- 3.18.5 Matters related to electricity duty exemption relate to GoUP and the stakeholders desiring any such favours may approach the GoUP along with their proposal.
- 3.18.6 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.
- 3.18.7 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.

## 3.19 HIGH COST OF POWER PURCHASE



- 3.19.1 Mr. Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad, submitted that power purchase cost is most important component of the ARR of the Licensee. He submitted that the power purchase cost projected by the Licensees for Bajaj Plant is Rs. 6.96 / Unit whereas from Rosa Power Project is Rs. 6.02 / Unit. He submitted that these projected costs are too high and requested the Commission to set up a committee to investigate into the matter. He also added that burden of costly power purchase which has been kept out in merit order approved in the Tariff Order FY 2014-15 should not be passed on to the consumers.
- 3.19.2 Mr. Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad, submitted that the Licensees have filed their ARR / Tariff Petitions for FY 2015-16 in which the fixed cost submitted by the Licensees for Lalitpur power project is Rs. 1.40 / Unit and variable cost is Rs. 1.98 / Unit. He further submitted that, the Licensees on the other hand on May 1, 2015 has submitted the petition for provisional tariff determination of Lalitpur power project wherein it has considered the fixed cost as Rs. 2.38 / Unit and variable cost as Rs. 3.47 / Unit which is completely different from the cost submitted in its ARR petition. In this regard, he requested the Commission to look into the matter and take appropriate action.
- 3.19.3 Mr. Ritesh Kumar Singh, Energy Manager, for Indus Tower Ltd, submitted that, power purchase costs for two specific power sources are mentioned below:

|                            | FY 2014-15                    |                       | FY 2015-16                       |                       |
|----------------------------|-------------------------------|-----------------------|----------------------------------|-----------------------|
| Source                     | Qty of Power<br>Procured (MU) | Cost per unit<br>(Rs) | Qty of Power<br>Procured<br>(MU) | Cost per<br>unit (Rs) |
| Total from IPPs and<br>JVs | 25593                         | 4.63                  | 35953                            | 4.28                  |
| Cogeneration and           | 7004                          | 4.89                  | 7717                             | 4.96                  |



- 3.19.4 He submitted that it is inexplicable as to why utility is procuring nearly 43,670 MU of power from expensive sources, as mentioned above. Weighted average cost of procurement from these two sources is Rs 4.40 / unit, whereas utilities could also procure cheaper power from sources like NHPC, i.e. at Rs 3.43/unit. Hence, the Commission is requested to disallow these high costs and direct the Discoms to purchase at reasonable rates.
- 3.19.5 Vidyut Upbhogkta Sangh, Mr Rajprakash Sharma, Mr Devendranath Mishra, Mr Rajkumar Vajpayee and Members of RWA Federation, Ghaziabad suggested that, costly power purchases should be stopped. Further it was submitted that, since power purchase costs are linked to capital costs of projects, there are cases where increase in capital costs was due to negligence of the Govt. In case of Anpara thermal power plant, land acquisition was delayed by the Govt, for which Govt had to pay 40 times the price of the land. Such costs in the long run are transferred to the consumers, through electricity bills.
- 3.19.6 Mr. Dinesh K Makked submits that, Discoms should purchase power from energy exchanges.

## B) Petitioner's Response

- 3.19.7 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. However, merely reliance on power exchanges cannot be done as they are not assured sources of power.
- 3.19.8 The Licensee submitted that the ARR and Tariff Petition for FY 2015-16 was filed by the Distribution Licensees on December 8, 2014. The fixed charge projected in the ARR Petition from Lalitpur TPP was based on a capital cost of Rs. 11,848 Crore (including margin money) which was intimated by the Lalitpur Power Generation Company Limited (LPGCL). The Licensee submitted that subsequently, the project cost was revised and also approved by the lenders to the tune of Rs. 17,295 Crore. The LPGCL had also filed a Petition in the last



quarter of calendar year 2014 for in-principle approval of the Ceiling Capital Cost.

- 3.19.9 The Licensee submitted that subsequently, the UPPCL appointed an Independent Expert Committee to appraise the ceiling capital cost of LPGCL. The expert committee submitted its report in or around the end of the month of March 2015 and recommended a project cost of Rs. 16,006.15 crore for Lalitpur TPP.
- 3.19.10 Subsequently, the LPGCL has filed a Petition for Determination of Provisional Tariff on May 1, 2015 wherein it has prayed for a fixed charge of Rs. 2.38 per unit and energy charge of Rs. 3.47 per unit.
- 3.19.11 Thus, there are two petitions pending before the Commission in the matter of Lalitpur TPP i.e. petition for approval of the Ceiling Capital Cost and petition for determination of Provisional Tariff. Further, it is imperative to submit that the provisional tariff for Lalitpur TPP would be determined by the Commission in terms of Clause 5(3) of the UPERC (Terms and Conditions of Generation Tariff) Regulations, 2014 which provides for determination of tariff based on the actual capital expenditure incurred.

## C) The Commission's View:

- 3.19.12 As regards high power purchase cost, the Commission has taken the matter seriously and had asked the Licensee to submit the actual power purchase data for FY 2012-13, FY 2013-14 and FY 2014-15 (till December). Based on the submission made by the Licensee the Commission has done prudence check and has determined and approved power purchase plan as detailed subsequently in this Order.
- 3.19.13 Since, the tariff of the Lalitpur power plants is yet to be determined by the Commission, the Commission has provisionally approved the fixed and energy charges of these plants as per the submission of the Distribution Licensee subject to truing up.

## 3.20 TARIFF FOR TAJ TRAPEZIUM ZONE



3.20.1 Dr. Anil Chaudhry, submitted that, from October 10, 2014 onwards tariff for farmers in the Taj Trapezium zone and Bundelkhand, has been increased twice the current rates. He submitted the concerns regarding uninterrupted power supply and 24 hours power supply for farmers in the state.

## B) Petitioner's Response

- 3.20.2 The Licensee has 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.
- 3.20.3 The Licensee states 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.
- 3.20.4 Regarding, the demand supply gap, the Licensee states 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.
- 3.20.5 The Licensee submits that Bundelkhand is supplied more power in view of the development needs of the region and considering its backwardness. However, any relaxation or special tariff dispensation would create discontent among other consumers of the State.

## C) The Commission's View

3.20.6 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.

## 3.21 RECOVERY OF ARREARS



- 3.21.1 Mr. Vishnu Bhagwan Agarwal, Chairman, Agra Chapter, ASSOCHAM, U.P, and Vidyut Upbhogkta Sangh submitted that there is a colossal amount which is due against Govt. departments, that is unrecovered and action should be taken on priority to recover the losses.
- 3.21.2 Dr. Pradeep Kumar Garg, Dr Garg Nursing Home & Ray Clinic, submitted that, very huge and regularly increasing past arrears are observed and if these arrears are recovered then, excess cash flow can be utilized to purchase cheaper electricity.
- 3.21.3 Mr. Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad, submitted that if the existing arrear on consumers should be realised then no tariff hike is required.

## B) The Petitioner's Response

- 3.21.4 The Licensee has 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. Moreover true-up petitions up to FY 2012-13 have already been filed on the basis of audited accounts so that yearly calculation 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.
- 3.21.5 Further, the ARR / Tariff would be determined by the Commission based on audited accounts of (n-2<sup>th</sup>) 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. 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 recognized as income once the bills are raised on accrual basis. Hence they cannot be recognized as income source when arrears are collected. The Commission fixes the tariff on accrual basis and not on the cash basis. 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:

- 3.21.6 The Commission agrees with the views of the LIcensees that the recovery from past dues cannot be treated as income of the Distribution Licensee and further treating the realization of arrears as income would amount to double accounting of income as also established by the Hon'ble ATE in its Judgments.
- 3.21.7 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, which has ensured that the burden of poor collection efficiency and consequent larger arrears is not passed on to the consumers.

## 3.22 METERING AND BILLING

- 3.22.1 Mr. Rakesh Goyal, President, Samparn Sankalp Samiti, submitted that, in certain areas of Lucknow, halogen lights, electric heaters for cooking are used, and these connections are not metered. In absence of proper metering at 11 kV substations, accounting is impossible. All figures relating to losses and theft are based on unsubstantiated consumption. Hence, these losses should not be passed on to the consumers.
- 3.22.2 Dr. P.K Garg submitted that by use of Information Technology the errors in the data submitted by the Licensees could be minimized. He also suggested various measures that can be taken by the Licensee such as sending of the bills to the consumers by SMS on allocated mobile numbers and generation of bills automatically by software on basis of line meter reading / SMS meter reading.
- 3.22.3 Mr. Atul Bhushan Gupta, President, Indian Industries Association submitted that, through Govt circular No. 4218/9-311.3.99.42 miscellaneous 199 dated



14.12.2000 multiplexes were kept in industrial category. But since last few months electricity bill is coming as per commercial category. Hence, he requested the Commission to put the multiplexes in industrial category.

- 3.22.4 Mr. D.S Verma, Indian Industries Association submitted that, unmetered supply of power to consumers should be stopped. Since FY 2000-01, Commission has been stating that Discoms should meter all consumers, in order to ensure energy auditing and promote good accounting practices he requested the Commission to put an end to this process.
- 3.22.5 Mr. D.S Verma, Indian Industries Association submitted that, where TVM / Electronic meters are installed, maximum demand is recorded, the fixed / demand charges should be applicable at 75% of the contracted load or maximum demand recorded whichever is higher. This is proposed as consumers apply for loads much more than their actual consumption and have to pay unnecessarily for excess contracted load.
- 3.22.6 The General Manager, BSNL submitted that, it has become very inconvenient for consumers as Electricity Bills are not distributed timely manner and bills are raised with wrong category with higher amounts. Further, he submitted that non-payment of these high bills results in disconnection of electricity.
  - 3.22.7 Mr. Avadhesh Kumar, Chairman, Uttar Pradesh Rajya Vidyut Upbhoktha Parishad (UPRVUP), submitted that, as per Commission's Order the unmetered rural consumers and commercial consumers whose load is within 2 kW will pay as per old tariffs till 31.03.2015. He submitted that almost 50 lakh consumers belong to this category and while giving new connection to these consumers the Discoms have already collected the cost of meters. He submitted that the Discoms are at fault for not installing meters according to Section 55 of Electricity Act, 2003, beyond the stated time period. So, the tariffs should not be revised till next tariff order. He also added that 100% metering and availability of meters in open market outlets is not complied by Discoms.
  - 3.22.8 He contended that Discoms are charging as per new tariffs to rural unmetered consumers, even after Commission's directive. Hence, legal action should be taken against them, according to section 142 of Electricity Act, 2003.



- 3.22.9 Mr. Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad, submitted that earlier through "Vidyut Chori Roko" abhiyan almost 25 lakh consumers were to be given new connection. He added that till March 16, 2015 in MVVNL 6,23,643 new connections were given out of which only 1,64,184 were given metered connection. He further contended that normative billing done by Discoms for unmetered consumers is not correct and the consumers are charged almost 155 units per kW. He submitted that Discoms recover the meter charges along with new connection, but during installation they again charge the consumers.
- 3.22.10 Mr. Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad, also submitted that there is inconsistency in the tariff for LMV-5 category of consumers.
- 3.22.11 Mr. S.B Aggarwal, Advisor, ASSOCHAM, UP, and Vishnu Bhagwan Aggrawal, National Chamber of Industries & Commerce, UP, submitted that, Commission is already aware of the billing fraud of approximately Rs. 1000 Crore, committed by the Discoms, putting power companies and Govt of UP in loss. Extensive action should be taken against the culprits, and further revision of tariffs can be controlled if such corruption is controlled.
- 3.22.12 Mr. Ritesh Singh, Energy Manager, for Indus Tower Ltd, requested the Commission to consider the proposal of compulsory installation of AMR meters and roll out consolidated billing for large consumers with multiple connections. Such measure would drive the efficiency of the Discoms by way of savings in meter readings and billing cost while ensuring accuracy.

## B) The Petitioner's Response

3.22.13 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 submitted by Licensees have been detailed 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.

- 3.22.14 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 and establish mutual trust between citizens and distribution officials
- 3.22.15 The Licensee submitted that any scheduled / unscheduled rostering / breakdown are 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.
- 3.22.16 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.
- 3.22.17 The Licensee submitted that efforts are being made to cover the remaining customers through billing agencies / division offices. They can also log on to



the KESCO 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 behaviour 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.

- 3.22.18 The Licensee submitted that 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.
- 3.22.19 With regard to the tariff for multiplexes, the Licensee submitted that any move to reduce the tariff of such consumers would hurt the Licensees who are already reeling under severe financial crisis. No subsidy is being received from the State Government towards such multiplexes. Hence, any reduction in their tariffs would be uncovered gap for the Licensees. 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 Hon'ble Commission, the National Tariff Policy, 2006 and the Electricity Act, 2003
- 3.22.20 The Licensee submitted that the Commission has embarked upon the glorious intention of 100% metering in the state of UP. In view of the same, a target of metering was given to the Discoms in the Tariff Order for FY 2014-15. Subsequent to the directions of the Hon'ble Commission, the Discoms started an extensive drive to meter the un-metered consumers. The Discoms under the said drive metered around 24 lakh consumers.



- 3.22.21 Thus, it is demonstrated that the Discoms are duty bound to achieve 100% metering and are strictly following the instructions of the Hon'ble Commission.
- 3.22.22 The Licensee submitted that following tariffs were applicable on PTW consumers for the FY 2013-14:

## (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.<br>30.00/BHP/month | Rs.75/ BHP/month | Rs. 1.00/KWh` |

**(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. 55/BHP/month | Rs.140/ BHP/month | Rs. 4.00/KWh  |

- 3.22.23 The above tariffs for LMV-5 were revised by the Commission as below for the Financial Year 2014-15:
  - (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  |

**(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.<br>55.00/BHP/month | Rs.220/ BHP/month | Rs. 5.00/KWh  |

- 3.22.24 It is apparent from the above that while there was no change in the tariffs of LMV-5 consumers getting supply as per rural schedule, the minimum charges and the energy charges for metered consumers getting supply as per urban schedule were revised upward. Since, TTZ / Bundelkhand areas are being supplied approximately 18 hours of supply tariffs as per urban schedule became applicable on LMV-5 consumers under these areas.
- 3.22.25 Since there is huge difference in the tariffs of LMV-5 consumers being provided supply as per rural schedule and urban schedule, representations protesting the hike in tariff were received from LMV-5 consumers in rural areas from TTZ/ Bundelkhand. The Commission after hearing the stakeholder subsequently vide order dated 5 February 2015, revised the tariffs applicable for LMV-5 consumers getting supply as per urban schedule as below:



| Fixed Charge        | Minimum Charges   | Energy Charge |
|---------------------|-------------------|---------------|
| Rs. 55.00/BHP/month | Rs.160/ BHP/month | Rs. 5.00/KWh  |

- 3.22.26 The same tariffs are presently applicable to consumers getting supply as per urban schedule.
- 3.22.27 The tariffs as specified by the Commission vide order dated February 5, 2015 are presently applicable to consumers getting supply as per urban schedule under TTZ / Bundelkhand area. Now the Commission has resolved the issue taking into stock various representations and the present tariff proposal is in conformity with Commission's prescription accordingly there is no issue left to be determined in this matter.
- 3.22.28 The Licensee submitted that the Tariff for Lifeline consumers has been proposed to with the objective that consumption norms for Lifeline / BPL Category consumers are in accordance with other States and in Compliance with the Tariff Policy. The Licensee also submitted that it has attempted to move towards 50% of the Cost of Supply as envisaged in NTP.
- 3.22.29 The Licensee submitted that Clause 8.3(1) of the Tariff Policy, 2006 states that,

"In accordance with the National Electricity Policy, consumers below poverty line who consume below a specified level, say 30 units per month, may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply. This provision will be re-examined after five years."

3.22.30 Electricity consumption of any consumer is directly proportional to hours of supply. Units for provisional billing therefore need to be adjusted to hours of supply. It has been the endeavour of the Licensee to provide increased hours of supply to all consumers in the State. Due to focused efforts of UPPCL, the average supply hours of rural consumers have increased from 8 to 14 hours per day. Un-metered consumers in rural areas are billed on flat rate basis, accordingly, the provisional units fixed for booking against such consumers is totally for academic reasons and for proper accounting of distribution as well



as AT & C losses of a particular area. Since, such treatment does not harm the interest of consumers in any manner historically the provisional units have been fixed by the Corporation considering it to be an executive function and matter has never been referred to the Commission. Even in past, such orders indicating provisional billing was issued by UPPCL and Commission never sought any justification regarding the same.

# C) The Commission's View:

- 3.22.31 The Commission has taken note of the objections / suggestions made by the objectors, on other hand it also appreciates the endeavours made by the Licensees to provide better consumer service and various other e-governance initiatives for consumer benefits.
- 3.22.32 As regards the objections related to individual objectors for settlement of bills etc. the Commission has taken a note of all such objections, however, the Commission is of the view that such objections do not specifically pertain to the ARR and Tariff related matter. The licensees are directed to look into the matter and take appropriate actions on the same.
- 3.22.33 Further, the Commission has also passed a Suo Motu Order on May 29, 2015 in the matter of Provisional Billing in case of defective meters / Normative Consumption for Un-metered consumers wherein the Commission has given appropriate direction to treatment of defective meters / Normative Consumption for Un-metered consumers.

## 3.23 REDUCED SUPPLY HOURS

- 3.23.1 Mr. Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad, submitted that, the tariffs should not be increased as supply hours are not increasing.
- 3.23.2 Mr. Saheb Singh Chauhan, Bhartiya Kisan Sangh, submitted that, electric supply for urban areas is 24 hours at higher rates and for rural areas is 18 hours at lower rates. He added that Bundelkhand is classified as urban area instead of



rural but supply is provided less than 24 hours. Further, he submitted that the farmers in this area cultivate the rabi crops for few months and are charged as compared to other areas. Hence, he requested the Commission to consider the plight of the farmers in Bundelkhand and take actions accordingly.

# B) Petitioner's Response

- 3.23.3 The Licensee submitted that ARR is prepared as per the methodology provided in Distribution tariff Regulation 2006 which clearly say that while making sales forecast the distribution licensee shall first assess the maximum availability of power at economic rates for the ensuing year and then accordingly re-adjust hours of supply to different category of consumers. In the ARR, sale forecast is prepared after considering all the parameters including the supply hours. The detail of which is already been provided in the ARR. The Licensee submits 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. As there is a significant gap between the ARR and the Revenue Assessment, hence a marginal tariff hike is being proposed to mitigate a portion of the revenue gap.
- 3.23.4 The Licensee has submitted that Bundelkhand is supplied more power in view of the development needs of the region and considering its backwardness. However, any relaxation or special tariff dispensation would create discontent among other consumers of the State.

## C) The Commission's View:

3.23.5 The Commission has noted the objections / suggestions of the stakeholders in this regards. The details related to all the aspects of Tariff design has been discussed in Chapter named Tariff Philosophy and Rate Schedule provided subsequently in the Order.

## 3.24 OPEN ACCESS



3.24.1 Mr. P.K Maskara, Director, The Mahabir Jute Mills Ltd, submitted that, open access is not encouraged by UPPCL. One of the units in Mahibir Jute Mills, completed all requirements of metering and then got permission as third party independent buyer on 33 kV. But, due to heavy imposition of transmission loss, transmission charge, wheeling loss and charges, availing of power under open access becomes unviable.

# B) Petitioner's Response

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

## C) The Commission's View

3.24.3 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.

## 3.25 AUDIT OF ACCOUNTS

- 3.25.1 Mr. D.S Verma, Indian Industries Association submitted that, ARR FY 2015-16, on behalf of Discoms may be rejected on the grounds that previous years accounts of Discoms have not been audited. There are no estimates / projections notified to the public about expenses and incomes.
- 3.25.2 Members of Jan Shakti Morcha, submitted that, CAG audit should be done in UP, like that of Delhi, and profits for Discoms should be capped. This will result in reduction in tariffs.



- 3.25.3 Mr. B.N Gupta, Secretary, Associated Chambers of Commerce & Industry of U.P, submitted that, accounts of Discoms should be properly audited. Metering of all connections to be done and no free supply of electricity should be given to consumers.
- 3.25.4 Mr. Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad, submitted that ARR / Tariff proposal should be proposed by the Licensees based on the audited accounts and timely filing of ARR must be done along with the submission of CAG Audit Report. He added that any delay on account of timely filing must be penalised and benefits must be passed on to the consumers.

## B) Petitioner's Response

3.25.5 The Licensees submit 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 2012-13. Such audited accounts and AGUP reports have already been published on the website of the Licensees.

#### C) The Commission's View

3.25.6 The Licensee has submitted the audited accounts of FY 2012-13 and provisional accounts for FY 2013-14. The CAG report for FY 2012-13 has also been submitted by the Licensee. The Petition of the Licensee was admitted only after the receipt of the above documents.

## 3.26 CROSS SUBSIDY AND CROSS SUBSIDY SURCHARGE

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

3.26.1 Mr. Rama Shanker Awasthi submitted that section 62 (3) of Electricity Act 2003 & national tariff policy also clearly says that cross subsidy is within +/- 20% of the average cost of supply. He added that Hon'ble APTEL has also passed Order in this regard. He requested the Commission to determine tariff as per



provisions of Electricity Act 2003, National Tariff Policy and Hon'ble APTEL Orders.

- 3.26.2 Mr. D.S Verma, , Indian Industries Association, submitted that, the average revenue per unit percent of ACoS is proposed to be increased from 112% to 117% in 2015-16 resulting in increase of unit rates for LMV-6 and HV-2 category. Already SME's are reeling under the pressure of cross subsidy. SMEs generate maximum employment, and hence should not be burdened with increase in burden of cross subsidy.
- 3.26.3 Mr. Mohan K. Kejriwal, Mohan Steels Ltd, submitted that, cross subsidy on purchase of energy on third party purchase should be removed as industrial consumer is already paying demand charges on connected load. Similarly wheeling charges shouldn't exceed that fixed for PGCIL.
- 3.26.4 Dr. Pradeep Garg, Dr Garg Nursing home & Ray clinic, submitted that, there is huge discrepancy in data of available subsidy, significant amount of LMV-10 subsidy bill and other unmetered supply is not accounted for in this data.

## B) Petitioner's Response:

3.26.5 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 Hon'ble Commission, the National Tariff Policy, 2006 and the Electricity Act, 2003.

## C) The Commission's View:

3.26.6 In accordance with the National Electricity Policy, consumers below poverty line who consume electricity below a specified level may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply. The tariff has been designed in such a way that it shall progressively reflect the cost of supply of electricity.



3.26.7 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 Chapter Open Access Charges.

# 3.27 TARIFF FOR TELECOM TOWERS

- 3.27.1 Mr. Tilak Raj Dua, Director General, Tower and Infrastructure Providers Association and Mr. Anand Mohan Mishra, Head, UPE Telecom Circle for Viom Networks Ltd submitted that, minimum charges of Rs 700 / kW / month for non domestic connection for consumers in FY 2015-16 would be applicable only to Telecom Industry. He condemns this as completely unfair and discriminatory as this would be a great setback to the Government's vision of Digital India besides the services becoming unaffordable.
- 3.27.2 Mr. Ritesh Kumar Singh, Energy Manager, Indus Tower Ltd, submitted that UP Power Corporation Ltd has certain feeders that operate under rural schedule. He submitted that based on data provided by UPPCL, establishments who receive electricity via rural feeders receive only 10 hours of supply, which is significantly less than that received by urban areas. He also submitted that the tariffs for rural and urban feeders should be billed accordingly, but most of telecom towers supplied by rural feeders are currently being billed based on urban tariffs as there is no clarity as to which region falls in which area. He requested the Commission to bill the telecom located in rural areas based on rural tariffs.
- 3.27.3 He also submitted that, current average tariff structure for commercial consumer is Rs. 7.67 / unit in the State, which is highest in the country for any category.

| States     | Energy Charges | Cost per Tower |
|------------|----------------|----------------|
| Uttrakhand | 4.55           | 31,870         |
| J&K        | 4.51           | 32,313         |



| States      | Energy Charges | Cost per Tower |
|-------------|----------------|----------------|
| Jharkhand   | 5.25           | 38,388         |
| Chattisgarh | 6.00           | 42,672         |
| Haryana     | 6.10           | 42,163         |
| UP          | 7.67           | 55,715         |

- 3.27.4 He submitted that it is costlier to operate telecom towers in UP as compared to other states and any further hike would be detrimental for the state's telecom business.
- 3.27.5 Further, he also submitted, that in accordance with Section 62(3) of the EA 2003, Commissions across various States in India have introduced specific subcategories for certain type of consumers under the commercial category. He submitted that the Commission has the right to differentiate between consumers on the basis of the "purpose for which the supply is required". In this regard, he requested the Commission to consider telecom as a special subcategory under the commercial category. He added that telecom tower industry forms a very different consumption profile and comes under the domain of essential service provider for social benefit and considering the ease of serving consumers, appropriate relaxations in tariff should be provided for telecom tower industry.

## B) Petitioner's Response

- 3.27.6 The Licensee clarified that the activity of consumers under the telecom 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.
- 3.27.7 Regarding the issue of, towers on rural schedule being billed on urban rates the Licensee submitted that, as the Commission is already seized with this matter, it would not be appropriate for the Licensee to comment on the same



in this proceeding. Further, this matter does not pertain to the determination of the ARR and Tariff for FY 2015-16.

# C) The Commission's View

3.27.8 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. With regards to urban tariff being implemented on feeders supplying as per rural schedule , requisite instructions have been issued to the Licensee in subsequent sections of this Order.

# 3.28 TARIFF STRUCTURE

- 3.28.1 Mr. Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad, submitted that, the tariff should be determined on the basis of use of electricity. He submitted that the domestic consumers uses electricity for their personal use and cannot pass on their tariff rise, which is the case with commercial consumers. He requested the Commission that considering these facts the tariff of the above categories should be designed.
- 3.28.2 Mr. Rami, Global Care Organisation, submitted that voltage and rates for LMV-1 and HV-1 are not clear as a lot of categories are added.
- 3.28.3 Mr. Vijay Dayal, Aasaskiya Sahayata Prapt Vidhlaya Prabhandhak Sabha, UP, submitted that tariff for non-Govt. aided educational institutes should be reduced.
- 3.28.4 Director, Tulsiani Construction and Developer's Ltd submitted that, UPPCL has proposed more than four types of variable domestic rates between Rs 2.20 and Rs 6.90. He submitted that Single point bulk load supply under LMV-1 and HV-1 (non- industrial bulk load) category which are for domestic consumers are



having different rates and voltage separation between LT and HT is not defined clearly.

- 3.28.5 Vidyut Upbhogkta Sangh suggested that, all slabs for commercial and domestic for rural categories should be combined to one slab with moderate tariffs.
- 3.28.6 Mr. Shailendra Singh Chauhan, Bureau Chief, Rastranaman Hindi Dainik Samachar, submitted that, the rate schedule should be simplified, instead of having so many slabs.

## B) Petitioner's Response

- 3.28.7 The Licensee submitted that the rates already approved by the Commission in previous year are based upon the use of electricity. Further, the licensee in its proposal has proposed different categories based on the use of electricity. As such further categorisation of consumers is not at all warranted.
- 3.28.8 The Licensee submitted that any move to reduce the tariff of non-Govt. aided institutions or such consumers would hurt the Licensees who are already reeling under severe financial crisis. No subsidy is being received from the State Government towards such educational institutions. Hence, any reduction in their tariffs would be uncovered gap for the Licensees.
- 3.28.9 The Licensee submits that it endeavours to simplify the rate schedule; however tariffs have been differentiated according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required in terms of Clause 62(3) of the Electricity Act, 2003.

## C) The Commission's View:

3.28.10 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.

# 3.29 PUBLIC PARTICIPATION

## A) Comments/Suggestion of the Public

- 3.29.1 Mr. Vivek Singh submitted that, regulatory process of filing has become more tedious and costly and places of public hearing are limited to certain cities like Sitapur and Ghaziabad and there is no alternative for residents of other cities.
- 3.29.2 Mr. Vishnu Bhagwan Aggrawal, President, Agra Chapter, ASSOCHAM, submitted that, hearing process should be captured in video camera and written in objections. The Commission should give their views accordingly.
- 3.29.3 He submitted that, under rules and regulations Commission is to hold public meetings before finalizing any tariff order. The Objector requests the Commission to inform as to how many suggestions from the public hearings in previous years are actually incorporated or taken into consideration while finalizing any tariff order.
- 3.29.4 Mr. Vivek Singh submitted that, time period for filing objections should be raised from 15 to 20 days.

## B) Petitioner's Response

3.29.5 The Licensee submits that the choice of places for the public hearings is the sole prerogative of the Hon'ble Commission.

## C) The Commission's View:

3.29.6 The Commission has taken note of the suggestions made by the stakeholder and also ensures the stakeholders that the Commission considers valuable suggestions provided by various stakeholders during the process and duly incorporates the same in the Tariff Order issued by it after taking all the necessary actions in this regards.



3.29.7 The Commission ensures the stakeholders that the public hearings are a transparent process and all necessary procedures in this regards are followed by the Commission as well as the Licensee which also include video-recording of the proceedings. The copy of the video-recording of the proceedings is available.

## 3.30 SUB STATION CAPACITY

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

3.30.1 Mr. Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad, submitted that, the numbers of consumers submitted by the Licensees for FY 2015-16 are 19454622 where as the connected load for FY 2015-16 submitted by Licensees is 46850199 kW. He also submitted that in U.P the substation capacity is around 29003 MVA, which reflects that the capacity is 26102700 kW. He submitted that the system capacity must be equivalent to the load sanctioned / connected to the consumers, which is not the case as it is almost double. He added that the diversity factor must be 1:1 for better performance of the system. He submitted that above reasons leads to system overloading and is major reason of low voltage in the state.

## B) Petitioner's Response

3.30.2 The Licensee submitted that the primary substations and secondary substations are initially not designed as per the total connected load, but are upgraded from time to time. In fact there exists a significant diversity factor across loads as well as across various categories of consumers. The reduced availability of supply at the consumer end is mainly attributed to insufficient availability of power from various sources during peak summer season. With all efforts for strengthening / upgrading both the primary as well as secondary substations, (details of various investment plans have already been provided in the present ARR), the problem of overloading of 33/11kV transformers and associated lines, if any, will be eliminated.

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



3.30.3 The Commission has taken note of the objections / suggestions made by the stakeholders. The Licensee must expedite the work of increasing the capacity of various sub-stations and power distribution network in accordance with the Capital Investment Plan so that above issue is 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.

## 3.31 ENCOURAGING RENEWABLE ENERGY

## A) Comments/Suggestion of the Public

3.31.1 Mr. Vishnu Bhagwan Aggrawal, President, Agra Chapter, ASSOCHAM, and Mr. Awadh Narayan Singh submitted that, solar power plants should be installed in remote areas and incentives should be provided to the consumers.

#### B) Petitioner's Response

3.31.2 The Hon'ble Commission has already provided incentives on usage of solar energy in the rate schedule.

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

3.31.3 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 given the power shortages being faced in the State. 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.

## 3.32 OTHER GENERAL ISSUES



- 3.32.1 Mr. Avadhesh Kumar Verma, Chairman, U.P. Rajya Vidyut Upbhokta Parishad, submitted that, O&M expenses of the Licensees are very high as compared to the other utilities across the States.
- 3.32.2 He submitted that the timely payment rebate of bill is very low and should be increased to incentivize the consumers.
- 3.32.3 Ms. Neha Kushwa, submitted that, electricity connection receipt and bill should be made mandatory along with ID proof for purchase of mobile phone, Sim-card, T.V, fridge etc. She added that while providing electricity connection LED Bulbs should be given to the consumers and for extra purchase of LED bulbs subsidy should also be given. She submitted that bulbs should be completely banned to promote energy efficiency and awareness programmes should be organized and consumers with least consuming units should be awarded.
- 3.32.4 Mr. Vivek Singh, submitted that, Discoms have certain inefficiencies such as unskilled employees are deployed for consumer services and to address faults in electric poles. Discoms have not provided any compensation for deaths due to electric shocks. He added that in case of failure of DTs the consumers in villages have to repair and replace the DTs at their own cost. He submitted that permanent employees are rewarded, even after consumer complaints against them.
- 3.32.5 Mr. P.K Maskara, Director, The Mahabir Jute Mills Ltd, submitted that, clarification is required regarding tariff and non-tariff items i.e. electricity duty, regulatory surcharge, delay payment surcharge, load factor rebate, power factor rebate, power factor surcharge, security deposit and interest on security deposit.

# B) Petitioner's Response

3.32.6 The Licensee humbly submitted that the O&M Expenses allowed to the Licensee are strictly as per the stipulations of the UPERC (Terms and Conditions of Distribution Tariff) Regulations, 2006 which provides for normative O&M expenses. Any O&M expenses incurred by the Licensee over and above the



normative expenses are not allowed to be recovered through tariff, thus penalising the licensees.

- 3.32.7 The Licensee submitted that tariff proposal has been submitted keeping in view the interest of licensee as well as consumers. Further reduction / rebate are not desirable as it will adversely affect the financial position of the licensees. It is imperative to mention that the genuine costs incurred by the licensees 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.
- 3.32.8 The Licensee submits that the village electrification under the RGGVY programme has been completed. Subsequent the major electrification programme is being implemented under the RGGVY Phase II programme.
- 3.32.9 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 break-downs also.
  - Periodic checking of all static and tri-vector meters.

## C) The Commission's View:

- 3.32.10 The O&M Expenses allowed to the Licensee are strictly as per the stipulations of the UPERC (Terms and Conditions of Distribution Tariff) Regulations, 2006 which provides for normative O&M expenses.
- 3.32.11 The issue regarding the rebate has been appropriately dealt in the subsequent section named Tariff Philosophy and Rate Schedule.



3.32.12 The Commission has taken note of the above objections / suggestions made by the stakeholders in this regards. The Commission has determined the Tariff for different category of consumers in accordance with the Electricity Act, 2003 and the Tariff Policy.



# 4. TRUING UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2012-13

## 4.1 INTRODUCTION

4.1.1 The Petitioner has sought the final truing up of expenditure and revenue for FY 2012-13 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 2012-13 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 2012-13, had approved the power purchase quantum of 74,703.39 MU and total power purchase expenses of Rs. 25,439.60 Crore at UPPCL level. The Petitioner, in its True-up Petition, has submitted that the actual power purchase expenses for FY 2012-13 are Rs. 29,557.94 Crore towards power procurement of 77,707.16 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 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:

| Particulars                                 | Unit | True-up<br>Petition |
|---|------|---------------------|
| Power Purchase                              | MU   | 77,707.16           |
| Transmission Loss                           | MU   | 4,039.76            |
| Transmission Loss                           | %    | 5.20%               |
| Energy available at Discom End              | MU   | 73,667.40           |
| Allowable Power Purchase Cost at Discom end | Rs   | 29,557.94           |

#### Table -: BULK SUPPLY TARIFF AS COMPUTED BY THE PETITIONER FOR FY 2012-13



| Particulars   | Unit   | True-up<br>Petition |
|---|--------|---------------------|
| (including PGCIL Charges)                           | Crore  |                     |
| Power Purchase Cost per unit at Discom end<br>(BST) | Rs/kWh | 4.01                |

4.2.4 The Commission has computed the BST based on the same philosophy as adopted in its Order dated October 1, 2014. The Commission further 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 4.08% for FY 2012-13. Further, in reply to the query raised by the Commission regarding bifurcated details of power purchase cost and PGCIL charges for FY 2012-13, the Petitioner submitted the following detail.

## Table -: DETAILS OF POWER PURCHASE COST AND PGCIL CHARGES SUBMITTED BY THE PETITIONER FOR FY 2012-13

| Particulars               | Amount (Rs. Crore) |
|---------------------------|--------------------|
| Power Purchase Cost       | 28,390.27          |
| PGCIL Charges             | 1,167.67           |
| Total Power Purchase Cost | 29,557.94          |

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 2012-13 as shown in the Table below:

| Table -: POWER PURCHASE COST AS COMPL | FIONER | FOR FY 2012-1 | 3 |
|---------------------------------------|--------|---------------|---|
|                                       | <br>-  |               |   |

| Particulars                 | Unit   | True-up Petition |
|-----------------------------|--------|------------------|
| Power Purchase              | MU     | 13,146.66        |
| Sales                       | MU     | 9,880.78         |
| Distribution Loss Target    | %      | 23.63%           |
| Allowable Power Purchase    | MU     | 12,937.20        |
| Trued up Bulk Supply Tariff | Rs/kWh | 4.01             |



| Particulars                   | Unit     | True-up Petition |
|-------------------------------|----------|------------------|
| Allowable Power Purchase Cost | Rs Crore | 5,274.90         |

- 4.2.6 The Petitioner has wrongly computed the allowable power purchase cost using actual Distribution loss of 24.84% against its claimed figure of 23.63% i.e. approved Distribution loss target of FY 2012-13.
- 4.2.7 The Commission has been considering Distribution losses as controllable parameter and thereupon the power purchase cost consequent to underachievement of Distribution loss is disallowed. For truing up of ARR for FY 2012-13 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.
- 4.2.8 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."

- 4.2.9 The Commission has obtained the rates and energy procured through unscheduled interchange (UI). It has been observed that the Petitioner for FY 2012-13 has purchased 3249.41 MU through UI at an average rate of Rs. 4.83 per kWh which is under the maximum rate of Rs. 6.06 per kWh for power purchased under the Merit Order of the licensee as approved by the Commission for FY 2012-13. In view of the above, the Commission has allowed the power purchased through UI.
- 4.2.10 The Petitioner has claimed Rs. 26.27 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. 26.27 Crore, the Petitioner submitted the following details:

# Table -: COMPUTATION OF O&M EXPENSES OF UPPCL AS SUBMITTED BY PETITIONER FOR FY 2012-13

| Particulars                                   | FY 2012-13<br>(Audited) |
|---|-------------------------|
| Employee Benefit Expenses                     | 128.95                  |
| Administrative, General and Other<br>Expenses | 18.29                   |
| Total O&M Expenses                            | 147.23                  |

#### Table -: ALLOCATION OF O&M EXPENSES IN THE RATIO OF INPUT ENERGY AS SUBMITTED BY PETITIONER FOR FY 2012-13

| Particulars   | DVVNL     | MVVNL     | PVVNL     | VVNL PuVVNL |          | PVVNL PuVVNL KESCO NPCL |           | NPCL | Total |
|---|-----------|-----------|-----------|-------------|----------|-------------------------|-----------|------|-------|
| Input energy (MU)   | 17,331.14 | 13,146.66 | 23,673.53 | 16,033.71   | 3,140.07 | 342.29                  | 73,667.40 |      |       |
| Total O&M Expenses – UPPCL as per audited account of FY 2012-13 |           |           |           |             |          |                         |           |      |       |
| Allocation of O&M   | 34.64     | 26.27     | 47.31     | 32.04       | 6.28     | 0.68                    | 147.23    |      |       |



- 4.2.11 The Commission has verified the above amount from the Audited Accounts of UPPCL and has allowed such expenses based on actual for FY 2012-13. 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.
- 4.2.12 The Table below summarises the sales, transmission losses, 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 2012-13:

| Particulars                                      | Unit     | Tariff<br>Order | Petition  | Actual    | Approved<br>upon<br>Truing Up |
|--|----------|-----------------|-----------|-----------|-------------------------------|
| Power Purchase                                   | MU       | 74,703.00       | 77,707.16 | 77,707.16 | 77,343.93                     |
| Inter-State Transmission Losses                  | MU       | 1,553.00        | 906.28    | 906.28    | 902.05                        |
| Inter-State Transmission Losses                  | %        | 2.08%           | 1.17%     | 1.17%     | 1.17%                         |
| Intra-State Transmission Losses                  | MU       | 2,655.00        | 3,133.48  | 3,133.48  | 2,774.48                      |
| Intra-State Transmission Losses                  | %        | 3.63%           | 4.08%     | 4.08%     | 3.63%                         |
| Energy available at Discom End                   | MU       | 70,495.00       | 73,667.40 | 73,667.40 | 73,667.40                     |
| Power Purchase Cost (including PGCIL charges)    | Rs Crore | 25,440.00       | 29,557.94 | 29,557.94 | 29,557.94                     |
| Power Purchase Cost per unit                     | Rs/kWh   | 3.41            | 3.80      | 3.80      | 3.80                          |
| O&M Expenses of UPPCL                            | Rs Crore |                 |           | 147.23    | 147.23                        |
| Allowable Power Purchase Cost at Discom end      | Rs Crore |                 |           |           | 29,567.01                     |
| Power Purchase Cost per unit at Discom end (BST) | Rs/kWh   | 3.61            | 4.01      | 4.03      | 4.01                          |



- 4.2.13 It can be seen from the above that, the Petitioner has claimed the BST as Rs. 4.01 / 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 the BST works out to be Rs. 4.03 / kWh, against which while undertaking the Truing up of FY 2012-13, the Commission has allowed the BST as Rs. 4.01 / kWh.
- 4.2.14 It can be further observed that the BST approved by the Commission in Tariff Order for FY 2012-13 was Rs. 3.61 / kWh. However, the BST claimed by the Distribution Licensees is Rs. 4.01 / kWh based on the actual power purchase cost incurred at UPPCL level in FY 2012-13. 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 2012-13 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 FY 2013-14 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.
- 4.2.15 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 2012-13. 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 2012-13:



| Particulars  | Approved  | True up Petition | Approved upon<br>Truing Up |
|--|-----------|------------------|----------------------------|
| Power Purchase (MU)                                    | 12,574.00 | 13,146.66        | 13,146.66                  |
| Sales (MU)   | 9,604.00  | 9,880.78         | 9,880.78                   |
| Distribution Loss Target (%)                           | 23.63%    | 23.63%           | 23.63%                     |
| Allowable Power Purchase (MU)                          | 12,574.00 | 12,937.20        | 12,937.20                  |
| Trued up Bulk Supply Tariff (Rs. / kWh)                | 3.61      | 4.01             | 4.01                       |
| Allowable Power Purchase Cost (Rs. Crore) <sup>#</sup> | 4,537.76  | 5,274.90         | 5,192.45                   |

#### Table -: ALLOWABLE POWER PURCHASE COST FOR FY 2012-13

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

# The Petitioner in its submission has wrongly computed the allowable power purchase cost; it has considered actual Distribution loss of 24.84% against its claimed figure of 23.63% while computing the power purchase cost for FY 2012-13.

## 4.3 TRANSMISSION CHARGES

- 4.3.1 The Petitioner submitted that in the Tariff Order for FY 2012-13, the Commission had approved the Transmission Charges of Rs. 218.80 Crore towards projected power purchase of 12,574.48 MU. The Petitioner submitted that as per the audited accounts, it has incurred Rs. 228.75 Crore towards transmission charges. The Petitioner further submitted that the allowable power purchase input for FY 2012-13 works out to 12,937.20 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. 0.1848 per kWh has been considered which is the rate submitted by UPPTCL in its True-up Petition for FY 2012-13 filed before the Commission. The Petitioner further submitted that the allowable Transmission Charges for FY 2012-13 works out Rs. 239.07 Crore.
- 4.3.2 Accordingly, the Petitioner has claimed allowable transmission charges of 239.07 Crore against the actual transmission charges of Rs. 228.75 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 2012-13. 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 2012-13.

4.3.4 Accordingly, the table below provides the allowable transmission charges for the Petitioner for FY 2012-13:

| Particulars                      | Approved in<br>Tariff Order | True up<br>Petition | Approved<br>upon Truing<br>Up |  |  |
|----------------------------------|-----------------------------|---------------------|-------------------------------|--|--|
| Units Wheeled (MU)               | 12,574.48                   | 12,937.20           | 12,937.20                     |  |  |
| Trued up Transmission Charge     |                             |                     |                               |  |  |
| (Rs./kWh)                        | 0.174                       | 0.1848              | 0.1722                        |  |  |
| Transmission Charges (Rs. Crore) | 218.8                       | 239.07              | 222.79                        |  |  |

#### Table -: ALLOWABLE TRANSMISSION CHARGES FOR FY 2012-13

## 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 2012-13, 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 2012-13 is Rs. 436.06 Crore, against the approved expenses of Rs. 418.15 Crore. The Petitioner submitted the actual net administrative and general expenses for FY 2012-13 is Rs. 164.13 Crore against the approved expenses of Rs. 30.22 Crore.
- 4.4.4 The Petitioner has submitted the actual Repair and Maintenance (R&M) Expenses for FY 2012-13 as Rs. 157.09 Crore as against the approved expenses of Rs. 129.69 Crore. The Petitioner has claimed the actual R&M Expenses for FY 2012-13.
- 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:



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

4.4.6 The Commission, in accordance with the above Regulation, has calculated the inflation index for FY 2012-13 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:

|           | W        | holesale | Price Inde | ex       | Consumer Price Index |          |          |          | Consolidated Index |          |          |          |
|-----------|----------|----------|------------|----------|----------------------|----------|----------|----------|--------------------|----------|----------|----------|
| Month     | FY<br>12 | FY<br>13 | FY<br>14   | FY<br>15 | FY<br>12             | FY<br>13 | FY<br>14 | FY<br>15 | FY<br>12           | FY<br>13 | FY<br>14 | FY<br>15 |
| April     | 152      | 164      | 171        | 181      | 186                  | 205      | 226      | 242      | 166                | 180      | 193      | 205      |
| May       | 152      | 164      | 171        | 182      | 187                  | 206      | 228      | 244      | 166                | 181      | 194      | 207      |
| June      | 153      | 165      | 173        | 183      | 189                  | 208      | 231      | 246      | 167                | 182      | 196      | 208      |
| July      | 154      | 166      | 176        | 185      | 193                  | 212      | 235      | 252      | 170                | 184      | 199      | 212      |
| August    | 155      | 167      | 179        | 186      | 194                  | 214      | 237      | 253      | 171                | 186      | 202      | 213      |
| September | 156      | 169      | 181        | 185      | 197                  | 215      | 238      | 253      | 173                | 187      | 204      | 212      |
| October   | 157      | 169      | 181        | 184      | 198                  | 217      | 241      | 253      | 173                | 188      | 205      | 211      |
| November  | 157      | 169      | 182        | 181      | 199                  | 218      | 243      | 253      | 174                | 188      | 206      | 210      |
| December  | 157      | 169      | 180        | 179      | 197                  | 219      | 239      | 253      | 173                | 189      | 203      | 208      |
| January   | 159      | 170      | 179        | 177      | 198                  | 221      | 237      | 254      | 174                | 191      | 202      | 208      |
| February  | 159      | 171      | 180        | 176      | 199                  | 223      | 238      | 253      | 175                | 192      | 203      | 207      |
| March     | 161      | 170      | 180        | 176      | 201                  | 224      | 239      | 254      | 177                | 192      | 204      | 207      |
| Average   | 156      | 168      | 178        | 181      | 195                  | 215      | 236      | 251      | 172                | 187      | 201      | 209      |



|                                     | Wholesale Price Index |          |          |          | Consumer Price Index |          |          |          | Consolidated Index                                   |          |          |          |
|-------------------------------------|-----------------------|----------|----------|----------|----------------------|----------|----------|----------|--|----------|----------|----------|
| Month                               | FY<br>12              | FY<br>13 | FY<br>14 | FY<br>15 | FY<br>12             | FY<br>13 | FY<br>14 | FY<br>15 | FY<br>12   | FY<br>13 | FY<br>14 | FY<br>15 |
|                                     |                       |          |          |          |                      |          |          |          | Calculation of Inflation Index<br>(CPI-40%, WPI-60%) |          |          |          |
| Weighted<br>Average of<br>Inflation |                       |          |          |          |                      |          |          |          |  | 8.75%    | 7.69%    | 4.02%    |

- 4.4.7 The Commission has determined the trued up O&M expenses of FY 2011-12, in the Order dated October 1, 2014. The approved O&M expenses for FY 2011-12 have been escalated using the inflation index of FY 2012-13 to derive the normative O&M Expenses for FY 2012-13. 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 2012-13 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 2012-13.

- 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 adhoc 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, 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 2012-13, is shown in the Table below:

| Particulars                                 | Tariff<br>Order | Actuals as<br>per<br>audited<br>accounts | True-up<br>Petition | Normative | Approved<br>upon<br>Truing Up |
|---|-----------------|--|---------------------|-----------|-------------------------------|
| Employee Expenses                           | 491.94          | 515.52                                   | 515.52              | 437.90    | 437.90                        |
| Repair & Maintenance Expenses               | 129.69          | 157.09                                   | 157.09              | 141.29    | 141.29                        |
| Administrative and General Expenses         | 35.55           | 177.51                                   | 177.51              | 80.94     | 80.94                         |
| Gross Operation and<br>Maintenance Expenses | 657.18          | 850.12                                   | 850.12              | 660.13    | 660.13                        |
| Less: Capitalisation                        |                 |  |                     |           |                               |
| Employee Cost Capitalized                   | 73.79           | 79.47                                    | 79.47               | 79.47     | 79.47                         |

#### Table -: O&M EXPENSES AS APPROVED BY THE COMMISSION FOR FY 2012-13 (Rs. Crore)



| Particulars                               | Tariff<br>Order | Actuals as<br>per<br>audited<br>accounts | True-up<br>Petition | Normative | Approved<br>upon<br>Truing Up |
|---|-----------------|--|---------------------|-----------|-------------------------------|
| A&G Expenses Capitalized                  | 5.33            | 13.37                                    | 13.37               | 13.37     | 13.37                         |
| Total Capitalization                      | 79.12           | 92.84                                    | 92.84               | 92.84     | 92.84                         |
| Net Operation and Maintenance<br>Expenses | 577.06          | 757.28                                   | 757.28              | 567.29    | 567.29                        |
| 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 2012-13 as Rs. 105.90 Crore, against the approved expenses of Rs. 92.47 Crore. The Petitioner has capitalized interest of Rs. 10.10 for FY 2012-13, against Rs. 9.36 Crore approved by the Commission in the Tariff Order.
- 4.5.2 The Petitioner submitted that the Commission in its previous tariff and trueup 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 2012-13.

- 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 2012-13, based on the audited accounts. The details are provided in the Table below:

|   |                 |                 | FY 2012-13 |          |                               |  |
|---|-----------------|-----------------|------------|----------|-------------------------------|--|
| Particulars   | Derivation      | Tariff<br>Order | Audited    | Petition | Approved<br>upon<br>Truing Up |  |
| Opening WIP as on 1st April                               | А               | 1121            | 1134.82    | 1134.82  | 1134.82                       |  |
| Investments   | В               | 465             | 279.56     | 279.56   | 279.56                        |  |
| Employee Expenses<br>Capitalisation                       | С               | 74              | 79.47      | 79.47    | 79.47                         |  |
| A&G Expenses Capitalisation                               | D               | 5               | 13.37      | 13.37    | 13.37                         |  |
| Interest Capitalisation on<br>Interest on long term loans | E               | 9               | 10.10      | 10.10    | 7.23                          |  |
| Total Investments   | F=<br>A+B+C+D+E | 1675            | 1517.33    | 1517.33  | 1514.45                       |  |
| Transferred to GFA (Total Capitalisation)                 | G               | 670             | 316.10     | 316.10   | 316.10                        |  |
| Closing WIP   | H= F-G          | 1005            | 1201.23    | 1201.23  | 1198.35                       |  |

Table -: CAPITAL INVESTMENTS IN FY 2012-13 (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:

|  |                 | FY 2012-13 |          |                               |  |  |  |
|--|-----------------|------------|----------|-------------------------------|--|--|--|
| Particulars  | Tariff<br>Order | Audited    | Petition | Approved<br>upon Truing<br>Up |  |  |  |
| Opening Balance of Consumer<br>Contributions, Grants and Subsidies<br>towards Cost of Capital Assets | -               | 688.72     | 688.72   | 688.72                        |  |  |  |
| Additions during the year  | -               | 143.80     | 143.80   | 143.80                        |  |  |  |
| Less: Amortisation   | -               | 59.21      | 59.21    | 59.21                         |  |  |  |
| Closing Balance  | -               | 773.31     | 773.31   | 773.31                        |  |  |  |

# Table -: CONSUMER CONTRIBUTIONS, CAPITAL GRANTS AND SUBSIDIES RECEIVED AS ALLOWED BY THE COMMISSION FOR FY 2012-13 (Rs. Crore)

- 4.5.8 It can be observed from the above that, the additions during FY 2012-13 has been claimed by the Petitioner as Rs. 143.80 Crore. However, based on the audited accounts of FY 2012-13, the addition has been considered by the Commission as Rs.143.80 Crore for truing up of FY 2012-13.
- 4.5.9 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.
- 4.5.10 Thus, based on the above, the approved financing of the capital investment is depicted in the Table below:

# Table -: FINANCING OF THE CAPITAL INVESTMENTS AS APPROVED BY THE COMMISSION FOR FY 2012-13 (Rs. Crore)

|                       |            |                 | FY 2012-13 |          |                               |  |
|-----------------------|------------|-----------------|------------|----------|-------------------------------|--|
| Particulars           | Derivation | Tariff<br>Order | Audited    | Petition | Approved<br>upon Truing<br>Up |  |
| Investment            | А          | 465             | 279.56     | 279.56   | 279.56                        |  |
| Less:                 |            |                 |            |          |                               |  |
| Consumer Contribution | В          |                 | 143.80     | 143.80   | 143.80                        |  |



|                                      |            |                 | FY 2012-1 | 012-13   |                               |  |  |
|--------------------------------------|------------|-----------------|-----------|----------|-------------------------------|--|--|
| Particulars                          | Derivation | Tariff<br>Order | Audited   | Petition | Approved<br>upon Truing<br>Up |  |  |
| Investment funded by debt and equity | C=A-B      | 465             | 135.76    | 135.76   | 135.76                        |  |  |
| Debt Funded                          | 70%        | 326             | 95.03     | 95.03    | 95.03                         |  |  |
| Equity Funded                        | 30%        | 140             | 40.73     | 40.73    | 40.73                         |  |  |

- 4.5.13 From the above tables, it is seen that the total investments made in distribution segment in FY 2012-13 were to the tune of Rs. 279.56 Crore. The consumer contributions, capital subsidies and grants received during the corresponding period is Rs. 143.80 Crore. Thus, balance Rs. 135.76 Crore have been funded through debt and equity. Considering a debt equity ratio of 70:30, Rs. 95.03 Crore or 70% of the capital investment is approved to be funded through debt and balance 30% equivalent to Rs. 40.73 Crore through equity. Allowable depreciation for the year has been considered as normative loan repayment.
- 4.5.14 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 2012-13 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.
- 4.5.15 The Commission considered the closing loan balance of FY 2011-12 as the opening loan balance of FY 2012-13.
- 4.5.16 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.

| Particulars | FY 2012-13   |          |             |
|-------------|--------------|----------|-------------|
|             | Tariff Order | Petition | Approved    |
|             |              |          | upon Truing |
|             |              |          | Up          |

#### Table -: INTEREST ON LONG TERM LOAN FOR FY 2012-13 (Rs Crore)



| Particulars  | FY 2012-13   |          |                         |  |  |
|--|--------------|----------|-------------------------|--|--|
|  | Tariff Order | Petition | Approved<br>upon Truing |  |  |
|  |              |          | Up                      |  |  |
| Opening Loan   |              | 1,149.19 | 1,149.19                |  |  |
| Loan Additions (70% of Investments)                    |              | 95.03    | 95.03                   |  |  |
| Less: Repayments (Depreciation allowable for the year) |              | 237.53   | 237.53                  |  |  |
| Closing Loan Balance                                   |              | 1,006.69 | 1,006.69                |  |  |
| Weighted Average Rate of Interest                      |              | 10.76%   | 10.76%                  |  |  |
| Interest on long term loan                             | 101.83       | 116.00   | 116.00                  |  |  |
| Less: Interest Capitalized                             | 9.36         | 10.10    | 7.23                    |  |  |
| Net Interest Charged                                   | 92.47        | 105.90   | 108.77                  |  |  |
| Interest Capitalisation Rate                           | 23.00%       | 8.71%    | 6.23%                   |  |  |

#### **Finance Charges**

- 4.5.17 The Petitioner has claimed Rs. 9.25 Crore against Rs. 22.34 Crore approved by the Commission towards total finance charges during FY 2012-13.
- 4.5.18 The bank charges and interest on consumer security deposits and finance charges have been allowed at actual based on audited accounts.
- 4.5.19 Thus, the Commission has approved finance charges amounting to Rs. 9.25 Crore as claimed by the Petitioner for FY 2012-13.

| Particulars           | Tariff<br>Order | Audited | Petition | Approved<br>upon Truing<br>Up |
|-----------------------|-----------------|---------|----------|-------------------------------|
| Interest to Consumers | 12.56           | 9.14    | 9.14     | 9.14                          |
| Bank Charges          | 1.46            | 0.11    | 0.11     | 0.11                          |
| Discount to Consumers | -               | -       | -        | -                             |
| Finance Charges       | 8.32            | -       | -        | -                             |
| Total Finance Charges | 22.34           | 9.25    | 9.25     | 9.25                          |

#### Table -: ALLOWABLE FINANCE CHARGES FOR FY 2012-13 (Rs. Crore)

Interest on Working Capital:



- 4.5.20 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. 57.47 Crore against the approved expenses of Rs. 63.25 Crore.
- 4.5.21 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."

- 4.5.22 Based on the methodology specified in the above Regulations, the Commission in its Tariff Order for FY 2012-13 had allowed normative interest on working capital of Rs. 63.25 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.
- 4.5.23 In reply to the query raised by the Commission regarding exorbitantly high interest on working capital of Rs. 512.98 Crore as per audited accounts against approved interest on working capital of Rs. 63.25 Crore in the Tariff Order for FY 2012-13, 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 trueup and tariff orders without imposing any additional burden on the consumers.

4.5.24 The summary of the interest on working capital approved by the Commission in the Tariff Order for FY 2012-13, claimed by the Petitioner and that approved by the Commission in the present Truing up Order is shown in the Table below:

|   | FY 2012-13      |         |          |                               |  |
|---|-----------------|---------|----------|-------------------------------|--|
| Particulars   | Tariff<br>Order | Audited | Petition | Approved<br>upon<br>Truing Up |  |
| One month's O & M Expenses  | 48.17           | -       | 70.84    | 47.27                         |  |
| One-twelfth of the sum of the book value of materials in stores at the end of each month of such financial year.                        | 4.62            | -       | 15.73    | 15.73                         |  |
| Receivables equivalent to 60 days average billing on consumers  | 666.42          | -       | 628.12   | 636.85                        |  |
| Grand Total   | 719.2           | -       | 714.70   | 699.85                        |  |
| Less: Total Security Deposits by the<br>Consumers reduced by Security Deposits<br>under section 47(1)(b) of the Electricity Act<br>2003 | 213.18          | -       | 254.95   | 254.95                        |  |
| Net Working Capital   | 506.03          | -       | 459.75   | 444.90                        |  |
| Rate of Interest on Working Capital   | 12.50%          | -       | 12.50%   | 12.50%                        |  |
| Interest on Working Capital   | 63.25           | 512.98  | 57.47    | 55.61                         |  |

Table -: INTEREST ON WORKING CAPITAL FOR FY 2012-13 (Rs. Crore)

4.5.25 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 -: ALLOWABLE INTEREST AND FINANCE CHARGES FOR FY 2012-13 (Rs. Crore)



| Particulars                               | Tariff<br>Order | Actual as per<br>audited<br>accounts | True-up<br>Petition | Approved<br>upon Truing<br>Up |
|---|-----------------|--------------------------------------|---------------------|-------------------------------|
| A: Interest on Long Term Loans            |                 |                                      |                     |                               |
| Gross Interest on Long Term<br>Loan       | 101.83          | 162.21                               | 116.00              | 116.00                        |
| Less: Interest Capitalisation             | 9.36            | 10.10                                | 10.10               | 7.23                          |
| Net Interest on Long Term Loans           | 92.47           | 152.11                               | 105.90              | 108.77                        |
| B: Finance and Other Charges              |                 |                                      |                     |                               |
| Finance Charges                           | 8.32            | -                                    | -                   | -                             |
| Bank Charges                              | 1.46            | 0.11                                 | 0.11                | 0.11                          |
| Interest on Consumer Security<br>Deposits | 12.56           | 9.14                                 | 9.14                | 9.14                          |
| Total Finance Charges                     | 22.34           | 9.25                                 | 9.25                | 9.25                          |
| C: Interest on Working Capital            | 63.25           | 512.98                               | 57.47               | 55.61                         |
| Total (A+B+C)                             | 178.06          | 674.34                               | 172.61              | 173.64                        |

## 4.6 DEPRECIATION

- 4.6.1 The Petitioner has submitted that the actual depreciation expense as per audited accounts is Rs. 113.43 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 2012-13.
- 4.6.2 As regards the Commission's query regarding source-wise of funding of capitalization, the Petitioner submitted that the Commission in the True up Order for FY 2008-09 to FY 2011-12 and ARR Order for FY 2014-15 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 2012-13 is shown in the Table below:

| Particulars          | Opening  | Additions | Deduction | Closing  | Depreciati | Permissible  |
|----------------------|----------|-----------|-----------|----------|------------|--------------|
|                      | GFA      | to GFA    | s to GFA  | GFA      | on Rates   | Depreciation |
|                      |          |           |           |          | considered |              |
| Land & Land Rights   |          |           |           |          |            |              |
| i) Unclassified      | 0.03     | -         | -         | 0.03     |            | -            |
| ii) Freehold Land    | -        | -         | -         | -        |            | -            |
| Buildings            | 25.79    | 7.97      | -         | 33.76    | 7.84%      | 2.33         |
| Other Civil Works    | -        | -         | -         | -        | 7.84%      | -            |
| Plants & Machinery   | 798.65   | 66.25     | 326.71    | 538.18   | 7.84%      | 52.40        |
| Lines, Cable Network | 1,148.67 | 240.52    | 11.98     | 1,377.21 | 7.84%      | 99.01        |
| etc.                 | 1,140.07 | 240.32    | 11.90     | 1,377.21 | 7.04/0     | 99.01        |
| Vehicles             | 4.16     | 0.00      | -         | 4.16     | 7.84%      | 0.33         |
| Furniture & Fixtures | 4.36     | 0.51      | -         | 4.87     | 7.84%      | 0.36         |
| Office Equipments    | 39.24    | 0.85      | -         | 40.09    | 7.84%      | 3.11         |
| Jeep & Motor Car     | -        | -         | -         | -        |            | -            |
| Total                | 2,020.89 | 316.10    | 338.69    | 1,998.30 |            | 157.55       |
| Fixed Asset as per   | 1 601 02 |           |           | 1 601 02 | 7 0 / 0/   | 125 52       |
| Transfer Scheme      | 1,601.03 | -         | -         | 1,601.03 | 7.84%      | 125.52       |
| Grand Total          | 3,621.92 | 316.10    | 338.69    | 3,599.33 | 7.84%      | 283.07       |

#### Table -: DEPRECIATION CLAIMED BY LICENSEE FOR FY 2012-13 (Rs. Crore)

- 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 2012-13, which is in line with the rate considered by the Commission in its Tariff Order for FY 2012-13.
- 4.6.5 The Commission asked the Petitioner to confirm that the cumulative depreciation in FY 2012-13 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 Considering the same philosophy as adopted by the Petitioner, which is also in line with the approach followed by the Commission in the previous Truing up



Order, and after verifying from the audited accounts for FY 2012-13 as submitted by the Petitioner, the net entitlement towards depreciation expenses claimed by the Petitioner and that approved by the Commission for Truing up of FY 2012-13 is shown in the Table below:

| Particulars   | Tariff<br>Order | Actual as<br>per<br>audited<br>accounts | True-up<br>Petition | Approved<br>upon Truing<br>Up |
|---|-----------------|---|---------------------|-------------------------------|
| Depreciation  | 312.50          | 158.97                                  | 283.07              | 283.07                        |
| Less: Equivalent amount of<br>depreciation on assets acquired out<br>of the consumer contribution and<br>GoUP Subsidy | 47.12           | 45.54                                   | 45.54               | 45.54                         |
| Net Allowable Depreciation  | 265.38          | 113.43                                  | 237.53              | 237.53                        |

## Table -: DEPRECIATION EXPENSES FOR FY 2012-13 (Rs. Crore)

## 4.7 PRIOR PERIOD EXPENSES

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 2012-13. 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"

- 4.7.2 The Petitioner has submitted that it has recognized Rs. 102.55 Crore of net prior period income in the audited financial statements for FY 2012-13.
- 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. With regard to the above direction the Petitioner in its Petition for FY 2015-16 has submitted that such information is under compilation. Further, the Commission in its deficiency note has asked the Petitioner to submit the relevant information for FY 2012-13 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 income may be allowed as stated in the audited account which has also received the approval of the CAG.
- 4.7.5 Thus, in line with the approach adopted by the Commission in its earlier True up Orders, the Petitioner 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. 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.
- 4.7.6 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 2012-13 is shown in the Table below:

## Table -: PRIOR PERIOD INCOME FOR FY 2012-13 (Rs. Crore)



| Particulars         | Tariff<br>Order | Actual as<br>per<br>audited<br>accounts | True-up<br>Petition | Approved<br>upon<br>Truing Up |
|---------------------|-----------------|---|---------------------|-------------------------------|
| Prior Period Income | 0.00            | 102.55                                  | 102.55              | 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 2012-13. 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. 76.42 Crore towards provision for bad and doubtful debts for FY 2012-13.
- 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 May 21, 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 May 31, 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]

4.8.5 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 Hon'ble Commission during the proceedings in respect of ARR and Tariff Petition for FY 2014-15. It 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 added]

- 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 2012-13 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 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.



| Particulars                          | Tariff<br>Order | Actual as<br>per<br>audited<br>accounts | True-up<br>Petition | Approved<br>upon<br>Truing Up |
|--------------------------------------|-----------------|---|---------------------|-------------------------------|
| Provision for Bad and Doubtful Debts | 0.00            | 50.65                                   | 76.42               | 0.00                          |

## Table -: PROVISION FOR BAD AND DOUBTFUL DEBT FOR FY 2012-13 (Rs. Crore)

## 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 2012-13.

## 4.10 REVENUE SUBSIDY FROM GOUP

- 4.10.1 The Petitioner has submitted that the actual revenue subsidy received from GoUP was Rs. 597.28 Crore during FY 2012-13 as against Rs. 937.99 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. Clause6.10 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 added]

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. As the matter is sub-judice, the same approach has been continued by the Commission as adopted in True up Order dated May 21, 2013 and Tariff Order October 1, 2014.
- 4.11.4 The Commission, in its Deficiency Note has asked the Distribution Licensees to submit the actual revenue, sales and the through rate for all the categories and sub-categories, essentially for the subsidised categories, i.e., "Rural



Domestic in LMV 1 Category" and "PTW – LMV 5" for FY 2012-13. In this regard, the Petitioner, in its reply has submitted the required details.

- 4.11.5 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.
- 4.11.6 As per the table provided below, the additional subsidy has been considered for reduction from the ARR being trued up.

| Particulars  | Sales    | Cost of<br>Service | Thru Rate | Loss         | Loss       |
|--|----------|--------------------|-----------|--------------|------------|
| Faiticulais  | (MU)     | (Rs/kWh)           | (Rs/kWh)  | (Rs/<br>kWh) | (Rs Crore) |
| LMV-1: (a) Consumer getting<br>supply as per "Rural<br>Schedule" | 1,191.18 | 6.45               | 1.26      | 5.19         | 618.58     |
| LMV-5: PTW   | 623.00   | 6.45               | 1.11      | 5.34         | 332.87     |
| Total Loss   | 1,814.18 |                    |           |              | 951.45     |
| Subsidy Available  |          |                    |           |              | 597.28     |
| Additional Subsidy<br>Requirement                                |          |                    |           |              | 354.17     |

## Table -: COMPUTATION OF SUBSIDY REQUIREMENT FOR FY 2012-13 (Rs Crore)

## 4.12 REVENUE SIDE TRUING UP

## NON-TARIFF INCOME

- 4.12.1 The Petitioner has submitted that the actual non-tariff income during FY 2012-13 was Rs. 17.63 Crore as compared to Rs. 41.49 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. 17.63 Crore for FY 2012-13.



## 4.13 REVENUE FROM SALE OF POWER

- 4.13.1 The Petitioner has submitted that the actual revenue from sale of power during FY 2012-13 is Rs. 3,821.07 Crore (out of which, Rs. 160.51 Crore is towards delayed payment surcharge) towards electricity sales of 9,880.78 MU against Rs. 3,998.50 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 further it should also 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. 3,821.07 Crore including delayed payment surcharge as per the audited accounts for FY 2012-13 towards sales of 9,880.78 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 2012-13 is shown in the Table below:

| Particulars  | Tariff<br>Order | Actual as per<br>audited<br>accounts | True-up<br>Petition | Approved<br>upon Truing<br>Up |
|--|-----------------|--------------------------------------|---------------------|-------------------------------|
| Revenue from Tariff including<br>Delayed Payment Surcharge | 3998.5          | 3821.07                              | 3821.07             | 3821.07                       |
| Non tariff items   | 41.49           | 17.63                                | 17.63               | 17.63                         |
| Total Revenue  | 4039.99         | 3838.70                              | 3838.70             | 3838.70                       |

Table -: REVENUE FOR FY 2012-13 (Rs. Crore)

## 4.14 ARR AND REVENUE GAP/ (SURPLUS) FOR FY 2012-13 AFTER TRUING UP

4.14.1 The Aggregate Revenue Requirement for FY 2012-13 after final truing up is summarized in the Table below:

## Table -: ARR, REVENUE AND GAP SUMMARY FOR FY 2012-13 (Rs. Crore)



| Particulars                             | Approved | Actual as per<br>audited<br>accounts | True-up<br>Petition | Approved<br>upon Truing Up |
|---|----------|--------------------------------------|---------------------|----------------------------|
| (a)                                     | (b)      | (c)                                  | (d)                 | (e)                        |
| Power Purchase Expenses                 | 4537.76  | 4745.95                              | 5274.90             | 5192.45                    |
| Apportionment of O&M Expenses of UPPCL# |          |                                      | 26.27               | 0.00                       |
| Transmission Expenses                   | 218.80   | 228.75                               | 239.07              | 222.79                     |
| Gross O&M Expenses                      | 657.18   | 850.12                               | 850.12              | 660.13                     |
| Gross Interest on Long Term Loans       | 101.83   | 162.21                               | 116.00              | 116.00                     |
| Interest to Consumer                    | 12.56    | 9.14                                 | 9.14                | 9.14                       |
| Finance Charges                         | 9.78     | 0.11                                 | 0.11                | 0.11                       |
| Interest on Working Capital             | 63.25    | 512.98                               | 57.47               | 55.61                      |
| Discount to Consumers                   | 0.00     | 0.00                                 | 0.00                | 0.00                       |
| Depreciation                            | 265.38   | 113.43                               | 237.53              | 237.53                     |
| Prior Period Expenses                   | 0.00     | (102.55)                             | (102.55)            | 0.00                       |
| Other Misc Expenses                     | 0.00     | 1.14                                 | 1.14                | 0.00                       |
| Provision for Bad and Doubtful<br>Debts | 0.00     | 50.65                                | 76.42               | 0.00                       |
| Gross Expenditure                       | 5866.54  | 6571.93                              | 6785.63             | 6494.11                    |
| Less: Employee Capitalisation           | 73.79    | 79.47                                | 79.47               | 79.47                      |
| Less: A&G Capitalisation                | 5.33     | 13.37                                | 13.37               | 13.37                      |
| Less: Interest Capitalisation           | 9.36     | 10.10                                | 10.10               | 7.23                       |
| Total Capitalisation                    | 88.48    | 102.94                               | 102.94              | 100.07                     |
| Net Expenditure                         | 5778.06  | 6468.99                              | 6682.69             | 6393.69                    |
| Add: Return on Equity                   | 0.00     | 0.00                                 | 0.00                | 0.00                       |
| Less: Non-tariff Incomes                | 41.49    | 17.63                                | 17.63               | 17.63                      |
| Add: Efficiency Gains                   | 0.00     | 0.00                                 | 0.00                | 0.00                       |
| Annual Revenue Requirement              | 5736.57  | 6451.36                              | 6665.06             | 6376.06                    |
| Revenue from Tariff incl. DPS           | 3998.50  | 3821.07                              | 3821.07             | 3821.07                    |
| GoUP Subsidy                            | 937.99   | 597.28                               | 597.28              | 597.28                     |
| Net Revenue Gap                         | 800.08   | 2033.01                              | 2246.71             | 1957.71                    |
| Less: Additional Subsidy<br>Requirement |          |                                      |                     | 354.17                     |
| Net Revenue Gap                         | 800.08   | 2033.01                              | 2246.71             | 1603.54                    |

# 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. 2,246.71 Crore.
- 4.14.3 However, as observed from the above Table, against the gap of Rs. 2,246.71 Crore claimed by the Petitioner for truing up of FY 2012-13, the Commission has worked out the gap of Rs. 1,603.54 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.



## 5. ANNUAL REVENUE REQUIREMENT FOR 2015-16

## 5.1 INTRODUCTION

5.1.1 In this section, the Commission has undertaken the process of approval of the Annual Revenue Requirements and Tariff determination of the Licensee for FY 2015-16 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 by 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 2015-16 as submitted by the Petitioner are shown in the Table below:



| Consumer categories             | No. of<br>consumers | Connected load<br>(kW) | Energy sales<br>(MU) |
|---------------------------------|---------------------|------------------------|----------------------|
| LMV-1: Domestic                 | 40,78,928           | 50,73,618              | 6,313                |
| LMV-2:Non-Domestic              | 2,86,941            | 7,50,511               | 1,095                |
| LMV-3: Public Lamps             | 4,159               | 93,326                 | 436                  |
| LMV-4: Institutions             | 20,182              | 1,43,244               | 410                  |
| LMV-5: Private Tube Wells       | 1,46,031            | 6,22,486               | 1,124                |
| LMV 6: Small and Medium Power   | 41,554              | 3,81,018               | 675                  |
| LMV-7: Public Water Works       | 2,173               | 1,04,649               | 754                  |
| LMV-8: State Tube Wells         | 9,769               | 1,87,361               | 799                  |
| LMV-9: Temporary Supply         | 138                 | 442                    | 2                    |
| LMV-10: Departmental Employees  | 26,763              | 99,066                 | 156                  |
| HV-1: Non-Industrial Bulk Loads | 822                 | 3,18,946               | 700                  |
| HV-2: Large and Heavy Power     | 1,383               | 5,37,248               | 1,684                |
| HV-3: Railway Traction          | 6                   | 34,288                 | 88                   |
| HV-4: Lift Irrigation           | 21                  | 26,163                 | 137                  |
| Extra state & Bulk              | 1                   | 5,000                  | 62                   |
| Total                           | 46,18,872           | 83,77,366              | 14,435               |

## Table -: CONSUMPTION PARAMETERS SUBMITTED BY THE PETITIONER FOR FY 2015-16

- 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:

| SI.<br>No | Category                   | Consumption Norm (As<br>per UPPCL Order No. 2649-<br>CUR/L dated July 20, 2001) | Consumption Norm (As per<br>UPPCL Order No. 165 CUR-2/<br>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  |



| SI.<br>No | Consumption Norm (As<br>Category per UPPCL Order No. 2649-<br>CUR/L dated July 20, 2001) |                               | Consumption Norm (As per<br>UPPCL Order No. 165 CUR-2/<br>R-3 dated February 14, 2014) |
|-----------|--|-------------------------------|--|
| 5         | LMV5: Private Tube Wells<br>(Rural)  | 91.66 kWh / kW / month        | 137.49 kWh / kW / month  |
| 6         | LMV8: State Tube Wells (Rural)   | 3562.35 kWh / pump /<br>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 directive to conduct a detailed study to provide accurate and effective consumption norms, the Licensees 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 by September 30, 2015 and December 12, 2015 respectively. Accordingly, the same would be completed in the stipulated timeframe.
- 5.2.12 Hence, 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 a time bound manner.
- 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:

| SI. 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     |

Table -: CONSUMPTION NORMS IN URBAN AREA SUBMITTED BY UPPCL

5.2.14 Further, the Commission has passed a Suo Motu 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 in spite 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 2015-16 by multiplying the consumption norms as per UPPCL Orders No. 2649-CUR/L dated July 20, 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 2015-16 have submitted that they have accounted the number of hours of supply / load shedding in different areas to estimate the sales for FY 2015-16. The Petitioner in its Petition has projected the supply hours for various areas as specified below:

| Sl. No. | Description       | FY 2015-16<br>(No. of Hours) |
|---------|-------------------|------------------------------|
| 1       | Mahanagar – M     | 21:30                        |
| 2       | District – D      | 17:30                        |
| 3       | Commissionary - C | 20:15                        |
| 4       | Bundelkhand – B   | 21:00                        |
| 5       | Rural - R         | 10:00                        |

Table -: Projected Hours of Supply as submitted by the Petitioner for FY 2015-16

5.2.19 The existing tariff structure allows different tariff for different categories of consumers which has no linkage with the number of hours of supply and it is observed that there is a general grievance among the consumers that the



number of supply hours are not uniform in all the areas of the Licensees. Thus, the Commission is of the view that there should be a mechanism to account the varying number of supply hours in the Tariff Structure.

| SI. No. | Description       | FY 2015-16 (Total No.<br>of Hours of Supply for<br>a month ) |
|---------|-------------------|--|
| 1       | Mahanagar – M     | 585  |
| 2       | District – D      | 525  |
| 3       | Commissionary - C | 608  |
| 4       | Bundelkhand – B   | 630  |
| 5       | Rural - R         | 300  |

Table -: Hours of Supply for a Month based on projected Hours of supply submittedby the Petitioner for FY 2015-16

- 5.2.20 Thus, in this regard, if in a particular month the number of hours of electricity supplied by the Licensee exceeds by more than 10% of the total number of hours as specified in the above table, then the Licensee may charge certain incremental charges from the domestic consumers which should not exceed 2% of the Rate of Charge.
- 5.2.21 The Commission hereby approves the consumption parameters for FY 2015-16 as shown in the Tables below. The detailed sub-category wise consumption parameters (historical and approved) have been provided in Annexure to this Order.

| Consumer categories           | No. of<br>consumers | Connected load<br>(kW) | Energy sales<br>(MU) |
|-------------------------------|---------------------|------------------------|----------------------|
| LMV-1: Domestic               | 40,78,928           | 50,73,618              | 6,313                |
| LMV-2:Non-Domestic            | 2,86,941            | 7,50,511               | 1,095                |
| LMV-3: Public Lamps           | 4,159               | 93,326                 | 436                  |
| LMV-4: Institutions           | 20,182              | 1,43,244               | 410                  |
| LMV-5: Private Tube Wells     | 1,46,031            | 6,22,486               | 1,124                |
| LMV 6: Small and Medium Power | 41,554              | 3,81,018               | 675                  |
| LMV-7: Public Water Works     | 2,173               | 1,04,649               | 754                  |

Table -: CONSUMPTION PARAMETERS APPROVED BY THE COMMISSION FOR FY 2015-16



| Consumer categories             | No. of<br>consumers | Connected load<br>(kW) | Energy sales<br>(MU) |
|---------------------------------|---------------------|------------------------|----------------------|
| LMV-8: State Tube Wells         | 9,769               | 1,87,361               | 799                  |
| LMV-9: Temporary Supply         | 138                 | 442                    | 2                    |
| `LMV-10: Departmental Employees | 26,763              | 99,066                 | 156                  |
| HV-1: Non-Industrial Bulk Loads | 822                 | 3,18,946               | 700                  |
| HV-2: Large and Heavy Power     | 1,383               | 5,37,248               | 1,684                |
| HV-3: Railway Traction          | 6                   | 34,288                 | 88                   |
| HV-4: Lift Irrigation           | 21                  | 26,163                 | 137                  |
| Extra state & Bulk              | 1                   | 5,000                  | 62                   |
| Total                           | 46,18,872           | 83,77,366              | 14,435               |



Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Consumer categories             | FY 11-12  | FY 12-13  | FY 13-14  | Computed for FY<br>14-15 | Approved for FY<br>2015-16 |
|---------------------------------|-----------|-----------|-----------|--------------------------|----------------------------|
| LMV-1: Domestic                 | 25,42,039 | 26,60,533 | 28,32,752 | 31,27,952                | 40,78,928                  |
| LMV-2:Non-Domestic              | 2,68,788  | 2,72,774  | 2,64,920  | 2,75,369                 | 2,86,941                   |
| LMV-3: Public Lamps             | 6,002     | 6,057     | 4,029     | 4,092                    | 4,159                      |
| LMV-4: Institutions             | 15,857    | 16,275    | 17,303    | 18,687                   | 20,182                     |
| LMV-5: Private Tube Wells       | 1,33,626  | 1,37,457  | 1,43,860  | 1,44,868                 | 1,46,031                   |
| LMV 6: Small and Medium Power   | 34,096    | 35,119    | 35,016    | 38,135                   | 41,554                     |
| LMV-7: Public Water Works       | 1,669     | 1,728     | 1,771     | 1,956                    | 2,173                      |
| LMV-8: State Tube Wells         | 9,197     | 9,064     | 9,245     | 9,498                    | 9,769                      |
| LMV-9: Temporary Supply         | 1,712     | 1,604     | 125       | 131                      | 138                        |
| LMV-10: Departmental Employees  | 21,609    | 22,262    | 23,553    | 25,101                   | 26,763                     |
| HV-1: Non-Industrial Bulk Loads | 482       | 535       | 680       | 748                      | 822                        |
| HV-2: Large and Heavy Power     | 1,126     | 1,205     | 1,269     | 1,324                    | 1,383                      |
| HV-3: Railway Traction          | 2         | 4         | 5         | 5                        | 6                          |
| HV-4: Lift Irrigation           | 17        | 18        | 18        | 19                       | 21                         |
| Bulk & Extra State              | 1         | 1         | 1         | 1                        | 1                          |
| Grand Total                     | 30,36,223 | 31,64,636 | 33,34,547 | 36,47,887                | 46,18,872                  |

#### Table -: NUMBER OF CONSUMERS: HISTORICAL TREND AND APPROVED VALUES FOR FY 2015-16



Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Consumer categories             | FY 11-12  | FY 12-13  | FY 13-14  | Computed for<br>FY 14-15 | Approved for<br>FY 2015-16 |
|---------------------------------|-----------|-----------|-----------|--------------------------|----------------------------|
| LMV-1: Domestic                 | 35,14,741 | 37,01,495 | 39,97,819 | 42,76,924                | 50,73,618                  |
| LMV-2:Non-Domestic              | 6,49,547  | 6,91,868  | 6,89,571  | 7,19,770                 | 7,50,511                   |
| LMV-3: Public Lamps             | 85,747    | 94,068    | 88,330    | 83,473                   | 93,326                     |
| LMV-4: Institutions             | 1,13,682  | 1,13,678  | 1,19,074  | 1,32,633                 | 1,43,244                   |
| LMV-5: Private Tube Wells       | 5,58,003  | 5,69,452  | 6,09,915  | 6,16,304                 | 6,22,486                   |
| LMV 6: Small and Medium Power   | 2,92,315  | 3,11,925  | 3,13,917  | 3,52,586                 | 3,81,018                   |
| LMV-7: Public Water Works       | 77,321    | 75,863    | 81,363    | 95,166                   | 1,04,649                   |
| LMV-8: State Tube Wells         | 1,40,635  | 1,37,758  | 1,42,060  | 1,74,933                 | 1,87,361                   |
| LMV-9: Temporary Supply         | 5,399     | 5,139     | 267       | 421                      | 442                        |
| LMV-10: Departmental Employees  | 75,214    | 79,111    | 78,491    | 92,923                   | 99,066                     |
| HV-1: Non-Industrial Bulk Loads | 1,88,664  | 2,10,259  | 2,63,690  | 2,90,004                 | 3,18,946                   |
| HV-2: Large and Heavy Power     | 4,24,246  | 4,54,706  | 4,91,476  | 5,13,611                 | 5,37,248                   |
| HV-3: Railway Traction          | 12,925    | 22,425    | 31,100    | 32,655                   | 34,288                     |
| HV-4: Lift Irrigation           | 22,800    | 22,961    | 23,101    | 24,574                   | 26,163                     |
| Bulk & Extra State              | 5,000     | 5,000     | 5,000     | 5,000                    | 5,000                      |
| Grand Total                     | 61,66,239 | 64,95,708 | 69,35,174 | 74,10,977                | 83,77,366                  |

## Table -: CONNECTED LOAD (KW): HISTORICAL TREND AND APPROVED VALUES FOR FY 2015-16



Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Consumer categories             | FY 2011-12 | FY 2012-13 | FY 2013-14 | Computed for<br>FY 2014-15 | Approved for<br>FY 2015-16 |
|---------------------------------|------------|------------|------------|----------------------------|----------------------------|
| LMV-1: Domestic                 | 3,794      | 3,996      | 4,493      | 5,412                      | 6,313                      |
| LMV-2:Non-Domestic              | 822        | 861        | 933        | 1,021                      | 1,095                      |
| LMV-3: Public Lamps             | 308        | 325        | 308        | 379                        | 436                        |
| LMV-4: Institutions             | 316        | 298        | 282        | 370                        | 410                        |
| LMV-5: Private Tube Wells       | 604        | 623        | 731        | 1,103                      | 1,124                      |
| LMV 6: Small and Medium Power   | 457        | 484        | 489        | 610                        | 675                        |
| LMV-7: Public Water Works       | 307        | 388        | 374        | 687                        | 754                        |
| LMV-8: State Tube Wells         | 784        | 896        | 922        | 763                        | 799                        |
| LMV-9: Temporary Supply         | 12         | 16         | 1          | 2                          | 2                          |
| LMV-10: Departmental Employees  | 122        | 135        | 132        | 142                        | 156                        |
| HV-1: Non-Industrial Bulk Loads | 395        | 408        | 523        | 637                        | 700                        |
| HV-2: Large and Heavy Power     | 1,130      | 1,239      | 1,263      | 1,601                      | 1,684                      |
| HV-3: Railway Traction          | 31         | 35         | 80         | 84                         | 88                         |
| HV-4: Lift Irrigation           | 110        | 117        | 117        | 129                        | 137                        |
| Extra state & Bulk              | 43         | 59         | 62         | 62                         | 62                         |
| Total                           | 9,235      | 9,880      | 10,711     | 13,001                     | 14,435                     |

#### Table -: ENERGY SALES (MU): HISTORICAL TREND AND APPROVED VALUES FOR FY 2015-16



5.2.22 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:"* 

5.2.23 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."

5.2.24 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.



- 5.2.25 The Distribution Losses of the Distribution Licensee are at higher level and the major reason for the same is large 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.
- 5.2.26 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.
- 5.2.27 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, has 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 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.

- 5.2.28 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.
- 5.2.29 To encourage the consumers to get metered connection, the Commission in its Order for FY 2014-15 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.
- 5.2.30 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, 2016.
- 5.2.31 In reply to the Commission's deficiency note regarding number of unmetered connections up to December, 2014, the Petitioner has submitted the details as follows:

| Particulars                 | FY<br>2008-09 | FY<br>2009-10 | FY<br>2010-11 | FY<br>2011-12 | FY<br>2012-13 | FY<br>2013-14 | FY 2014-15<br>(Till<br>December<br>2014) |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|--|
| LMV – 1 Rural<br>Domestic   | 7,71,177      | 8,44,922      | 8,35,115      | 8,31,834      | 8,48,076      | 8,88,464      | 11,87,092                                |
| LMV – 2 Rural<br>Commercial | 13,074        | 17,648        | 18,751        | 21,412        | 21,069        | 20,609        | 22,473                                   |
| LMV-3 Public<br>Lamps       | 5,013         | 5,064         | 5,635         | 5,852         | 5,899         | 3,875         | 3,050                                    |
| LMV-5 PTW                   | 1,15,607      | 1,22,965      | 1,26,178      | 1,26,701      | 1,30,578      | 1,36,615      | 1,40,075                                 |

TABLE -: NUMBER OF UN-METERED CONSUMERS AS SUBMITTED BY MVVNL



| Particulars                  | FY<br>2008-09 | FY<br>2009-10 | FY<br>2010-11 | FY<br>2011-12 | FY<br>2012-13 | FY<br>2013-14 | FY 2014-15<br>(Till<br>December<br>2014) |
|------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|--|
| LMV-8 State<br>Tube Wells    | 9,175         | 8,680         | 8,501         | 8,138         | 8,861         | 8,806         | 9,181                                    |
| LMV-9<br>Temporary<br>Supply | 1,014         | 7             | 59            | 25            | -             | -             | 152                                      |
| LMV-10<br>Employees          | 19,334        | 19,856        | 21,237        | 21,609        | 22,262        | 23,553        | 24,350                                   |
| Total                        | 9,34,394      | 10,19,142     | 10,15,476     | 10,15,571     | 10,36,745     | 10,81,922     | 13,86,373                                |

5.2.32 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."

5.2.33 However, the Licensee has not submitted any explanation as to why it has not been able to convert the unmetered connections to metered connections since FY 2008-09. 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 it sincere efforts to achieve the target given by the Commission.



5.2.34 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 (till December 2014) are shown in the Table below:

| Particulars                 | FY<br>2008-09 | FY<br>2009-10 | FY<br>2010-11 | FY<br>2011-12 | FY<br>2012-13 | FY<br>2013-14 | FY 2014-<br>15 (<br>Till Dec<br>2014) |  |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------------------------------|--|
| LMV – 1 Rural Domestic      | 3461091       | 3688734       | 3884519       | 4108404       | 4368890       | 4716315       | 5539029                               |  |
| LMV – 2 Rural<br>Commercial | 72090         | 84533         | 83235         | 88172         | 96372         | 100842        | 106900                                |  |
| LMV-3 Public Lamps          | 6802          | 7233          | 7294          | 8174          | 8969          | 7131          | 6492                                  |  |
| LMV-5 PTW                   | 745919        | 721451        | 752153        | 765552        | 802308        | 827654        | 852340                                |  |
| LMV-8 State Tube Wells      | 27788         | 27458         | 27332         | 27865         | 28325         | 29420         | 28974                                 |  |
| LMV-9 Temporary<br>Supply   | 1167          | 100           | 490           | 215           | 251           | 278           | 641                                   |  |
| LMV-10 Employees            | 70700         | 75327         | 75722         | 80468         | 81966         | 84940         | 84830                                 |  |
| Total                       | 4385557       | 4604836       | 4830745       | 5078850       | 5387081       | 5766580       | 6619206                               |  |

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

- 5.2.35 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.
- 5.2.36 Further, with regard to the above the Petitioner in its ARR / Tariff Petition for FY 2015-16 has submitted that it has prepared a roadmap for rural metering and billing for its entire unmetered consumer base. The roadmap for rural metering submitted by the Licensee has been specified below:
  - Target set for release of approximately 30 lakh new connections per year.



- Web enabled online billing system based on cloud computing to be put in place by June 2015.
- Payment facility for all consumers through web enabled system with the help of franchisees and government agencies.
- With web-enabled online billing system along with provision of handheld machines, bills to be delivered at door-step and collection in the village itself through Franchisee/Govt. Agencies
- 5.2.37 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%.
- 5.2.38 The unmetered consumers of LMV-10 category shall be converted into metered consumers by December 31, 2015 beyond which the tariff for consumers under this category shall be same as that of "other metered consumers" under LMV-1 category as detailed in the Rate Schedule provided subsequently in this Order.
- 5.2.39 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.
- 5.2.40 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)

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

| Distribution<br>Licensee | 2011 Census<br>Data (No. of<br>Households) | Total No. of<br>Domestic<br>Consumers<br>(LMV-1<br>Category)<br>approved for<br>FY 2014-15 | Additional<br>Households<br>to be<br>covered | 70 % of<br>Additional<br>Household is<br>considered<br>for target<br>setting | Target<br>number of<br>Consumers<br>to be<br>added in<br>1st Year<br>(FY 2014-<br>15) | Target<br>number of<br>Consumers<br>to be<br>added in<br>2nd Year<br>(FY 2015-<br>16) |
|--------------------------|--|--|--|--|---|---|
|                          | А  | В  | C = A-B                                      | D = 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  | 2,403,067                                    | 1,682,147  | 420,537   | 420,537   |
| PuVVNL                   | 9,773,781                                  | 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 - : ADDITIONAL CONSUMER ADDITION TARGET FOR FY 2015-16

5.2.42 Further, in compliance to the Commission's directive for additional target consumer to be added in FY 2014-15, 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.

# TABLE -: ADDITIONAL CONSUMER ADDITION AND LOAD ENHANCEMENTUNDERTAKEN BY THE LICENSEES THROUGH VARIOUS DRIVES IN FY 2014-15

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

\*The above figures are at State Level

5.2.43 Further, the Commission has passed Suo - Motu Order on May 29, 2015 in the matter of Provisional Billing in case of defective meters / Normative Consumption for Un-metered consumers, wherein during the proceedings the Licensees submitted that the connections without meters were also released during Vidyut Chori Roko Abhiyan while adding 24 Lakhs of new consumers during July and August 2014, due to lack of availability of meters. But such connections were released to at least ledgerize illegal connections and most of such unmetered connections have been metered. With regard to the above the Commission in aforesaid Order has specified as depicted below:

"....However, 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....."

- 5.2.44 Thus, with regard to the above, the Commission directs the Licensees that in the case where the consumers were given metered connection but meters are not 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.
- 5.2.45 It may also be noted that the Distribution Licensees by means of various campaigns have been successfully able to add around 24 lakh consumers



within few months. In this regard, the Commission highly appreciates the efforts put in by the Licensees; however, additional and more sincere efforts are desired from the Licensees to include these consumers in its loop. In this regard, the Licensees are directed to submit the total number of additional consumers added in FY 2014-15 apart from the normal consumer addition within three months of this Order.

## 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.
- 5.3.2 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 submitted 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 Licensee namely, MVVNL, PVVNL, DVVNL, PuVVNL and KESCO in their ARR Petition for FY 2015-16 have projected the following Distribution Losses for FY 2015-16:

| Discom         | FY 2015-16 |  |
|----------------|------------|--|
| PVVNL (Retail) | 22.15%     |  |
| PuVVNL         | 23.55%     |  |
| MVVNL          | 22.66%     |  |
| DVVNL (Retail) | 32.47%     |  |
| KESCO          | 26.66%     |  |

## Table -: DISTRIBUTION LOSS PROJECTED BY THE DISTRIBUTION LICENSEES FOR FY 2015-16

- 5.3.6 The Commission, in its deficiency note, asked the Distribution Licensees to submit the actual Distribution losses for FY 2014-15 (till December, 2014) 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 2014-15 (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 2015-16 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 estimated the losses for FY 2014-15 & FY 2015-16. Also if in case the actual losses for FY 2013-14 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 2013-14.
- 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 2015-16 and the distribution loss as projected by the Licensees for FY 2015-16 in their Petitions is shown in the Table below:

| Distribution<br>Licensee | Actual<br>FY 2009-<br>10 | Actual<br>FY 2010-<br>11 | Actual<br>FY 2011-<br>12 | Actual<br>FY 2012-<br>13 | Actual<br>FY 2013-<br>14 | Approved by<br>the<br>Commission<br>for FY 2014-15 | Approved<br>in FRP for<br>FY 2015-16 | Projected by<br>Licensees for<br>FY 2015-16 in<br>their Petitions |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|--------------------------------------|---|
| DVVNL                    | 31.78%                   | 28.51%                   | 36.64%                   | 36.58%                   | 33.81%                   | 28.00%   | 21.55%                               | 32.47%  |
| MVVNL                    | 22.64%                   | 28.02%                   | 26.36%                   | 24.85%                   | 24.85%                   | 21.03%   | 19.00%                               | 22.66%  |
| PVVNL                    | 28.67%                   | 27.04%                   | 29.25%                   | 27.22%                   | 23.06%                   | 23.00%   | 19.00%                               | 22.15%  |
| PuVNNL                   | 24.44%                   | 25.48%                   | 26.20%                   | 25.66%                   | 24.73%                   | 21.72%   | 18.00%                               | 23.55%  |
| KESCO                    | 36.79%                   | 37.30%                   | 33.33%                   | 31.41%                   | 30.84%                   | 23.00%   | 19.00%                               | 26.66%  |

Table -: SUMMARY OF DISTRIBUTION LOSSES

5.3.10 However, as may be observed from the Table -: the actual distribution losses of the Licensees for FY 2013-14 are very high as compared to the loss target approved in the FRP for FY 2015-16. Therefore, approving the target losses at the levels approved in the FRP would not be practically achievable by the Licensees.



- 5.3.11 The Commission is of the view that the Distribution Losses reduction targets projected by some of the Distribution Licensees are very low. As the actual losses are very high, there is ample room for reduction of the distribution losses with appropriate measures. However the Commission has considered the practical difficulties being faced by the Distribution Licensees in reduction of Distribution Losses. Distribution Licensee has submitted that they have undertaken Vidyut Chori Roko Abhiyan (VICRA) and are undertaking sincere efforts to reduce the 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 2015-16 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.
- 5.3.12 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 2014-15. Thus, taking into consideration all the reasons as stated above and actual distribution loss level of last three years, the Commission has approved the Distribution Loss targets of the Distribution Licensees DVVNL and KESCO for FY 2015-16 as specified in the table below:



| KESCO                    |  |   |                                     |                               |  |  |  |  |
|--------------------------|--|---|-------------------------------------|-------------------------------|--|--|--|--|
| Distribution<br>Licensee | Actual<br>submitted by<br>Licensee FY<br>2013-14 | Projected by<br>Licensees for<br>FY 2015-16<br>(Petition) | Approved in<br>TO for FY<br>2014-15 | Approved<br>for FY<br>2015-16 |  |  |  |  |
| DVVNL                    | 33.81%   | 32.47%  | 28.00%                              | 29.00%                        |  |  |  |  |
| KESCO                    | 30.84%   | 26.66%  | 23.00%                              | 23.50%                        |  |  |  |  |

### Table -: DISTRIBUTION LOSS APPROVED BY THE COMMISSION FOR FY 2015-16 for DVVNL & KESCO

- 5.3.13 Thus, the Commission directs the Distribution Licensees to put strong efforts in achieving these Distribution Losses targets in FY 2015-16.
- 5.3.14 The Commission for the purpose of approving the target Distribution Losses for FY 2015-16 for Distribution Licensees namely PVVNL, PuVNNL, and MVVNL has considered the methodology as adopted by the Commission in its Tariff Order dated October 1, 2014.
- 5.3.15 Considering the above methodology, the Commission has approved the target distribution losses for the Distribution Licensees as shown in the Table **below**:

| Distribution<br>Licensee | Actual<br>submitted by<br>Licensee FY<br>2013-14 | Projected by<br>Licensees for<br>FY 2015-16<br>(Petition) | Approved in<br>TO for FY<br>2014-15 (B) | Worked out<br>with 8% Y-o-Y<br>improvement<br>for FY 2015-<br>16<br>(A) | Approved<br>for FY<br>2015-16<br>(Minimum<br>of A & B) |
|--------------------------|--|---|---|---|--|
| MVVNL                    | 24.85%   | 22.66%  | 21.03%                                  | 21.03%  | 21.03%   |
| PVVNL                    | 23.06%   | 22.15%  | 23.00%                                  | 19.52%  | 19.52%   |
| PuVNNL                   | 24.73%   | 23.55%  | 21.72%                                  | 20.93%  | 20.93%   |

#### Table -: DISTRIBUTION LOSS APPROVED BY THE COMMISSION FOR FY 2015-16

5.3.16 While projecting the Power Purchase requirement for FY 2015-16, the transmission Losses has been considered at 3.59% as proposed by the Distribution Licensees.



5.3.17 Based on the above, the approved energy balance for FY 2015-16 for the State owned Distribution Licensees is shown in the Table below:

| Particulars                       | PVVNL     | DVVNL       | MVVNL     | PuVVNL    | KeSCO       | Consolidated |
|-----------------------------------|-----------|-------------|-----------|-----------|-------------|--------------|
| Faiticulais                       |           |             |           |           |             |              |
| Retail Sales (MU)                 | 24,336.84 | 17,985.18   | 14,434.97 | 17,243.94 | 2,907.10    | 76,908.02    |
| Distribution Losses (%)           | 19.52%    | 29.00%      | 21.03%    | 20.93%    | 23.50%      | 22.67%       |
| Energy at Discom Periphery for    | 20,220,05 | 25 224 24   | 10 270 22 | 24 000 05 | 2 000 4 2   | 00 450 40    |
| Retail Sales (MU)                 | 30,238.85 | 25,331.24   | 18,279.33 | 21,808.85 | 3,800.13    | 99,458.40    |
| Intra-State Transmission Losses % | 3.59%     | 3.59%       | 3.59%     | 3.59%     | 3.59%       | 3.59%        |
| Energy Available at State         | 21 264 05 | 26 274 40   | 18.000.00 | 22 (20.04 | 2 0 4 1 C 4 | 102 101 02   |
| periphery for Transmission(MU)    | 31,364.85 | 5 26,274.49 | 18,960.00 | 22,620.94 | 3,941.64    | 103,161.92   |
| Inter-State Transmission Losses % | 1.65%     | 1.65%       | 1.65%     | 1.65%     | 1.65%       | 1.65%        |
| Purchases Required & Billed       | 21 200 20 | 26 74 5 00  | 10 277 02 | 22,000,26 | 4 007 72    | 104 001 00   |
| Energy (MU)                       | 31,890.80 | 26,715.08   | 19,277.93 | 23,000.26 | 4,007.73    | 104,891.80   |
| Total Inter & Intra State         | F 100/    | F 100/      | F 100/    | F 100/    | F 100/      | F 1.00/      |
| Transmission Losses (%)           | 5.18%     | 5.18%       | 5.18%     | 5.18%     | 5.18%       | 5.18%        |
| Total T&D Losses in Retail Sales  | 7 552 00  | 0 720 00    | 4 842 00  | F 7FC 22  | 1 100 00    | 20.00%       |
| (MU) / (%)                        | 7,553.96  | 8,729.90    | 4,842.96  | 5,756.33  | 1,100.63    | 26.68%       |

| Table -: APPROVED ENER | RGY BALANCE FOR | FY 2015-16 |
|------------------------|-----------------|------------|
|                        | OI DALANCE I ON | 11 2013-10 |

- 5.3.18 Although the Commission has approved the above losses based on the review of actual performance of the Licensees in the past, the Commission feels that the same are still on a higher side. 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.
- 5.3.19 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.

- 5.3.20 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.
- 5.3.21 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."

5.3.22 The Commission reiterates & 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.

### 5.4 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 2015-16 in its ARR Petitions. The Distribution Licensees have submitted that the energy requirement for FY 2015-16 is 1,08,707 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 peaks.
- 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 2012-13, FY 2013-14 & 2014-15 (till December 2014) 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.
- 5.4.4 The Distribution Licensees vide Letter No. 264 / RAU / TF 2015-16 dated March 19, 2015 submitted the source wise power purchase details for FY 2012-13 and FY 2013-14 (up to December 2013) along with the hard copies of the power purchase bills. However the summary of break-up of Fixed Charges and energy charges, etc. were not been submitted by the Licensees. Further, the Distribution Licensees also submitted that the power purchase details pertaining to year 2014 (i.e. from January 2014 to Dec 2014) would be submitted to the Commission before the commencement of the Public Hearings. In this regard, the Licensees have requested the Commission to accept and admit the Petitions for ARR and Tariff Determination of FY 2015-16 to which Commission agreed and directed to furnish the same at earliest.
- 5.4.5 In this regard, the Distribution Licensees submitted the power purchase details pertaining to year 2014 (i.e. from January 2014 to Dec 2014) on April 07, 2015. The Commission has gone through the submission made by the Petitioner in this regard. It has been observed that in the submission made by the Petitioner, the break-up of Fixed and the energy charges has not been shown and only the total billed amount has been shown.



- 5.4.6 Further, in absence of the required actual power purchase details for FY 2013-14 and for FY 2014-15 (April, 2014 to December, 2014), the Commission has considered the data in respect of power procurement plan provided in the ARR / Tariff Petition for FY 2015-16 and the details provided for 9 months of April 2014 to December 2014 as it is the most relevant data available for projecting the power purchase cost for FY 2015-16. Suitable modifications, wherever deemed necessary, have been made by the Commission to arrive at the approved power purchase cost for FY 2015-16. The Commission further directs the Petitioner to provide such data in the format specified by the Commission along with the Tariff Petition for FY 2016-17.
- 5.4.7 The Commission has also run the merit order dispatch schedule for power purchase for FY 2015-16 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 2015-16 is given in Table -:.
- 5.4.8 Since, the power purchase expense is the single 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 or through bilateral power purchase agreements. 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 would enable 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) Orders issued by the Commission for UPRVUNL and UPJVNL for their respective power stations for FY 2009-10 to 2013-14 form the basis for determining the costs for FY 2014-15 and thereafter escalations have been considered in the Fixed and energy Charges for determination of cost for FY 2015-16.

- 5.5.2 The computation of cost of power procurement for FY 2015-16 has been done based on:
  - Provisional power purchase cost and units of FY 2013-14
  - Trend observed in the previous and current year.
  - Share of expected capacity available from various Generators to the UPPCL / Discoms.
- 5.5.3 Distribution Licensees submitted that the cost of energy available from State Thermal and Hydro generating stations has been derived from the tariff approved by the Commission in Review Order dated March 20, 2012 and the True-up Order dated November 14, 2013 for the purpose of fixed charges, whereas for determination of energy charges actual bills for the period April to September, 2014 have been considered. Distribution Licensee has considered the Fixed and energy Charge for Anpara-D thermal power station on the basis of the tariff petition filed for approval of provisional tariff for Anpara-D.
- 5.5.4 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 -: ASSUMPTIONS FOR POWER PURCHASE FROM UPRVUNL AS CONSIDERED BY THE DISTRIBUTION LICENSEES

| S. No. | Particulars                  | Assumption   |
|--------|------------------------------|--|
| 1      | Power<br>Purchase<br>Quantum | 1. Net Power Purchase quantum is considered based on the Actual Availability for FY 2014-15 for all power stations. Further a certain improvement in PLF has also been considered as presently some of the units are under R&M and will soon be commissioning again. |



| S. No. | Particulars                    | Assumption  |
|--------|--------------------------------|---|
|        |                                | 2. Thereafter, Merit Order Despatch is applied for projecting the quantum of energy to be purchased from UPRVUNL.   |
| 2      | Fixed &<br>Variable<br>Charges | <ol> <li>Fixed Charges have been considered as per UPERC's Review Order<br/>dated 14.11.2013 for UPRVUNL for FY 2009-10 to 2013-14 plus escalation<br/>in the O&amp;M cost at 4.10% for FY 2014-15 and FY 2015-16.</li> <li>The variable charges have been considered as per the actual bills<br/>raised by UPRVUNL for the period April to September, 2014 including the<br/>bills raised for Fuel Cost Adjustment.</li> </ol> |

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

| S. No. | Particulars                    | Assumption   |
|--------|--------------------------------|--|
| 1      | Power<br>Purchase<br>Quantum   | <ol> <li>Net Power Purchase Quantum form all power stations expect Belka &amp;<br/>Babail is considered as per UPERC's MYT Tariff Order dated 20.10.2011<br/>for UPJVNL for FY 2009-10 to 2013-14</li> <li>Net Power Purchase from Belka &amp; Babail is taken as per the recent bills.</li> <li>Hydro Stations are considered Must-run in Merit Order Despatch</li> </ol> |
| 2      | Fixed &<br>Variable<br>Charges | The same have been considered as per the actual bills raised by UPJNL for the period April to September, 2014.   |

5.5.5 Considering the above, the power purchase quantum and cost as projected by the Distribution Licensees from State Thermal and Hydro Generating Stations for FY 2015-16 is as shown in the Tables below:

### Table -: DETAILS OF POWER PURCHASE COST FROM UPRVUNL STATIONS FOR FY2015-16 AS SUBMITTED BY DISTRIBUTION LICENSEES

| Source of | MW        | MU   | Fixed Cost     |  | Variable Cost |              | Total Cost     |              | Averag<br>e Cost |
|-----------|-----------|------|----------------|--|---------------|--------------|----------------|--------------|------------------|
| Power     | Available | WO   | (Rs. /<br>kWh) | $(\mathbf{R} \mathbf{c} \mathbf{C} \mathbf{r}) = \mathbf{c}$ |               | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh)   |
| Anpara A  | 630       | 3848 | 0.63           | 241  | 1.91          | 733          | 2.53           | 974          | 2.53             |



| Source of                               | MW        | MU    | Fixed Cost     |           | Variable Cost  |              | Total Cost     |              | Averag<br>e Cost |
|---|-----------|-------|----------------|-----------|----------------|--------------|----------------|--------------|------------------|
| Power                                   | Available | NIO   | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh)   |
| Anpara B                                | 1000      | 6314  | 1.09           | 691       | 1.83           | 1,156        | 2.92           | 1,847        | 2.92             |
| Harduaganj                              | 165       | 259   | 2.13           | 55        | 5.10           | 132          | 7.23           | 187          | 7.23             |
| Obra A                                  | 288       | 779   | 0.94           | 73        | 2.43           | 189          | 3.37           | 263          | 3.37             |
| Obra B                                  | 1000      | 4158  | 0.61           | 255       | 2.52           | 1,048        | 3.14           | 1,304        | 3.14             |
| Panki                                   | 210       | 907   | 1.09           | 99        | 4.36           | 396          | 5.45           | 495          | 5.45             |
| Parichha                                | 220       | 323   | 0.98           | 32        | 3.91           | 126          | 4.89           | 158          | 4.89             |
| Parichha Extn.                          | 420       | 2512  | 1.28           | 322       | 3.33           | 837          | 4.61           | 1,159        | 4.61             |
| Parichha Extn.<br>Stage II<br>(2X250MW) | 500       | 3308  | 1.81           | 597       | 3.23           | 1,067        | 5.03           | 1,665        | 5.03             |
| Harduaganj Ext.<br>(2X250MW)            | 500       | 3158  | 1.95           | 615       | 3.44           | 1,086        | 5.38           | 1,700        | 5.38             |
| Anpara D                                | 1000      | 2916  | 1.18           | 344       | 1.79           | 521          | 2.96           | 864          | 2.96             |
| Total                                   | 5933      | 28482 | 1.17           | 3,324     | 2.56           | 7,291        | 3.73           | 10,615       | 3.73             |

### Table -: DETAILS OF POWER PURCHASE COST FROM UPJVNL STATIONS FOR FY2015-16 AS SUBMITTED BY DISTRIBUTION LICENSEES

| Course of Dourse   | MW        | 5.411 | Total Cost     |           |  |  |
|--------------------|-----------|-------|----------------|-----------|--|--|
| Source of Power    | Available | MU    | (Rs. /<br>kWh) | (Rs. Cr.) |  |  |
| Khara              | 58        | 151   | 0.75           | 11.35     |  |  |
| Matatila           | 20        | 53    | 0.68           | 3.56      |  |  |
| Obra (Hydel)       | 99        | 260   | 0.66           | 17.06     |  |  |
| Rihand             | 255       | 670   | 0.57           | 38.37     |  |  |
| UGC Power Stations | 14        | 36    | 2.22           | 7.98      |  |  |
| Belka & Babail     | 6         | 16    | 2.34           | 3.69      |  |  |
| Sheetla            | 4         | 9     | 2.84           | 2.69      |  |  |
| Total              | 455       | 1195  | 0.71           | 84.70     |  |  |



#### The Commission's Analysis:

- 5.5.6 The Commission has analysed the six month details of power purchase as submitted by the Distribution Licensees. As tariff of Anpara D is yet to determine by the Commission, the Commission has approved the quantum and the power purchase cost from Anpara D provisionally as per the submission of the Distribution Licensee subject to truing up. The Commission has followed the approach for the projections as discussed below.
- 5.5.7 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:

| S. No. | Particulars                 | Assumption  |
|--------|-----------------------------|---|
| 1      | Power Purchase<br>Quantum   | <ol> <li>Net Power Purchase Quantum is considered based<br/>on the Actual Availability for FY 2014-15 for all power<br/>stations. Further a certain improvement in PLF has<br/>also been considered as presently some of the units<br/>are under R&amp;M and will soon be commissioning<br/>again. The above is in line with the basis adopted by<br/>the Licensee.</li> <li>Further the quantum is approved as per Merit<br/>order despatch principles.</li> </ol>   |
| 2      | Fixed & Variable<br>Charges | <ol> <li>Petitioner for estimating the Fixed Charges for FY</li> <li>2015-16 has considered the UPERC's Review Order</li> <li>dated 14.11.2013 for UPRVUNL for FY 2009-10 to FY</li> <li>2013-14 plus escalation in the O&amp;M cost at 4.10% for</li> <li>FY 2014-15 and FY 2015-16. In absence of the Tariff</li> <li>Order for FY 2015-16, the Commission has estimated</li> <li>the fixed charges for UPRVUNL as per the approach</li> <li>adopted by the Licensee.</li> <li>The variable charges have been considered as</li> <li>submitted by the Licensee which is as per the actual</li> <li>bills raised by UPRVUNL for the period April to</li> </ol> |

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



| S. No. | S. No. Particulars Assumption |   |  |  |  |  |
|--------|-------------------------------|---|--|--|--|--|
|        |                               | September, 2014 including the bills raised for Fuel |  |  |  |  |
|        |                               | Cost Adjustment.                                    |  |  |  |  |

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

| S. No. | Particulars                 | Assumption   |
|--------|-----------------------------|--|
| 1      | Power Purchase<br>Quantum   | <ol> <li>Net Power Purchase Quantum form all power<br/>stations expect Belka and Babail is considered as per<br/>UPERC's MYT Tariff Order dated 20.10.2011 for<br/>UPJVNL for FY 2009-10 to 2013-14. The same is<br/>equivalent to the quantum approved by the<br/>Commission in its Order dated October 1, 2014.</li> <li>Net Power Purchase from Belka and Babail is taken<br/>as provided by Licensee.</li> <li>Hydro Stations are considered as Must-run in Merit<br/>Order Dispatch.</li> </ol> |
| 2      | Fixed & Variable<br>Charges | 1. The same has been considered as submitted by the<br>Licensee which is as per the actual bills raised by<br>UPJVNL for the period April to September, 2014.  |

5.5.8 The Commission has observed that the Distribution Licensee has mentioned that it has considered the Net Power Purchase Quantum from all power stations expect Belka & Babail as per UPERC's MYT Tariff Order dated October 20, 2011 for UPJVNL for FY 2009-10 to 2013-14, however, the quantum of the power purchase for power stations of UPJVNL as submitted by Licensees is different from the power generation approved by the Commission in MYT Tariff Order dated October 20, 2011. The Commission has approved the net Power Purchase Quantum form all power stations expect Belka and Babail of UPJVNL as per UPERC's MYT Tariff Order dated October 20, 2011 for UPJVNL which is also equivalent to the quantum approved by the Commission in its Order dated October 1, 2014. Based on above approach, the summary of



approved cost of power purchase from UPRVUNL and UPJVNL generating stations for FY 2015-16 is given in the following Tables:

| Source of                     | MW        | MU        | Fixed Cost     |           | Variable Cost  |           | Total Cost     |           | Average<br>Cost |
|-------------------------------|-----------|-----------|----------------|-----------|----------------|-----------|----------------|-----------|-----------------|
| Power                         | Available | N         | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  |
| Anpara A                      | 630.00    | 3,848.44  | 0.63           | 240.79    | 1.91           | 733.15    | 2.53           | 973.94    | 2.53            |
| Anpara B                      | 1,000.00  | 6,313.73  | 1.09           | 690.93    | 1.83           | 1,155.63  | 2.92           | 1,846.56  | 2.92            |
| Harduagunj                    | 165.00    | 258.72    | 2.13           | 55.08     | 5.10           | 131.91    | 7.23           | 186.99    | 7.23            |
| Obra A                        | 288.00    | 778.64    | 0.94           | 73.41     | 2.43           | 189.32    | 3.37           | 262.73    | 3.37            |
| Obra B                        | 1,000.00  | 4,158.31  | 0.61           | 255.21    | 2.52           | 1,048.45  | 3.14           | 1,303.66  | 3.14            |
| Panki                         | 210.00    | 907.10    | 1.09           | 99.11     | 4.36           | 395.50    | 5.45           | 494.62    | 5.45            |
| Parichha                      | 220.00    | 323.08    | 0.98           | 31.80     | 3.91           | 126.31    | 4.89           | 158.11    | 4.89            |
| Parichha<br>Extn.             | 420.00    | 2,512.06  | 1.28           | 322.24    | 3.33           | 836.75    | 4.61           | 1,158.99  | 4.61            |
| Parichha<br>Extn. Stage<br>II | 500.00    | 3,308.21  | 1.81           | 597.36    | 3.23           | 1,067.47  | 5.03           | 1,664.83  | 5.03            |
| Harduaganj<br>Ext.            | 500.00    | 3,157.55  | 1.95           | 614.56    | 3.44           | 1,085.63  | 5.38           | 1,700.19  | 5.38            |
| Anpara D                      | 1,000.00  | 2,916.35  | 1.18           | 343.58    | 1.79           | 520.91    | 2.96           | 864.50    | 2.96            |
| Total                         | 5,933.00  | 28,482.20 | 1.17           | 3,324.08  | 2.56           | 7,291.02  | 3.73           | 10,615.10 | 3.73            |

#### Table -: APPROVED COST OF POWER PURCHASE FROM UPRVUNL STATIONS FOR FY 2015-16

#### Table : APPROVED COST OF POWER PURCHASE FROM UPJVNL STATIONS FOR FY 2015-16

|                    |              |          | Fixed Cost  |           |  |  |
|--------------------|--------------|----------|-------------|-----------|--|--|
| Source of Power    | MW Available | MU       | (Rs. / kWh) | (Rs. Cr.) |  |  |
| Khara              | 57.60        | 303.20   | 0.78        | 23.66     |  |  |
| Matatila           | 20.00        | 80.67    | 0.70        | 5.68      |  |  |
| Obra (Hydel)       | 99.00        | 276.00   | 0.68        | 18.84     |  |  |
| Rihand             | 255.00       | 772.65   | 0.60        | 46.05     |  |  |
| UGC Power Stations | 13.70        | 31.00    | 2.31        | 7.16      |  |  |
| Belka & Babail     | 6.00         | 15.77    | 2.44        | 3.84      |  |  |
| Sheetla            | 3.60         | 10.00    | 2.96        | 2.96      |  |  |
| Total              | 454.90       | 1,489.29 | 0.73        | 108.19    |  |  |



#### 5.6 POWER PROCUREMENT FROM CENTRAL GENERATING STATIONS

#### The Licensees' Submission:

- 5.6.1 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) as well as from generating station with Joint Ventures and Independent Power Producer's (IPPs). The Licensees in their ARR / Tariff Petition for FY 2015-16 have submitted that the cost of power procurement for FY 2015-16 from these sources has been based on the following assumptions:
  - UPPCL's current allocated share from various central sector plants is projected as per NRPC circular (NRPC/ OPR/ 103/ 02/ 2014-15) dated November 12, 2014. 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 of August, 2014 and are inclusive of FPA. All variable costs have been escalated by 6% for FY 2015-16.
  - Trend observed in the previous and current year (Copies of power purchase bills for the month of August 2014 have been furnished by the Distribution Licensees)
  - Share of expected capacity available from various Generators to the Licensee.
- 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. The cost of power purchase from IPPs within the State has been determined in accordance with UPERC (Terms and Conditions of Generation Tariff) Regulations, 2009. Similarly, the cost of power purchase from IPPs outside the State has been derived from tariffs and power purchase agreements 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 2015-16 have not been issued the



tariffs for FY 2014-15 have been escalated by 4.10% in case of fixed charges, 6.00% in case of energy charges for coal based stations and 15% for gas based stations.

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:

| S. No. | Particulars  | Assumption   |  |  |
|--------|--|--|--|--|
| 1      | Power Purchase Quantum 1. Net Power Purchase Quantum is derived as a prespective power plants' MW capacity, plant load (PLF) and UP State's Share in respective power plants |  |  |  |
|        |  | 2. Further, the quantum is projected as per Merit order Dispatch principles.   |  |  |
|        |  | 3. PLF considered being the average of the PLF recorded at<br>respective power stations for the last three year's (2011-12,<br>2012-13 and 2013-14). The PLF number for the three years<br>is sourced from Regional Energy Accounting Report and<br>Annual Report of NRPC and ERPC.  |  |  |
|        |  | 4. Allocation of Power from various central generating<br>stations for FY 2014-15 both firm and unallocated quota<br>has been considered as per the NRPC circular (NRPC/ OPR/<br>103/02/2014-15) dated November 12, 2014.  |  |  |
| 2      | Fixed Charges  | 1. Fixed charges are computed after considering UP state's<br>allocated share in respective power plant as per Regional<br>Energy Accounting Report and Annual Report of NRPC and<br>ERPC and fixed cost approved as per CERC order for<br>respective power plants. Thereafter, the fixed charges have<br>been projected by escalating the O&M component and<br>considering the other component of Fixed Charges at same<br>level. for |  |  |

### Table -: ASSUMPTIONS FOR POWER PURCHASE FROM NTPC STATIONS AS CONSIDERED BY THE DISTRIBUTION LICENSEES



| S. No. | Particulars      | Assumption   |
|--------|------------------|--|
| 3      | Variable Charges | Variable cost is considered as per the recent energy bills<br>raised for the period April to September, 2014. Thereafter,<br>the Variable Charges for FY 2014-15 are escalated at 6.00%<br>for determination of variable charges for FY 2015-16 for<br>coal based stations and 15% for gas based stations. |

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

| S. No. | Particulars               | Assumption   |
|--------|---------------------------|--|
| 1      | Power Purchase<br>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 is considered as Must-run in Merit Order Dispatch.   |
|        |                           | 3. Factoring the MW capacity, auxiliary consumption<br>and design energy as specified by CERC for respective<br>Hydro plants, the Petitioner has calculated the energy<br>sourced from each of the plant.  |
|        |                           | 4. Allocation of Power from various central generating<br>stations for FY 2015-16 both firm and unallocated<br>quota has been considered as per the NRPC circular<br>(NRPC/ OPR/ 103/ 02/ 2014-15) dated November 12,<br>2014.   |
| 2      | Fixed Charges             | Fixed charges are computed after considering UP<br>state's allocated share in respective power plant as<br>per Regional Energy Accounting Report and Annual<br>Report of NRRC and fixed cost approved by as per<br>CERC order for respective power plants. Thereafter,<br>the fixed charges have been projected by escalating<br>the O&M component and considering the other |



| S. No. | Particulars      | Assumption  |
|--------|------------------|---|
|        |                  | component of Fixed Charges at same level.   |
| 3      | Variable Charges | Variable cost is considered as per the recent energy bills raised for the period April to September, 2014 |

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

| S. No. | Particulars               | Assumption  |
|--------|---------------------------|---|
| 1      | Power Purchase<br>Quantum | <ol> <li>Net Power Purchase Quantum is derived as a<br/>product of respective power plants MW capacity,<br/>capacity factor and UP state's share in respective<br/>power plant. Power sourced from these NPCIL plants<br/>is considered Must-run in Merit Order Dispatch.</li> <li>Capacity factor is considered to be the average of<br/>the capacity factor recorded at respective power<br/>stations for the last three year's (2011-12, 2012-13<br/>and 2013-14). Capacity factors are sourced from<br/>official website of NPCIL.</li> </ol> |
| 2      | Tariff<br>(Single part)   | 1. Variable cost is considered as per the recent energy bills raised for the period April to September, 2014  |

5.6.4 The Licensees' submission of power purchased from NTPC, NHPC and NPCIL generating stations for FY 2015-16 is provided in the following Tables:

### Table -: DETAILS OF POWER PURCHASE COST FROM NTPC STATIONS FOR FY2015-16 AS SUBMITTED BY DISTRIBUTION LICENSEES

| Source of | MW<br>Availa | MU  | Fixe           | ed Cost   | Variable Cost  |           | Total Cost     |           | Average<br>Cost |
|-----------|--------------|-----|----------------|-----------|----------------|-----------|----------------|-----------|-----------------|
| Power     | ble          |     | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  |
| Anta      | 119          | 813 | 0.74           | 59.77     | 3.26           | 264.85    | 3.99           | 324.62    | 3.99            |



| Source of               | MW<br>Availa MU |       | Fixed Cost |           | Variable Cost  |           | Total Cost     |           | Average<br>Cost |
|-------------------------|-----------------|-------|------------|-----------|----------------|-----------|----------------|-----------|-----------------|
| Power                   | ble             |       |            | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  |
| Auriya                  | 244             | 1640  | 0.56       | 91.16     | 4.36           | 715.10    | 4.92           | 806.26    | 4.92            |
| Dadri<br>Thermal        | 84              | 613   | 0.86       | 52.51     | 4.15           | 254.08    | 5.00           | 306.58    | 5.00            |
| Dadri Gas               | 272             | 1925  | 0.57       | 109.54    | 4.17           | 802.39    | 4.74           | 911.94    | 4.74            |
| Dadri<br>Extension      | 150             | 1097  | 1.62       | 177.49    | 3.92           | 430.34    | 5.54           | 607.84    | 5.54            |
| Rihand-I                | 373             | 2661  | 0.82       | 217.11    | 1.76           | 467.63    | 2.57           | 684.74    | 2.57            |
| Rihand-II               | 348             | 2478  | 0.95       | 234.71    | 1.79           | 443.78    | 2.74           | 678.48    | 2.74            |
| Singrauli               | 849             | 6151  | 0.54       | 332.64    | 1.32           | 809.26    | 1.86           | 1,141.89  | 1.86            |
| Tanda                   | 440             | 3136  | 1.05       | 330.58    | 3.52           | 1,105.20  | 4.58           | 1,435.78  | 4.58            |
| Unchahar-I              | 258             | 1927  | 0.87       | 166.98    | 2.91           | 560.81    | 3.78           | 727.79    | 3.78            |
| Unchahar-II             | 153             | 1145  | 0.90       | 102.56    | 2.86           | 327.41    | 3.76           | 429.96    | 3.76            |
| Unchahar-III            | 75              | 560   | 1.37       | 76.89     | 2.86           | 160.14    | 4.23           | 237.03    | 4.23            |
| Farakka                 | 33              | 217   | 0.86       | 18.56     | 3.65           | 79.03     | 4.50           | 97.59     | 4.50            |
| Kahalgaon<br>St. I      | 77              | 528   | 0.96       | 50.56     | 2.98           | 157.24    | 3.94           | 207.80    | 3.94            |
| Kahalgaon<br>St.II Ph.I | 251             | 1729  | 1.22       | 211.65    | 2.81           | 486.12    | 4.04           | 697.77    | 4.04            |
| Koldam<br>(Hydro)       | 95              | 414   | 1.56       | 64.57     | _              | -         | 1.56           | 64.57     | 1.56            |
| Rihand-III              | 377             | 2691  | 1.32       | 355.96    | 1.82           | 491.06    | 3.15           | 847.01    | 3.15            |
| Total                   | 4197            | 29724 |            | 2,653.23  |                | 7,554.41  |                | 10,207.65 | 3.43            |

### Table -: DETAILS OF POWER PURCHASE COST FROM NHPC STATIONS FOR FY2015-16 AS SUBMITTED BY DISTRIBUTION LICENSEES

| Source of | MW<br>Available | MW  |                | Fixed Cost   |                | Variable Cost |                | Total Cost |                |
|-----------|-----------------|-----|----------------|--------------|----------------|---------------|----------------|------------|----------------|
| Power     |                 | e   | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs.<br>Cr.)  | (Rs. /<br>kWh) | (Rs. Cr.)  | (Rs. /<br>kWh) |
| Chamera   | 109             | 336 | 0.60           | 20.30        | 1.07           | 35.79         | 1.67           | 56.09      | 1.67           |



| Source of          | MW        | MU   | Fixed Cost     |              | Variable Cost  |              | Total Cost     |           | Average<br>Cost |
|--------------------|-----------|------|----------------|--------------|----------------|--------------|----------------|-----------|-----------------|
| Power              | Available | WIC  | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  |
| Chamera-II         | 86        | 393  | 1.36           | 53.50        | 1.70           | 66.80        | 3.06           | 120.30    | 3.06            |
| Chamera-III        | 62        | 283  | 2.00           | 56.55        | 2.20           | 62.20        | 4.20           | 118.75    | 4.20            |
| Dhauliganga        | 75        | 282  | 1.10           | 31.15        | 1.45           | 40.99        | 2.56           | 72.14     | 2.56            |
| Salal I&II         | 48        | 252  | 0.60           | 15.20        | 0.48           | 12.07        | 1.08           | 27.28     | 1.08            |
| Tanakpur           | 21        | 103  | 1.70           | 17.47        | 1.15           | 11.84        | 2.85           | 29.30     | 2.85            |
| Uri                | 96        | 497  | 1.05           | 51.95        | 0.81           | 39.99        | 1.85           | 91.94     | 1.85            |
| Dulhasti           | 111       | 517  | 2.82           | 145.96       | 3.08           | 159.23       | 5.90           | 305.19    | 5.90            |
| Sewa-II            | 35        | 137  | 1.89           | 25.85        | 2.34           | 31.95        | 4.23           | 57.80     | 4.23            |
| Uri-II             | 25        | 111  | 4.98           | 55.11        | 1.75           | 19.40        | 6.73           | 74.50     | 6.73            |
| Parbati ST-II      | 160       | 0    | -              | -            | -              | -            | -              | -         |                 |
| Parbati ST-<br>III | 104       | 383  | 1.41           | 53.98        | 3.18           | 121.53       | 4.59           | 175.51    | 4.59            |
| Total              | 934       | 3292 |                | 527.01       |                | 601.79       |                | 1,128.80  | 3.43            |

Table -: DETAILS OF POWER PURCHASE COST FROM NPCIL STATIONS FOR FY2015-16 AS SUBMITTED BY DISTRIBUTION LICENSEES

| Source of | Source of MW<br>Power Available MU |      | Fixed Cost |      | Variable Cost |        | Total Cost |        | Average<br>Cost |
|-----------|------------------------------------|------|------------|------|---------------|--------|------------|--------|-----------------|
| Power     |                                    |      | (Rs. /     | (Rs. | (Rs. /        | (Rs.   | (Rs. /     | (Rs.   | (Rs. /          |
|           |                                    |      | kWh)       | Cr.) | kWh)          | Cr.)   | kWh)       | Cr.)   | kWh)            |
| NAPP      | 167                                | 937  | -          | -    | 2.79          | 261.86 | 2.79       | 261.86 | 2.79            |
| RAPP      | 80                                 | 604  | -          | -    | 3.12          | 188.62 | 3.12       | 188.62 | 3.12            |
| #3&4      |                                    |      |            |      |               |        |            |        |                 |
| RAPP#5&6  | 115                                | 802  | -          | -    | 3.86          | 309.52 | 3.86       | 309.52 | 3.86            |
| Total     | 362                                | 2343 |            |      |               | 760.01 |            | 760.01 | 3.24            |

### The Commission's Analysis:

5.6.5 It has been observed that so far the tariff of NTPC and NHPC stations have not been determined by the CERC for FY 2015-16 as per new Tariff Regulations notified by CERC for the period FY 2014-15 to FY 2018-19. Considering the



same, the assumptions considered by the Commission while approving the power purchase quantum and cost from the NTPC, NHPC and NPCIL Stations are given in the following Tables:

| S. No. | Particulars            | Assumption  |
|--------|------------------------|---|
|        |                        |   |
| 1      | Power Purchase Quantum | 1. 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.  |
|        |                        | 2. Further, the quantum has been projected as per Merit     |
|        |                        | order Dispatch principles.                                  |
|        |                        | 3. PLF has been considered to be the average of the PLF     |
|        |                        | recorded at respective power station for the last three     |
|        |                        | year's (2011-12, 2012-13 and 2013-14). The PLF for the      |
|        |                        | three years has been sourced from monthly reports of the    |
|        |                        | CEA.  |
|        |                        |   |
| 2      | Fixed Charges          | 1. Fixed charges has been computed after considering UP     |
|        |                        | State's allocated Share in respective power plant and fixed |
|        |                        | cost approved as per CERC order for respective power        |
|        |                        | plants. The Fixed Charges applicable for FY 2013-14 are     |
|        |                        | considered for FY 2015-16 without any escalation.           |
|        |                        | 2. Incentive has not been considered while computing the    |
|        |                        | Fixed Charges as done in the computations of the            |
|        |                        | Licensees.  |
| 3      | Variable Charges       | Variable charges have been considered as provided by the    |
|        |                        | Licensees in ARR / Tariff Petition for FY 2015-16.          |
| 4      | Koldam Hydro           | With no precedents, the quantum and cost has been           |
|        | ,                      | considered same as submitted by the Licensees.              |

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

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



| S. No. | Particulars  | Assumption   |
|--------|--|--|
| 1      | Power Purchase<br>Quantum  | <ol> <li>Factoring the MW capacity, auxiliary consumption<br/>and design energy as specified by CERC in its Tariff<br/>Order for FY 2013-14 for respective hydro plants, the<br/>Commission has calculated the energy sourced from<br/>each of the plant.</li> <li>Power sourced from these NHPC plants has been<br/>considered as must-run in Merit Order Dispatch.</li> <li>Allocation of Power from various central generating<br/>stations for FY 2014-15 - both firm and unallocated<br/>quota - has been considered as per the NRPC circular<br/>(NRPC/ OPR/ 103/ 02/ 2013-14) dated 28<sup>th</sup> March,<br/>2014.</li> </ol> |
| 2      | Fixed Charges  | 1. Fixed charges have been computed after considering UP State's allocated Share in respective power plant and fixed cost approved by as per CERC Order for respective power plants. The Fixed Charges applicable for FY 2013-14 have been considered for FY 2015-16 without any escalation.   |
| 3      | Variable Charges   | 1. Variable costs have been calculated as per CERC Regulations which is 50% of the Fixed charges (excluding incentive).  |
| 4      | Power Purchase<br>quantum and cost<br>from Prabati ST-III &<br>URI-II Stations | <ol> <li>As regard Parbati St-III , AFC has been derived from<br/>the CERC order and in same order CERC has approved<br/>the reduced Design Energy till upstream Prabati –II is<br/>commissioned</li> <li>URI-II capacity has been considered as 240 MW as<br/>plant is fully commissioned</li> </ol>  |

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



| S. No. | Partic        | ulars    | Assumption  |
|--------|---------------|----------|---|
| 1      | Power         | Purchase | 1. Net Power Purchase Quantum has been derived as     |
|        | Quantum       |          | a product of respective power plants MW capacity,     |
|        |               |          | capacity factor and UP State's Share in respective    |
|        |               |          | power plant.  |
|        |               |          | 2. Capacity factor has been considered to be the      |
|        |               |          | average of the capacity factor recorded at respective |
|        |               |          | power stations for the last three years (2012-13,     |
|        |               |          | 2013-14 and 2014-15). Capacity factors are sourced    |
|        |               |          | from the website of NPCIL.                            |
|        |               |          | 3. Power sourced from these NPCIL plants has been     |
|        |               |          | considered as Must-run in Merit Order Dispatch.       |
| 2      | Tariff        |          | 1. As provided in ARR / Tariff Petition submitted by  |
|        | (Single part) |          | Licensees Petitioner for FY 2015-16                   |

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 -:, Table -:, and Table -:, below:

|                    |                 |          | Fixed Cost     |           | Variable Cost  |           | Total Cost     |           | Average<br>Cost |
|--------------------|-----------------|----------|----------------|-----------|----------------|-----------|----------------|-----------|-----------------|
| Source of<br>Power | MW<br>Available | MU       | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  |
| Anta               | 119.50          | 812.80   | 0.53           | 43.32     | 3.26           | 264.85    | 3.79           | 308.17    | 3.79            |
| Auriya             | 243.59          | 1,640.30 | 0.32           | 52.26     | 4.36           | 715.10    | 4.68           | 767.35    | 4.68            |
| Dadri<br>Thermal   | 84.00           | 612.81   | 0.80           | 49.28     | 4.15           | 254.08    | 4.95           | 303.36    | 4.95            |
| Dadri Gas          | 271.83          | 1,924.87 | 0.39           | 74.82     | 4.17           | 802.39    | 4.56           | 877.21    | 4.56            |
| Dadri<br>Extension | 150.43          | 1,097.44 | 1.42           | 155.65    | 3.92           | 430.34    | 5.34           | 585.99    | 5.34            |
| Rihand-I           | 373.20          | 2,661.03 | 0.78           | 208.53    | 1.76           | 467.63    | 2.54           | 676.15    | 2.54            |

| Table -: APPROVED COST OF POWER PURCHASE FROM NTPC STATIONS FOR FY 2015-16 |
|--|
|  |



|                         |                 |           |                | Fixed Cost |                | Variable Cost |                | Total Cost |                |
|-------------------------|-----------------|-----------|----------------|------------|----------------|---------------|----------------|------------|----------------|
| Source of<br>Power      | MW<br>Available | MU        | (Rs. /<br>kWh) | (Rs. Cr.)  | (Rs. /<br>kWh) | (Rs. Cr.)     | (Rs. /<br>kWh) | (Rs. Cr.)  | (Rs. /<br>kWh) |
| Rihand-II               | 347.50          | 2,477.78  | 0.90           | 221.85     | 1.79           | 443.78        | 2.69           | 665.63     | 2.69           |
| Singrauli               | 849.00          | 6,150.60  | 0.54           | 332.00     | 1.32           | 809.26        | 1.86           | 1,141.26   | 1.86           |
| Tanda                   | 440.00          | 3,135.55  | 1.05           | 329.94     | 3.52           | 1,105.20      | 4.58           | 1,435.14   | 4.58           |
| Unchahar-I              | 257.63          | 1,927.10  | 0.82           | 158.63     | 2.91           | 560.81        | 3.73           | 719.44     | 3.73           |
| Unchahar-II             | 153.01          | 1,144.51  | 0.84           | 96.30      | 2.86           | 327.41        | 3.70           | 423.70     | 3.70           |
| Unchahar-III            | 74.87           | 560.00    | 1.29           | 72.12      | 2.86           | 160.14        | 4.15           | 232.25     | 4.15           |
| Farakka                 | 33.28           | 216.70    | 0.75           | 16.15      | 3.65           | 79.03         | 4.39           | 95.19      | 4.39           |
| Kahalgaon<br>St. I      | 76.61           | 527.88    | 0.84           | 44.19      | 2.98           | 157.24        | 3.82           | 201.43     | 3.82           |
| Kahalgaon<br>St.II Ph.I | 250.95          | 1,729.20  | 1.06           | 182.61     | 2.81           | 486.12        | 3.87           | 668.73     | 3.87           |
| Koldam<br>(Hydro)       | 94.50           | 413.91    | -              | 32.50      | -              | 32.50         | -              | 65.00      | 1.57           |
| Rihand-III              | 377.42          | 2,691.12  | 1.70           | 457.81     | 1.82           | 491.06        | 3.53           | 948.87     | 3.53           |
| Total                   | 4,197.30        | 29,723.59 | 0.85           | 2,527.96   | 2.55           | 7,586.91      | 3.40           | 10,114.88  | 3.40           |

#### Table -: APPROVED COST OF POWER PURCHASE FROM NHPC STATIONS FOR FY 2015-16

| Source of      | D.4347 | MW     |                | Fixed Cost   |                | Variable Cost |                | Total Cost   |                |
|----------------|--------|--------|----------------|--------------|----------------|---------------|----------------|--------------|----------------|
| Power Availabl |        | MU     | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs.<br>Cr.)  | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) |
| Chamera        | 109.46 | 333.36 | 0.88           | 29.23        | 0.84           | 28.04         | 1.72           | 57.28        | 1.72           |
|                | 105.10 | 555.50 | 0.00           | 29.25        | 0.01           | 20.01         | 1.72           | 57.20        | 1.72           |
| Chamera-II     | 86.28  | 413.89 | 1.20           | 49.59        | 1.12           | 46.29         | 2.32           | 95.88        | 2.32           |
| Chamera-III    | 62.13  | 288.13 | 1.64           | 47.20        | 1.52           | 43.70         | 3.15           | 90.90        | 3.15           |
| Dhauliganga    | 74.90  | 293.40 | 1.27           | 37.39        | 1.22           | 35.89         | 2.50           | 73.29        | 2.50           |
| Salal I&II     | 47.96  | 212.06 | 0.44           | 9.39         | 0.40           | 8.57          | 0.85           | 17.96        | 0.85           |
| Tanakpur       | 21.33  | 101.35 | 1.10           | 11.14        | 0.99           | 10.02         | 2.09           | 21.17        | 2.09           |
| Uri            | 96.29  | 512.80 | 0.74           | 37.98        | 0.66           | 34.08         | 1.41           | 72.05        | 1.41           |



|                    | MW<br>Available |          | Fixed Cost     |              | Variable Cost  |              | Total Cost     |              | Average<br>Cost |
|--------------------|-----------------|----------|----------------|--------------|----------------|--------------|----------------|--------------|-----------------|
| Source of<br>Power |                 | MU       | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh)  |
| Dulhasti           | 111.38          | 524.91   | 2.58           | 135.29       | 2.53           | 132.63       | 5.10           | 267.93       | 5.10            |
| Sewa-II            | 35.10           | 150.44   | 1.94           | 29.23        | 1.78           | 26.81        | 3.73           | 56.04        | 3.73            |
| Uri-II             | 25.35           | 226.21   | 2.92           | 66.08        | 2.03           | 45.98        | 4.95           | 112.06       | 4.95            |
| Parbati ST-II      | 160.00          | -        |                | -            |                | -            | -              | -            | -               |
| Parbati ST-<br>III | 104.00          | 181.49   | 3.70           | 67.09        | 2.77           | 50.32        | 6.47           | 117.41       | 6.47            |
| Total              | 934.17          | 3,238.05 | 1.60           | 519.62       | 1.43           | 462.34       | 3.03           | 981.96       | 3.03            |

#### Table -: APPROVED COST OF POWER PURCHASE FROM NPCIL STATIONS FOR FY 2015-16

| Source of | MW        | <b>NALL</b> | Fixed Cost     |              | Variable Cost  |              | Total Cost     |              | Average<br>Cost |
|-----------|-----------|-------------|----------------|--------------|----------------|--------------|----------------|--------------|-----------------|
| Power     | Available | MU          | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh)  |
| NAPP      | 166.54    | 797.78      | -              | -            | 2.79           | 222.86       | 2.79           | 222.86       | 2.79            |
| RAPP #3&4 | 79.67     | 502.40      | -              | -            | 3.12           | 156.89       | 3.12           | 156.89       | 3.12            |
| RAPP#5&6  | 115.46    | 969.63      | -              | -            | 3.86           | 374.20       | 3.86           | 374.20       | 3.86            |
| Total     | 361.67    | 2,269.82    |                |              | 3.32           | 753.95       | 3.32           | 753.95       | 3.32            |

### 5.7 POWER PROCUREMENT FROM IPPS / JVs

#### The Licensees' Submission:

5.7.1 The assumptions considered by the Licensees while estimating the power purchase from the IPPs and Joint Ventures (JVs) for FY 2015-16 is provided in the Table below:

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



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

- 5.7.2 Further the cost estimation for Bara Thermal Power Plant has been done based on the competitive bidding price i.e Rs. 3.02 per kWh for the base year and for Lalitpur thermal power station the cost has been estimated on the basis of cost plus model considering the norms prescribed in the Generation Tariff Regulation, 2009.
- 5.7.3 The summary of power purchase quantum and cost estimated by Distribution Licensees for FY 2015-16 from IPP / JVs are provided in the Table below:

### Table -: DETAILS OF POWER PURCHASE COST FROM IPPS / JVs STATIONS FOR FY2015-16 ASSUBMITTED BY DISTRIBUTION LICENSEES

| Source of Power      | MW<br>Avail MU - |      | Fixe           | Fixed Cost |                | ble Cost  | Tota           | Averag<br>e Cost |                |
|----------------------|------------------|------|----------------|------------|----------------|-----------|----------------|------------------|----------------|
| Source of Fower      | able             | NO   | (Rs. /<br>kWh) | (Rs. Cr.)  | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.)        | (Rs. /<br>kWh) |
| NATHPA JHAKRI<br>HPS | 288              | 1387 | 1.60           | 221.64     | 1.46           | 203.00    | 3.06           | 424.65           | 3.06           |
| TALA POWER           | 45               | 181  | -              | -          | 2.47           | 44.81     | 2.47           | 44.81            | 2.47           |
| Koteshwar            | 173              | 570  | 2.02           | 115.00     | 2.20           | 125.12    | 4.22           | 240.12           | 4.21           |
| Srinagar             | 290              | 519  | 3.02           | 156.57     | -              | -         | 3.02           | 156.57           | 3.02           |
| Sasan                | 495              | 2081 | 0.18           | 36.96      | 1.29           | 268.84    | 1.47           | 305.80           | 1.47           |
| Teesta St-III        | 0                | 0    | -              | -          | -              | -         | -              | -                | -              |
| Karcham-<br>Wangtoo  | 200              | 158  | -              | -          | 4.00           | 63.01     | 4.00           | 63.01            | 4.00           |
| VISHNUPRAYAG         | 352              | 1623 | 1.01           | 164.24     | 1.40           | 227.18    | 2.41           | 391.42           | 2.41           |
| TEHRI STAGE-I        | 419              | 1811 | 1.88           | 340.47     | 2.58           | 467.21    | 4.46           | 807.68           | 4.46           |



| Source of Power       | MW<br>Avail MU - |       | Fixe           | Fixed Cost |                | ble Cost  | Tot            | Averag<br>e Cost |                |
|-----------------------|------------------|-------|----------------|------------|----------------|-----------|----------------|------------------|----------------|
| Source of Power       | able             | NO    | (Rs. /<br>kWh) | (Rs. Cr.)  | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.)        | (Rs. /<br>kWh) |
| Rosa Power<br>Project | 600              | 4066  | 1.70           | 689.88     | 4.33           | 1,758.69  | 6.02           | 2,448.57         | 6.02           |
| Rosa Power<br>Project | 600              | 4066  | 1.70           | 689.88     | 4.33           | 1,758.69  | 6.02           | 2,448.57         | 6.02           |
| Bara                  | 1188             | 1115  | -              | -          | 3.20           | 357.01    | 3.20           | 357.01           | 3.20           |
| Anpara 'C'            | 1100             | 7015  | 1.19           | 833.81     | 2.71           | 1,899.58  | 3.90           | 2,733.39         | 3.90           |
| IGSTPP,<br>Jhajhjhar  | 51               | 358   | 1.61           | 57.68      | 4.39           | 157.44    | 6.00           | 215.12           | 6.00           |
| Bajaj Hindusthan      | 450              | 2982  | 2.25           | 671.00     | 4.71           | 1,403.51  | 6.96           | 2,074.51         | 6.96           |
| Lalitpur              | 1782             | 8022  | 1.40           | 1,123.08   | 1.98           | 1,588.35  | 3.38           | 2,711.43         | 3.38           |
| Total                 | 8032             | 35953 |                | 5100       |                | 10322     |                | 15423            | 4.29           |

### The Commission's Analysis:

5.7.4 The Commission has gone through the submission made by the Licensees regarding the power purchase from IPPs / JVs. Since the tariff of the new power plants of the Lalitpur and Bara are yet to be determined by the Commission, the Commission provisionally approves the fixed and energy charges of these plants as per the submission of the Distribution Licensee subject to truing up.

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

| S. No. | Particulars Assumption |  |  |  |  |  |
|--------|------------------------|--|--|--|--|--|
| 1      | Power Purchase Quantum | <ol> <li>Net Power Purchase Quantum has been<br/>considered as provided by the Licensees in its ARR<br/>/ Tariff Petition for FY 2015-16.</li> <li>Nathpa-Jhakri, Tehri, Tala &amp; Vishnu Prayag are<br/>considered as Must-run in Merit Order Dispatch.</li> </ol> |  |  |  |  |



| S. No. | Particulars                                       | Assumption  |
|--------|---|---|
| 2      | Tariff (Single part & Two<br>part) for IPPs / JVs | <ol> <li>Fixed and variable charges are considered as<br/>provided in ARR / Tariff Petition submitted by the<br/>Licensees for FY 2015-16.</li> </ol> |

### Table -: APPROVED COST OF POWER PURCHASE FROM IPPS / JVs FOR FY 2015-16

| Source of             | MW        | Fixed Cost |                |           | Varia          | able Cost | Total Cost     |           | Average<br>Cost |
|-----------------------|-----------|------------|----------------|-----------|----------------|-----------|----------------|-----------|-----------------|
| Power                 | Available | MU         | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  |
| NATHPA JHAKRI<br>HPS  | 287.85    | 1,386.86   | 1.60           | 221.64    | 1.46           | 203.00    | 3.06           | 424.65    | 3.06            |
| TALA POWER            | 44.98     | 181.26     | -              | -         | 2.47           | 44.81     | 2.47           | 44.81     | 2.47            |
| Koteshwar             | 172.84    | 569.60     | 2.02           | 115.00    | 2.20           | 125.12    | 4.22           | 240.12    | 4.22            |
| Srinagar              | 290.00    | 518.63     | 3.02           | 156.57    | -              | -         | 3.02           | 156.57    | 3.02            |
| Sasan                 | 495.00    | 2,081.38   | 0.18           | 36.96     | 1.29           | 268.84    | 1.47           | 305.80    | 1.47            |
| Teesta St-III         | -         | -          | -              | -         | -              | -         | -              | -         |                 |
| Karcham-<br>Wangtoo   | 200.00    | 157.68     | -              | -         | 4.00           | 63.01     | 4.00           | 63.01     | 4.00            |
| VISHNUPRAYAG          | 352.00    | 1,622.83   | 1.01           | 164.24    | 1.40           | 227.18    | 2.41           | 391.42    | 2.41            |
| TEHRI STAGE-I         | 418.50    | 1,811.03   | 1.88           | 340.47    | 2.58           | 467.21    | 4.46           | 807.68    | 4.46            |
| Rosa Power<br>Project | 600.00    | 4,065.52   | 1.70           | 689.88    | 4.33           | 1,758.69  | 6.02           | 2,448.57  | 6.02            |
| Rosa Power<br>Project | 600.00    | 4,065.52   | 1.70           | 689.88    | 4.33           | 1,758.69  | 6.02           | 2,448.57  | 6.02            |
| Bara                  | 1,188.00  | 1,115.24   | -              | -         | 3.20           | 357.01    | 3.20           | 357.01    | 3.20            |
| Anpara 'C'            | 1,100.00  | 7,015.01   | 1.19           | 833.81    | 2.71           | 1,899.58  | 3.90           | 2,733.39  | 3.90            |
| IGSTPP,<br>Jhajhjhar  | 51.15     | 358.46     | 1.61           | 57.68     | 4.39           | 157.44    | 6.00           | 215.12    | 6.00            |
| Bajaj<br>Hindusthan   | 450.00    | 2,982.12   | 2.25           | 671.00    | 4.71           | 1,403.51  | 6.96           | 2,074.51  | 6.96            |
| Lalitpur              | 1,782.00  | 8,021.97   | 1.40           | 1,123.08  | 1.98           | 1,588.35  | 3.38           | 2,711.43  | 3.38            |
| Total                 | 8,032.32  | 35,953.10  | 1.42           | 5,100.22  | 2.87           | 10,322.43 | 4.29           | 15,422.65 | 4.29            |

#### 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, NTPC Vidyut Vyapar Nigam Ltd. (NVVNL) and power exchange for FY 2015-16 is provided in the Table below:

### Table -: POWER PURCHASE COST: STATE CO-GENERATION FACILITIES, SOLAR AND OTHER SOURCES FOR FY 2015-16

| Source of Power      | Fixed Cost |                | Variab       | le Cost        | Total     | Average<br>Cost |           |             |
|----------------------|------------|----------------|--------------|----------------|-----------|-----------------|-----------|-------------|
| Source of Power      | NIC        | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  | (Rs. Cr.) | (Rs. / kWh) |
| Captive and<br>Cogen | 2865       |                |              | 4.90           | 1,403.05  | 4.90            | 1,403.05  | 4.90        |
| Solar Energy         | 84         |                |              | 11.81          | 99.19     | 11.81           | 99.19     | 11.81       |
| NVVN Coal<br>Power   | 352        |                |              | 3.00           | 105.38    | 3.00            | 105.38    | 3.00        |

### 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 2015-16, 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 2014-15. Considering the same, the Commission for approving the power purchase cost from solar energy sources for FY 2015-16 has considered the average rate of power from solar energy as Rs. 11.09 / kWh.



- 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 2015-16 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 2015-16 is provided in the Table below:

### Table -: APPROVED COST OF POWER PURCHASE FROM STATE CO-GENERATION FACILITIES AND SOLAR ENERGY SOURCES FOR FY 2015-16

| Source of Power   | MU       | Fixed Cost     |              | Varia          | ble Cost  | Т              | Average<br>Cost |                |
|-------------------|----------|----------------|--------------|----------------|-----------|----------------|-----------------|----------------|
| Source of Fower   | N/O      | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.)       | (Rs. /<br>kWh) |
| Captive and Cogen | 2,865.00 |                |              | 4.90           | 1,403.05  | 4.90           | 1,403.05        | 4.90           |
| Solar Energy      | 84.00    |                |              | 11.81          | 99.19     | 11.81          | 99.19           | 11.81          |
| NVVN Coal Power   | 352.62   |                |              | 3.00           | 105.38    | 3.00           | 105.38          | 3.00           |
| Total             | 3300.62  |                |              |                | 1601.59   |                | 1601.59         | 4.85           |

### 5.9 POWER PROCUREMENT FROM BILATERAL SOURCES

### The Licensees' Submission:

5.9.1 The Licensee's submission of power purchase from bilateral sources for FY 2015-16 is provided in the Table below:

### Table -: 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<br>Cost |
|---|------------|-----------------|
|---|------------|-----------------|



|   |         | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) |
|---|---------|----------------|--------------|----------------|-----------|----------------|-----------|----------------|
| Inter system<br>exchange (Bilateral<br>& PXIL) / UI | 4416.33 |                |              | 5.04           | 2,223.62  | 5.04           | 2,223.62  | 5.04           |
| Total   | 4416.33 |                |              |                | 2,223.62  |                | 2,223.62  | 5.04           |

- 5.9.2 The Commission based on the submission of the Licensees has assessed the rate for Power purchase from other / emergency sources as Rs. 5.04 / kWh for FY 2014-15. In accordance with Clause 4.2.8 of the Distribution Tariff Regulations, 2006, the Commission hereby approves a maximum ceiling rate of Rs. 5.04 / kWh towards power purchase cost from short term sources for FY 2015-16. 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.
- 5.9.3 Considering the above, the approved power purchase from bilateral sources for FY 2015-16 is provided in the Table below:

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

| Source of Power                                     | MU      | Fixed Cost     |              | Varial         | ble Cost  | Tota           | Average<br>Cost |                |
|---|---------|----------------|--------------|----------------|-----------|----------------|-----------------|----------------|
| Source of Power                                     | WIO     | (Rs. /<br>kWh) | (Rs.<br>Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.)       | (Rs. /<br>kWh) |
| Inter system<br>exchange (Bilateral<br>& PXIL) / UI | 4416.33 |                |              | 5.04           | 2,223.62  | 5.04           | 2,223.62        | 5.04           |
| Total   | 4416.33 |                |              |                | 2,223.62  |                | 2,223.62        | 5.04           |

5.9.4 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.

5.9.5 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."

- 5.9.6 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.
- 5.9.7 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.
- 5.9.8 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.

5.9.9 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 Hon'ble 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/240 dt. 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 Hon'ble Commission", the Commission vide its Order dated October 23, 2013 gave direction to 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 October 23, 2013.
- 5.10.4 Subsequently the Petitioners vide its Letter No. 3135/RAU/FPPCA dated December 29, 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 nonuniform 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)DeterminationofDifferencebetweenActualandApproved Power Purchase Cost in a quarter

P<sub>D</sub>= (P actual-P approved)

Where

*P<sub>D</sub>* = Difference in Actual and Approved Power Purchase Cost ('Crs.)

P<sub>actual</sub> = 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

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 The Commission's view on each of the proposal submitted by the Petitioners is discussed in the following paragraphs.

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

5.10.7 The Commission in its Regulations had approved the formula for computing FPPCA which results in uniform charge / unit for all the consumers irrespective of their consumer category. The Commission had followed such approach to simplify the mechanism for Distribution Licensees. However the Petitioners have themselves submitted that such mechanism would defeat the purpose of having categorisation of the consumers.



- 5.10.8 In regard to the same and to have a differential distribution of FPPCA over different category, Petitioners have proposed 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.
- 5.10.9 The Commission has gone through the proposal made by the Petitioners and agrees with the Petitioners that it would be better to have a differential FPPCA charge for each consumer category otherwise the same would defeat the purpose of having categorisation of the consumer. However, with this another issue can be raised that within each of the consumer categories from LMV-1 to HV-4 there exists various sub-categories and the same may also be considered for such proportionate distribution of FPPCA. Such sub-categories would then again have further sub-categories. The Commission has analysed such issue and is of the view that going beyond the broader categories i.e. LMV-1 to HV-4 as defined in the Rate Schedule would be an endless task. In view of the same and the submission made by the Petitioners, the Commission accepts the proposal of the Petitioners and approves to distribute FPPCA over different broad categories in the ratio of their approved ABR for the respective financial year in such a way that percentage increase across all the categories remains the same. The detailed mechanism for computation of the same has been discussed subsequently in this Order.

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

&

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

5.10.10 As per the provision 2 of Regulation 6.9 (2) of Distribution Tariff Regulations the variation in power purchase cost due to UI and other unapproved purchases are not allowable to be recovered under FPPCA. In regard to the same, the Commission in its Order dated 23rd October, 2013 had directed the Petitioners to submit the detailed computation of the FPPCA formula for at least a year, along with the details of quantum, amount & source of all the UI and unapproved power purchases made for each quarter of the year. The Petitioner in compliance to the above has submitted the FPPCA working for 3



quarter from January, 2013 to September, 2013 under the following two scenarios:

- a) FPPCA working excluding UI & unapproved purchases.
- b) FPPCA working including UI & unapproved purchases.

Based on the same the Petitioner submitted that there is a loss of Rs. 457.5 Crore to the Distribution Licensees in terms of FPPCA for only three quarters.

The Commission has gone through the submission made by the Petitioners. It 5.10.11 has been observed that the power purchase allowed under the FPPCA mechanism is based on the approved losses and thus the additional power purchase cost under FPPCA does not account for the inefficiencies of the Distribution Licensees but are to cater the additional electricity requirement. As it is the power purchase cost is uncontrollable and also depends ion the demand on the real time basis and would anyhow be allowable at the time of truing up at normative loss level, hence the Commission allows the Distribution Licensees to consider the variation in power purchase cost from the sources which have not been considered in Tariff Order as per merit order dispatch principle, for which the Distribution Licensees have signed the long term power purchase agreements (PPA). However, the Commission does not intend to include the variation on account of short term power purchase and power purchase through UI adjustment since it would require prudence check and would delay the process. Moreover as the quantum of power procured through UI and other short term sources is low, the financial impact of the same would not be significant and can be settled during the truing up process. The detailed mechanism for computation of the same has been discussed subsequently in this Order.

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



- 5.10.12 The Petitioners in Petition No. 848/2012 have submitted that the provision 3 of Regulation 6.9 (2) of Distribution Tariff Regulations seems to be contradictory to the established tariff principles which allows power purchase cost (on billing basis) to include while computing the tariff. As per the Regulations only those bills of generators against which the payment has been made, will be included while calculating FPPCA.
- 5.10.13 Petitioners submitted that many times UPPCL / Discoms fail to make payment to generator / supplier in time due to paucity of funds. Petitioner submitted that with the exiting FPPCA formula it will not be possible to recover the actual increase in fuel and power purchase cost. Petitioners have requested the Commission to allow considering power purchase cost as per the bills received (instead of paid) for computing the FPPCA.
- 5.10.14 The Commission has gone through the submission made by the Petitioners. It may be noted that the mentioned provision for considering the power purchase cost based on actual payments is to encourage the Distribution Licensee to make timely payments for the power purchase. However, the Commission has accepted the proposal of the Petitioners to consider the power purchase cost for FPPCA computation on billed basis instead of actual paid basis as provided in the Regulations.

## E- Date of applicability of FPPCA:

- 5.10.15 As pointed out by the Distribution Licensees that the issue with regard to the date of applicability of FPPCA has already been settled by the Commission vide its letter no. UPERC/D(T)RAU/2012-1127 dated 30th October, 2012 no further discussion is required.
- 5.10.16 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 has 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 <sub>D</sub> | = Difference | in Actua | l and Approved | Power | Purchase | Cost (Rs. |
|----------------|--------------|----------|----------------|-------|----------|-----------|
| Crore)         |              |          |                |       |          |           |

*P*<sub>actual</sub> = Actual Cost of Power Purchase (Rs. Crore)

*P*<sub>approved</sub> = 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</u> <u>consumers each month of the quarter</u>

## Category wise FPPCA (Rs. / unit) = ABR<sub>C</sub> / ABR<sub>D</sub> \*FPPCA<sub>A</sub>

Where,

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

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

2. The variation in power purchase cost due to UI and other unapproved purchases from short term sources shall not be covered under FPPCA<del>.</del>

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.

- 5.10.17 For the purpose of Fuel & Power Purchase Cost Adjustment (FPPCA) as per above mentioned formula, the projected monthly power purchase requirement is provided in Annexure - of this Order, which is derived from the monthly power purchase submitted by the Licensees. The monthly power purchase quantum has been worked out excluding the power requirement of NPCL, as UPPCL has discontinued the supply of power to NPCL.
- 5.10.18 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.
- 5.10.19 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.
- 5.10.20 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.
- 5.10.21 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 2015-16 is presented in the Tables below:

## Table -: SUMMARY OF POWER PURCHASE COST AS SUBMITTED BY THE DISTRIBUTION LICENSEES

| Source of                               | MW        | MU       | Fixe           | ed Cost      | Varia          | ble Cost    | Tot            | al Cost   | Average<br>Cost |
|---|-----------|----------|----------------|--------------|----------------|-------------|----------------|-----------|-----------------|
| Power                                   | Available | inic     | (Rs. /<br>kWh) | (Rs. Cr.)    | (Rs. /<br>kWh) | (Rs. Cr.)   | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  |
|   | Procu     | rement o | f power        | from State S | ector Ge       | enerating S | tations        |           |                 |
|   |           |          | Т              | hermal Stati | ions           |             |                |           |                 |
| Anpara A                                | 630       | 3,848    | 0.63           | 241          | 1.91           | 733         | 2.53           | 974       | 2.53            |
| Anpara B                                | 1,000     | 6,314    | 1.09           | 691          | 1.83           | 1,156       | 2.92           | 1,847     | 2.92            |
| Harduagunj                              | 165       | 259      | 2.13           | 55           | 5.10           | 132         | 7.23           | 187       | 7.23            |
| Obra A                                  | 288       | 779      | 0.94           | 73           | 2.43           | 189         | 3.37           | 263       | 3.37            |
| Obra B                                  | 1,000     | 4,158    | 0.61           | 255          | 2.52           | 1,048       | 3.14           | 1,304     | 3.14            |
| Panki                                   | 210       | 907      | 1.09           | 99           | 4.36           | 396         | 5.45           | 495       | 5.45            |
| Parichha                                | 220       | 323      | 0.98           | 32           | 3.91           | 126         | 4.89           | 158       | 4.89            |
| Parichha Extn.                          | 420       | 2,512    | 1.28           | 322          | 3.33           | 837         | 4.61           | 1,159     | 4.61            |
| Parichha Extn.                          | 500       | 3,308    | 1.81           | 597          | 3.23           | 1,067       | 5.03           | 1,665     | 5.03            |
| Stage II                                |           |          |                |              |                | ,           |                | ,         |                 |
| Harduaganj Ext.                         | 500       | 3,158    | 1.95           | 615          | 3.44           | 1,086       | 5.38           | 1,700     | 5.38            |
| Anpara D                                | 1,000     | 2,916    | 1.18           | 344          | 1.79           | 521         | 2.96           | 864       | 2.96            |
| Sub total -<br>Thermal                  | 5933      | 28482    |                | 3324         |                | 7291        |                | 10615     | 3.73            |
| Per unit Avg Rate of Thermal Generation |           |          |                |              |                |             |                |           |                 |
|   |           |          |                | Hydro Static | ons            |             |                |           |                 |
| Khara                                   | 58        | 151      | 0.78           | 12           |                |             | 0.78           | 12        | 0.78            |



| Source of                | MW           | MU        | Fixe           | ed Cost     | Varia          | ble Cost  | Tot            | al Cost   | Average<br>Cost |
|--------------------------|--------------|-----------|----------------|-------------|----------------|-----------|----------------|-----------|-----------------|
| Power                    | Available    | WO        | (Rs. /<br>kWh) | (Rs. Cr.)   | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  |
| 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       | 0.60           | 40          |                |           | 0.60           | 40        | 0.60            |
| UGC Power<br>Stations    | 14           | 36        | 2.31           | 8           |                |           | 2.31           | 8         | 2.31            |
| Belka & Babail           | 6            | 16        | 2.44           | 4           |                |           | 2.44           | 4         | 2.44            |
| Sheetla                  | 4            | 9         | 2.96           | 3           |                |           | 2.96           | 3         | 2.96            |
| Subtotal -<br>Hydro      | 455          | 1195      |                | 88.17       |                | 0.00      |                | 88.17     | 0.74            |
| Purc                     | chase Per ur | it Avg Ra | te from l      | hydro gener | ating sta      | itions    |                | 0.74      |                 |
| Sub-Total Own generation | 6388         | 29678     |                | 3,412.25    |                | 7,291.02  |                | 10,703.27 | 3.61            |
|                          | Procur       | ement of  | power fi       | rom Central | Sector G       | enerating | Stations       | L         |                 |
| Anta                     | 119          | 813       | 0.74           | 60          | 3.26           | 265       | 3.99           | 325       | 3.99            |
| Auriya                   | 244          | 1,640     | 0.56           | 91          | 4.36           | 715       | 4.92           | 806       | 4.92            |
| Dadri Thermal            | 84           | 613       | 0.86           | 53          | 4.15           | 254       | 5.00           | 307       | 5.00            |
| Dadri Gas                | 272          | 1,925     | 0.57           | 110         | 4.17           | 802       | 4.74           | 912       | 4.74            |
| Dadri Extension          | 150          | 1,097     | 1.62           | 177         | 3.92           | 430       | 5.54           | 608       | 5.54            |
| Rihand-I                 | 373          | 2,661     | 0.82           | 217         | 1.76           | 468       | 2.57           | 685       | 2.57            |
| Rihand-II                | 348          | 2,478     | 0.95           | 235         | 1.79           | 444       | 2.74           | 678       | 2.74            |
| Singrauli                | 849          | 6,151     | 0.54           | 333         | 1.32           | 809       | 1.86           | 1,142     | 1.86            |
| Tanda                    | 440          | 3,136     | 1.05           | 331         | 3.52           | 1,105     | 4.58           | 1,436     | 4.58            |
| Unchahar-I               | 258          | 1,927     | 0.87           | 167         | 2.91           | 561       | 3.78           | 728       | 3.78            |
| Unchahar-II              | 153          | 1,145     | 0.90           | 103         | 2.86           | 327       | 3.76           | 430       | 3.76            |
| Unchahar-III             | 75           | 560       | 1.37           | 77          | 2.86           | 160       | 4.23           | 237       | 4.23            |
| Farakka                  | 33           | 217       | 0.86           | 19          | 3.65           | 79        | 4.50           | 98        | 4.50            |
| Kahalgaon St. I          | 77           | 528       | 0.96           | 51          | 2.98           | 157       | 3.94           | 208       | 3.94            |
| Kahalgaon St.II<br>Ph.I  | 251          | 1,729     | 1.22           | 212         | 2.81           | 486       | 4.04           | 698       | 4.04            |
| Koldam (Hydro)           | 95           | 414       | 1.56           | 65          | -              | -         | 1.56           | 65        | 1.56            |



## Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Source of            | MW        | MU    | Fixe           | ed Cost   | Varia          | ble Cost  | Tot            | al Cost   | Average<br>Cost |
|----------------------|-----------|-------|----------------|-----------|----------------|-----------|----------------|-----------|-----------------|
| Power                | Available | NIO   | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  |
| Rihand-III           | 377       | 2,691 | 1.32           | 356       | 1.82           | 491       | 3.15           | 847       | 3.15            |
| Sub-Total NTPC       | 4197      | 29724 |                | 2653      |                | 7554      |                | 10208     | 3.43            |
| Chamera              | 109       | 336   | 0.60           | 20        | 1.07           | 36        | 1.67           | 56        | 1.67            |
| Chamera-II           | 86        | 393   | 1.36           | 53        | 1.70           | 67        | 3.06           | 120       | 3.06            |
| Chamera-III          | 62        | 283   | 2.00           | 57        | 2.20           | 62        | 4.20           | 119       | 4.20            |
| Dhauliganga          | 75        | 282   | 1.10           | 31        | 1.45           | 41        | 2.56           | 72        | 2.56            |
| Salal I&II           | 48        | 252   | 0.60           | 15        | 0.48           | 12        | 1.08           | 27        | 1.08            |
| Tanakpur             | 21        | 103   | 1.70           | 17        | 1.15           | 12        | 2.85           | 29        | 2.85            |
| Uri                  | 96        | 497   | 1.05           | 52        | 0.81           | 40        | 1.85           | 92        | 1.85            |
| Dulhasti             | 111       | 517   | 2.82           | 146       | 3.08           | 159       | 5.90           | 305       | 5.90            |
| Sewa-II              | 35        | 137   | 1.89           | 26        | 2.34           | 32        | 4.23           | 58        | 4.23            |
| Uri-II               | 25        | 111   | 4.98           | 55        | 1.75           | 19        | 6.73           | 75        | 6.73            |
| Parbati ST-III       | 104       | 383   | 1.41           | 54        | 3.18           | 122       | 4.59           | 176       | 4.59            |
| Sub-Total<br>NHPC    | 774       | 3292  |                | 527.01    |                | 601.79    |                | 1,128.80  | 3.43            |
| NAPP                 | 167       | 937   | -              | _         | 2.79           | 262       | 2.79           | 262       | 2.79            |
| RAPP #3&4            | 80        | 604   | -              | _         | 3.12           | 189       | 3.12           | 189       | 3.12            |
| RAPP#5&6             | 115       | 802   | -              | _         | 3.86           | 310       | 3.86           | 310       | 3.86            |
| Sub-Total<br>NPCIL   | 362       | 2343  |                |           |                | 760.01    |                | 760.01    | 3.24            |
| NATHPA JHAKRI<br>HPS | 288       | 1,387 | 1.60           | 222       | 1.46           | 203       | 3.06           | 425       | 3.06            |
| TALA POWER           | 45        | 181   | -              | -         | 2.47           | 45        | 2.47           | 45        | 2.47            |
| Koteshwar            | 173       | 570   | 2.02           | 115       | 2.20           | 125       | 4.22           | 240       | 4.22            |
| Srinagar             | 290       | 519   | 3.02           | 157       | -              | -         | 3.02           | 157       | 3.02            |
| Sasan                | 495       | 2,081 | 0.18           | 37        | 1.29           | 269       | 1.47           | 306       | 1.47            |
| Teesta St-III        |           |       |                |           |                |           |                |           |                 |
| Karcham-<br>Wangtoo  | 200       | 158   | _              | -         | 4.00           | 63        | 4.00           | 63        | 4.00            |



## Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Source of   | MW        | MU     | Fixe           | ed Cost   | Varia          | ble Cost  | Tot            | tal Cost  | Average<br>Cost |
|---|-----------|--------|----------------|-----------|----------------|-----------|----------------|-----------|-----------------|
| Power   | Available | WO     | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  |
| VISHNUPRAYAG  | 352       | 1,623  | 1.01           | 164       | 1.40           | 227       | 2.41           | 391       | 2.41            |
| TEHRI STAGE-I   | 419       | 1,811  | 1.88           | 340       | 2.58           | 467       | 4.46           | 808       | 4.46            |
| Rosa Power<br>Project                                       | 600       | 4,066  | 1.70           | 690       | 4.33           | 1,759     | 6.02           | 2,449     | 6.02            |
| Rosa Power<br>Project                                       | 600       | 4,066  | 1.70           | 690       | 4.33           | 1,759     | 6.02           | 2,449     | 6.02            |
| Bara  | 1,188     | 1,115  | -              | -         | 3.20           | 357       | 3.20           | 357       | 3.20            |
| Anpara 'C'  | 1,100     | 7,015  | 1.19           | 834       | 2.71           | 1,900     | 3.90           | 2,733     | 3.90            |
| IGSTPP,<br>Jhajhjhar  | 51        | 358    | 1.61           | 58        | 4.39           | 157       | 6.00           | 215       | 6.00            |
| Bajaj<br>Hindusthan   | 450       | 2,982  | 2.25           | 671       | 4.71           | 1,404     | 6.96           | 2,075     | 6.96            |
| Lalitpur  | 1,782     | 8,022  | 1.40           | 1,123     | 1.98           | 1,588     | 3.38           | 2,711     | 3.38            |
| Sub-Total<br>IPP/JV   | 8032      | 35953  |                | 5100      |                | 10322     |                | 15423     | 4.29            |
| Captive and<br>Cogen  | _         | 2,865  | _              | -         | 4.90           | 1,403     | 4.90           | 1,403     | 4.90            |
| Inter system<br>exchange<br>(Bilateral &<br>PXIL, IEX) / UI | -         | 4,416  | -              | -         | 5.04           | 2,224     | 5.04           | 2,224     | 5.04            |
| Solar Energy  | -         | 84     | -              | -         | 11.81          | 99        | 11.81          | 99        | 11.81           |
| NVVN Coal<br>Power  | -         | 352    | -              | -         | 3.00           | 105       | 3.00           | 105       | 3.00            |
| Sub-Total : Co-<br>Generation &<br>Other Sources            | -         | 7717   |                |           |                | 3,831.24  |                | 3,831.24  | 4.96            |
| Grand Total of<br>Power<br>Purchase                         | 19753     | 108707 |                | 11,692.71 |                | 30,360.9  |                | 42,053.61 | 3.87            |



| Source of Power            | MW<br>Available | MU        | Fix            | ed Cost      | Varia          | able Cost | Tot            | tal Cost  | Average<br>Cost |
|----------------------------|-----------------|-----------|----------------|--------------|----------------|-----------|----------------|-----------|-----------------|
|                            |                 |           | (Rs. /<br>kWh) | (Rs. Cr.)    | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  |
|                            |                 | State     | Therma         | l Generating | Station        | 5         |                |           |                 |
| Anpara A                   | 630.00          | 3,848.44  | 0.63           | 240.79       | 1.91           | 733.15    | 2.53           | 973.94    | 2.53            |
| Anpara B                   | 1,000.00        | 6,313.73  | 1.09           | 690.93       | 1.83           | 1,155.63  | 2.92           | 1,846.56  | 2.92            |
| Harduagunj                 | 165.00          | 258.72    | 2.13           | 55.08        | 5.10           | 131.91    | 7.23           | 186.99    | 7.23            |
| Obra A                     | 288.00          | 778.64    | 0.94           | 73.41        | 2.43           | 189.32    | 3.37           | 262.73    | 3.37            |
| Obra B                     | 1,000.00        | 4,158.31  | 0.61           | 255.21       | 2.52           | 1,048.45  | 3.14           | 1,303.66  | 3.14            |
| Panki                      | 210.00          | 907.10    | 1.09           | 99.11        | 4.36           | 395.50    | 5.45           | 494.62    | 5.45            |
| Parichha                   | 220.00          | 323.08    | 0.98           | 31.80        | 3.91           | 126.31    | 4.89           | 158.11    | 4.89            |
| Parichha Extn.             | 420.00          | 2,512.06  | 1.28           | 322.24       | 3.33           | 836.75    | 4.61           | 1,158.99  | 4.61            |
| Parichha Extn. Stage<br>II | 500.00          | 3,308.21  | 1.81           | 597.36       | 3.23           | 1,067.47  | 5.03           | 1,664.83  | 5.03            |
| Harduaganj Ext.            | 500.00          | 3,157.55  | 1.95           | 614.56       | 3.44           | 1,085.63  | 5.38           | 1,700.19  | 5.38            |
| Anpara D                   | 1,000.00        | 2,916.35  | 1.18           | 343.58       | 1.79           | 520.91    | 2.96           | 864.50    | 2.96            |
| Total                      | 5,933.00        | 28,482.20 | 1.17           | 3,324.08     | 2.56           | 7,291.02  | 3.73           | 10,615.10 | 3.73            |
|                            |                 | State     | e Hydro        | Generating S | Stations       |           |                |           |                 |
| Khara                      | 57.60           | 303.20    | 0.78           | 23.66        |                |           | 0.78           | 23.66     | 0.78            |
| Matatila                   | 20.00           | 80.67     | 0.70           | 5.68         |                |           | 0.70           | 5.68      | 0.70            |
| Obra (Hydel)               | 99.00           | 276.00    | 0.68           | 18.84        |                |           | 0.68           | 18.84     | 0.68            |
| Rihand                     | 255.00          | 772.65    | 0.60           | 46.05        |                |           | 0.60           | 46.05     | 0.60            |
| UGC Power Stations         | 13.70           | 31.00     | 2.31           | 7.16         |                |           | 2.31           | 7.16      | 2.31            |
| Belka & Babail             | 6.00            | 15.77     | 2.44           | 3.84         |                |           | 2.44           | 3.84      | 2.44            |
| Sheetla                    | 3.60            | 10.00     | 2.96           | 2.96         |                |           | 2.96           | 2.96      | 2.96            |
| Total                      | 454.90          | 1,489.29  | 0.73           | 108.19       |                |           | 0.73           | 108.19    | 0.73            |
| Sub-Total Own generation   | 6,387.90        | 29,971.49 | 1.15           | 3,432.27     | 2.43           | 7,291.02  | 3.58           | 10,723.29 | 3.58            |
|                            |                 |           |                | NTPC         |                |           |                |           |                 |
| Anta                       | 119.50          | 812.80    | 0.53           | 43.32        | 3.26           | 264.85    | 3.79           | 308.17    | 3.79            |
| Auriya                     | 243.59          | 1,640.30  | 0.32           | 52.26        | 4.36           | 715.10    | 4.68           | 767.35    | 4.68            |
| Dadri Thermal              | 84.00           | 612.81    | 0.80           | 49.28        | 4.15           | 254.08    | 4.95           | 303.36    | 4.95            |
| Dadri Gas                  | 271.83          | 1,924.87  | 0.39           | 74.82        | 4.17           | 802.39    | 4.56           | 877.21    | 4.56            |

## Table -: SUMMARY OF APPROVED POWER PURCHASE COST FOR FY 2015-16



## Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Source of Power      | MW<br>Available                       | MU        | Fix            | ed Cost   | Varia          | able Cost | Tot            | tal Cost  | Average<br>Cost |
|----------------------|---------------------------------------|-----------|----------------|-----------|----------------|-----------|----------------|-----------|-----------------|
|                      |                                       |           | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  |
| Dadri Extension      | 150.43                                | 1,097.44  | 1.42           | 155.65    | 3.92           | 430.34    | 5.34           | 585.99    | 5.34            |
| Rihand-I             | 373.20                                | 2,661.03  | 0.78           | 208.53    | 1.76           | 467.63    | 2.54           | 676.15    | 2.54            |
| Rihand-II            | 347.50                                | 2,477.78  | 0.90           | 221.85    | 1.79           | 443.78    | 2.69           | 665.63    | 2.69            |
| Singrauli            | 849.00                                | 6,150.60  | 0.54           | 332.00    | 1.32           | 809.26    | 1.86           | 1,141.26  | 1.86            |
| Tanda                | 440.00                                | 3,135.55  | 1.05           | 329.94    | 3.52           | 1,105.20  | 4.58           | 1,435.14  | 4.58            |
| Unchahar-I           | 257.63                                | 1,927.10  | 0.82           | 158.63    | 2.91           | 560.81    | 3.73           | 719.44    | 3.73            |
| Unchahar-II          | 153.01                                | 1,144.51  | 0.84           | 96.30     | 2.86           | 327.41    | 3.70           | 423.70    | 3.70            |
| Unchahar-III         | 74.87                                 | 560.00    | 1.29           | 72.12     | 2.86           | 160.14    | 4.15           | 232.25    | 4.15            |
| Farakka              | 33.28                                 | 216.70    | 0.75           | 16.15     | 3.65           | 79.03     | 4.39           | 95.19     | 4.39            |
| Kahalgaon St. I      | 76.61                                 | 527.88    | 0.84           | 44.19     | 2.98           | 157.24    | 3.82           | 201.43    | 3.82            |
| Kahalgaon St.II Ph.I | 250.95                                | 1,729.20  | 1.06           | 182.61    | 2.81           | 486.12    | 3.87           | 668.73    | 3.87            |
| Koldam (Hydro)       | 94.50                                 | 413.91    | -              | 32.50     | -              | 32.50     | -              | 65.00     | 1.57            |
| Rihand-III           | 377.42                                | 2,691.12  | 1.70           | 457.81    | 1.82           | 491.06    | 3.53           | 948.87    | 3.53            |
| Total                | 4,197.30                              | 29,723.59 | 0.85           | 2,527.96  | 2.55           | 7,586.91  | 3.40           | 10,114.88 | 3.40            |
|                      |                                       |           |                | NHPC      |                |           |                |           |                 |
| Chamera              | 109.46                                | 333.36    | 0.88           | 29.23     | 0.84           | 28.04     | 1.72           | 57.28     | 1.72            |
| Chamera-II           | 86.28                                 | 413.89    | 1.20           | 49.59     | 1.12           | 46.29     | 2.32           | 95.88     | 2.32            |
| Chamera-III          | 62.13                                 | 288.13    | 1.64           | 47.20     | 1.52           | 43.70     | 3.15           | 90.90     | 3.15            |
| Dhauliganga          | 74.90                                 | 293.40    | 1.27           | 37.39     | 1.22           | 35.89     | 2.50           | 73.29     | 2.50            |
| Salal I&II           | 47.96                                 | 212.06    | 0.44           | 9.39      | 0.40           | 8.57      | 0.85           | 17.96     | 0.85            |
| Tanakpur             | 21.33                                 | 101.35    | 1.10           | 11.14     | 0.99           | 10.02     | 2.09           | 21.17     | 2.09            |
| Uri                  | 96.29                                 | 512.80    | 0.74           | 37.98     | 0.66           | 34.08     | 1.41           | 72.05     | 1.41            |
| Dulhasti             | 111.38                                | 524.91    | 2.58           | 135.29    | 2.53           | 132.63    | 5.10           | 267.93    | 5.10            |
| Sewa-II              | 35.10                                 | 150.44    | 1.94           | 29.23     | 1.78           | 26.81     | 3.73           | 56.04     | 3.73            |
| Uri-II               | 25.35                                 | 226.21    | 2.92           | 66.08     | 2.03           | 45.98     | 4.95           | 112.06    | 4.95            |
| Parbati ST-II        | 160.00                                | -         | -              | -         | -              | -         | -              | -         | -               |
| Parbati ST-III       | 104.00                                | 181.49    | 3.70           | 67.09     | 2.77           | 50.32     | 6.47           | 117.41    | 6.47            |
| Total                | 934.17                                | 3,238.05  | 1.60           | 519.62    | 1.43           | 462.34    | 3.03           | 981.96    | 3.03            |
|                      | · · · · · · · · · · · · · · · · · · · |           | 1              | NPCIL     |                |           |                |           |                 |
| NAPP                 | 166.54                                | 797.78    |                |           | 2.79           | 222.86    | 2.79           | 222.86    | 2.79            |
| RAPP #3&4            | 79.67                                 | 502.40    |                |           | 3.12           | 156.89    | 3.12           | 156.89    | 3.12            |
| RAPP#5&6             | 115.46                                | 969.63    |                |           | 3.86           | 374.20    | 3.86           | 374.20    | 3.86            |



## Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Source of Power                                     | MW<br>Available | MU         | Fix            | ed Cost    | Vari           | able Cost | Tot            | Total Cost |                |
|---|-----------------|------------|----------------|------------|----------------|-----------|----------------|------------|----------------|
|   |                 |            | (Rs. /<br>kWh) | (Rs. Cr.)  | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.)  | (Rs. /<br>kWh) |
| Total   | 361.67          | 2,269.82   |                |            | 3.32           | 753.95    | 3.32           | 753.95     | 3.32           |
|   |                 |            |                | PPs / JVs  |                |           |                |            |                |
| NATHPA JHAKRI HPS                                   | 287.85          | 1,386.86   | 1.60           | 221.64     | 1.46           | 203.00    | 3.06           | 424.65     | 3.06           |
| TALA POWER  | 44.98           | 181.26     | -              | -          | 2.47           | 44.81     | 2.47           | 44.81      | 2.47           |
| Koteshwar   | 172.84          | 569.60     | 2.02           | 115.00     | 2.20           | 125.12    | 4.22           | 240.12     | 4.22           |
| Srinagar  | 290.00          | 518.63     | 3.02           | 156.57     | -              | -         | 3.02           | 156.57     | 3.02           |
| Sasan   | 495.00          | 2,081.38   | 0.18           | 36.96      | 1.29           | 268.84    | 1.47           | 305.80     | 1.47           |
| Karcham-Wangtoo                                     | 200.00          | 157.68     | -              | -          | 4.00           | 63.01     | 4.00           | 63.01      | 4.00           |
| VISHNUPRAYAG  | 352.00          | 1,622.83   | 1.01           | 164.24     | 1.40           | 227.18    | 2.41           | 391.42     | 2.41           |
| TEHRI STAGE-I                                       | 418.50          | 1,811.03   | 1.88           | 340.47     | 2.58           | 467.21    | 4.46           | 807.68     | 4.46           |
| Rosa Power Project                                  | 600.00          | 4,065.52   | 1.70           | 689.88     | 4.33           | 1,758.69  | 6.02           | 2,448.57   | 6.02           |
| Rosa Power Project                                  | 600.00          | 4,065.52   | 1.70           | 689.88     | 4.33           | 1,758.69  | 6.02           | 2,448.57   | 6.02           |
| Bara  | 1,188.00        | 1,115.24   | -              | -          | 3.20           | 357.01    | 3.20           | 357.01     | 3.20           |
| Anpara 'C'  | 1,100.00        | 7,015.01   | 1.19           | 833.81     | 2.71           | 1,899.58  | 3.90           | 2,733.39   | 3.90           |
| IGSTPP, Jhajhjhar                                   | 51.15           | 358.46     | 1.61           | 57.68      | 4.39           | 157.44    | 6.00           | 215.12     | 6.00           |
| Bajaj Hindusthan                                    | 450.00          | 2,982.12   | 2.25           | 671.00     | 4.71           | 1,403.51  | 6.96           | 2,074.51   | 6.96           |
| Lalitpur  | 1,782.00        | 8,021.97   | 1.40           | 1,123.08   | 1.98           | 1,588.35  | 3.38           | 2,711.43   | 3.38           |
| Total   | 8,032.32        | 35,953.10  | 1.42           | 5,100.22   | 2.87           | 10,322.43 | 4.29           | 15,422.65  | 4.29           |
|   |                 | Co-G       | ienerati       | on & Other | Sources        | •         |                |            |                |
| Captive and Cogen                                   |                 | 2,865.00   | -              | -          | 4.90           | 1,403.05  | 4.90           | 1,403.05   | 4.90           |
| Solar Energy  |                 | 84.00      | -              | -          | 11.09          | 93.17     | 11.09          | 93.17      | 11.09          |
| NVVN Coal Power                                     |                 | 351.62     | -              | -          | 3.00           | 105.38    | 3.00           | 105.38     | 3.00           |
| Total   |                 | 3,300.62   | -              | -          | 18.99          | 1,601.59  | 18.99          | 1,601.59   | 4.85           |
| Inter system<br>exchange (Bilateral<br>& PXIL) / UI |                 | 4,416.33   | -              | -          | 5.04           | 2,223.62  | 5.04           | 2,223.62   | 5.04           |
| Grand Total of<br>Power Purchase                    | 19,913.35       | 108,872.99 | 1.06           | 11,580.07  | 2.78           | 30,241.87 | 3.84           | 41,821.93  | 3.84           |



| Source of Power   | urce of Power Available N |            | Fixed Cost     |           | Variable Cost  |           | Total Cost     |           | Average<br>Cost |
|---|---------------------------|------------|----------------|-----------|----------------|-----------|----------------|-----------|-----------------|
|   |                           |            | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh) | (Rs. Cr.) | (Rs. /<br>kWh)  |
| Grand Total of<br>Power Purchase<br>(after applying<br>merit order) | 19,913.35                 | 104,891.80 | 1.10           | 11,580.07 | 2.69           | 28,235.70 | 3.80           | 39,815.76 | 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:

| Rank | Power Station      | Туре          | Dispatch<br>Mode | Variable<br>Charge (Rs<br>/ kWh) |
|------|--------------------|---------------|------------------|----------------------------------|
| 1    | Khara              | UPJVNL-Hydro  | Must Run         | 0.00                             |
| 2    | Matatila           | UPJVNL-Hydro  | Must Run         | 0.00                             |
| 3    | Obra (Hydel)       | UPJVNL-Hydro  | Must Run         | 0.00                             |
| 4    | Rihand             | UPJVNL-Hydro  | Must Run         | 0.00                             |
| 5    | UGC Power Stations | UPJVNL-Hydro  | Must Run         | 0.00                             |
| 6    | Belka & Babail     | UPJVNL-Hydro  | Must Run         | 0.00                             |
| 7    | Sheetla            | UPJVNL-Hydro  | Must Run         | 0.00                             |
| 8    | Koldam (Hydro)     | NTPC          | Must Run         | 0.00                             |
| 9    | Parbati ST-II      | NHPC          | Must Run         | 0.00                             |
| 10   | Srinagar           | IPP/JV/Others | Must Run         | 0.00                             |
| 11   | Salal I&II         | NHPC          | Must Run         | 0.40                             |
| 12   | Uri                | NHPC          | Must Run         | 0.66                             |
| 13   | Chamera            | NHPC          | Must Run         | 0.84                             |
| 14   | Tanakpur           | NHPC          | Must Run         | 0.99                             |
| 15   | Chamera-II         | NHPC          | Must Run         | 1.12                             |
| 16   | Dhauliganga        | NHPC          | Must Run         | 1.22                             |
| 17   | VISHNUPRAYAG       | IPP/JV/Others | Must Run         | 1.40                             |

#### Table -: APPROVED MERIT ORDER DISPATCH FOR FY 2015-16



| Rank | Power Station        | Туре              | Dispatch<br>Mode | Variable<br>Charge (Rs<br>/ kWh) |
|------|----------------------|-------------------|------------------|----------------------------------|
| 18   | NATHPA JHAKRI HPS    | IPP/JV/Others     | Must Run         | 1.46                             |
| 19   | Chamera-III          | NHPC              | Must Run         | 1.52                             |
| 20   | Sewa-II              | NHPC              | Must Run         | 1.78                             |
| 21   | Uri-II               | NHPC              | Must Run         | 2.03                             |
| 22   | TALA POWER           | IPP/JV/Others     | Must Run         | 2.47                             |
| 23   | Dulhasti             | NHPC              | Must Run         | 2.53                             |
| 24   | TEHRI STAGE-I        | IPP/JV/Others     | Must Run         | 2.58                             |
| 25   | Parbati ST-III       | NHPC              | Must Run         | 2.77                             |
| 26   | NAPP                 | NPCIL             | Must Run         | 2.79                             |
| 27   | RAPP #3&4            | NPCIL             | Must Run         | 3.12                             |
| 28   | RAPP#5&6             | NPCIL             | Must Run         | 3.86                             |
| 29   | Karcham-Wangtoo      | IPP/JV/Others     | Must Run         | 4.00                             |
| 30   | Captive and Cogen    | IPP/JV/Others     | Must Run         | 4.90                             |
| 31   | Solar Energy         | IPP/JV/Others     | Must Run         | 11.09                            |
| 32   | Teesta St-III        | IPP/JV/Others     | Merit            | 0.00                             |
| 33   | Sasan                | IPP/JV/Others     | Merit            | 1.29                             |
| 34   | Singrauli            | NTPC              | Merit            | 1.32                             |
| 35   | Rihand-I             | NTPC              | Merit            | 1.76                             |
| 36   | Anpara D             | UPRVUNL - Thermal | Merit            | 1.79                             |
| 37   | Rihand-II            | NTPC              | Merit            | 1.79                             |
| 38   | Rihand-III           | NTPC              | Merit            | 1.82                             |
| 39   | Anpara B             | UPRVUNL - Thermal | Merit            | 1.83                             |
| 40   | Anpara A             | UPRVUNL - Thermal | Merit            | 1.91                             |
| 41   | Lalitpur             | IPP/JV/Others     | Merit            | 1.98                             |
| 42   | Koteshwar            | IPP/JV/Others     | Merit            | 2.20                             |
| 43   | Obra A               | UPRVUNL - Thermal | Merit            | 2.43                             |
| 44   | Obra B               | UPRVUNL - Thermal | Merit            | 2.52                             |
| 45   | Anpara 'C'           | IPP/JV/Others     | Merit            | 2.71                             |
| 46   | Kahalgaon St.II Ph.I | NTPC              | Merit            | 2.81                             |
| 47   | Unchahar-III         | NTPC              | Merit            | 2.86                             |
| 48   | Unchahar-II          | NTPC              | Merit            | 2.86                             |
| 49   | Unchahar-I           | NTPC              | Merit            | 2.91                             |
| 50   | Kahalgaon St. I      | NTPC              | Merit            | 2.98                             |
| 51   | NVVN Coal Power      | IPP/JV/Others     | Merit            | 3.00                             |
| 52   | Bara                 | IPP/JV/Others     | Merit            | 3.20                             |



| Rank | Power Station                                    | Туре              | Dispatch<br>Mode | Variable<br>Charge (Rs<br>/ kWh) |
|------|--|-------------------|------------------|----------------------------------|
| 53   | Parichha Extn. Stage II                          | UPRVUNL - Thermal | Merit            | 3.23                             |
| 54   | Anta   | NTPC              | Merit            | 3.26                             |
| 55   | Parichha Extn.                                   | UPRVUNL - Thermal | Merit            | 3.33                             |
| 56   | Harduaganj Ext.                                  | UPRVUNL - Thermal | Merit            | 3.44                             |
| 57   | Tanda  | NTPC              | Merit            | 3.52                             |
| 58   | Farakka  | NTPC              | Merit            | 3.65                             |
| 59   | Parichha   | UPRVUNL - Thermal | Merit            | 3.91                             |
| 60   | Dadri Extension                                  | NTPC              | Merit            | 3.92                             |
| 61   | Dadri Thermal                                    | NTPC              | Merit            | 4.15                             |
| 62   | Dadri Gas  | NTPC              | Merit            | 4.17                             |
| 63   | Rosa Power Project                               | IPP/JV/Others     | Merit            | 4.33                             |
| 64   | Rosa Power Project                               | IPP/JV/Others     | Merit            | 4.33                             |
| 65   | Auriya   | NTPC              | Merit            | 4.36                             |
| 66   | Panki  | UPRVUNL - Thermal | Merit            | 4.36                             |
| 67   | IGSTPP, Jhajhjhar                                | IPP/JV/Others     | Merit            | 4.39                             |
| 68   | Bajaj Hindusthan                                 | IPP/JV/Others     | Merit            | 4.71                             |
| 69   | Inter system exchange<br>(Bilateral & PXIL) / UI | IPP/JV/Others     | Merit            | 5.04                             |
| 70   | Harduagunj                                       | UPRVUNL - Thermal | Merit            | 5.10                             |

5.12.2 The Commission allows Licensee to procure power to meet demand on real time basis following the merit order dispatch principles. However Licensee should seek the prior permission of the Commission in case it intends to procure power from the short term sources at the rate above ceiling rate of Rs. 5.04 / kWh. Licensee should endeavour to optimise power purchase cost using economic principles and follow merit order dispatch while procuring power from all the sources.



#### 5.13 ANNUAL REVENUE REQUIREMENT OF MVVNL FOR FY 2015-16

- 5.13.1 The Petitioner 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 2013-14 and expenses available for FY 2014-15.
- 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. 2727.71 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 2015-16 after considering the availability of power. The power purchase quantum and cost approved by the Commission for FY 2015-16 is depicted in Table -.
- 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 2015-16<br>Approved |
|---|------------|------------------------|
| Projected Power Purchase by Licensee (MU) | А          | 108,707.15             |
| Projected PGCIL Charges (Rs. Crore)       | В          | 2,727.71               |
| Projected PGCIL Charges (Rs./kWh)         | C = A/B*10 | 0.251                  |
| Approved Power Purchase (MU)              | D          | 104,891.80             |
| Approved PGCIL Charges (Rs. Crore)        | E = D*C/10 | 2,631.97               |

## TABLE -: APPROVED PGCIL CHARGES FOR FY 2015-16

- 5.14.6 The Commission further reiterates that the actual inter-State transmission charges for FY 2015-16 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 2015-16 as given in the Table below:

## Table -: APPROVED CONSOLIDATED BULK SUPPLY TARIFF



| Particulars   | Derivation  | ARR<br>Petition | FY 2015-16<br>Approved |
|---|-------------|-----------------|------------------------|
| Purchases Required & Billed Energy (MU)                       | A           | 1,08,707.15     | 104,891.80             |
| Periphery Loss (Up to inter connection Point)<br>(%)          | В           | 1.65%           | 1.65%                  |
| Energy Available at State periphery for Transmission (MU)     | C =A* (1-B) | 1,06,913.48     | 103,161.92             |
| Intra -State Transmission losses %                            | D           | 3.59%           | 3.59%                  |
| Energy Input into Transmission-Distribution<br>Interface (MU) | E=C* (1-D)  | 1,03,076.12     | 99,458.40              |
| Power Purchase Cost (Rs. Crore)                               | F           | 42,053.61       | 39,815.76              |
| PGCIL Inter-State transmission charges (Rs. Crore)            | G           | 2,728           | 2,631.97               |
| Total Power Procurement Cost (Rs. Crore)                      | H=F+G       | 44,781.32       | 42,447.74              |
| Bulk Supply Tariff (Rs./Unit)                                 | I= (H/E)*10 | 4.34            | 4.27                   |

5.14.8 Based on the approved quantum, the Commission has approved power procurement cost for MVVNL for FY 2015-16 as given in the Table below:

| Particulars  | Derivation | ARR<br>Petition | FY 2015-16<br>Approved |
|--|------------|-----------------|------------------------|
| Energy Input into Transmission-<br>Distribution Interface (MU) | А          | 18,665          | 18,279.33              |
| Bulk Supply Tariff (Rs./kWh)                                   | В          | 4.34            | 4.27                   |
| Power Procurement Cost from UPPCL<br>(Rs. Crore)               | C =A*B /10 | 8,109           | 7,801.42               |

Table -: POWER PROCUREMENT COST FOR MVVNL FOR FY 2015-16

## 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 2015-16.
- 5.15.4 The Petitioner submitted that in its Petition, UPPTCL has projected transmission charge at a rate of Rs. 0.196 per kWh for FY 2015-16 and accordingly MVVNL has estimated the cost of intra-State transmission charges.
- 5.15.5 Transmission and SLDC charges for FY 2015-16 have been approved in concurrence with the ARR and transmission tariff approved for UPPTCL for FY 2015-16 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 2015-16 are given in Table below:

| Particulars  | Derivation | ARR Petition | FY 2015-16<br>Approved |  |
|--|------------|--------------|------------------------|--|
| Energy Input into Transmission-<br>Distribution Interface (MU) | А          | 18,665       | 18,279.33              |  |
| Transmission Tariff (Rs./kWh)                                  | В          | 0.196        | 0.1723                 |  |
| Transmission Cost (Rs. Cr.)                                    | C =A*B /10 | 366.54       | 314.87                 |  |

Table -: INTRA STATE TRANSMISSION CHARGES FOR FY 2015-16

## 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 7.69% for FY 2014-15 and 4.10% for FY 2015-16. 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 7.69% for FY 2014-15 and the same escalation / inflation index has been considered for FY 2015-16 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 2015-16 have been claimed by escalating the actual component wise O&M expenses for FY 2011-12 by using the yearly inflation indices approved by the Commission up to FY 2014-15 in its Tariff Order dated October 1, 2014 and at the rate of 4.10% for FY 2015-16.
- 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 Commission has computed the normative O&M expenses for FY 2015-16 by escalating the normative O&M expenses of FY 2014-15 with the escalation index of 7.69%. Since, escalation index of FY 2015-16 cannot be computed at this stage, escalation index of FY 2014-15 has been considered to project the normative O&M expense of FY 2015-16. The escalation index computation has been shown in **TABLE** of this Order.
- 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 2015-16 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 2015-16 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 2015-16.
- 5.17.8 The summary of the O&M expenses submitted by the Petitioner and as approved by the Commission for FY 2015-16 is shown in the Table below:

| Particulars                             | ARR Petition | FY 2015-16<br>Approved |  |  |  |  |
|---|--------------|------------------------|--|--|--|--|
| Employee Expenses                       |              |                        |  |  |  |  |
| Employee Cost and Provisions            | 628.49       | 479.17                 |  |  |  |  |
| Incremental Employee Expenses @ 2.5%    | 26.01        | 54.67 <sup>#</sup>     |  |  |  |  |
| Gross Employee Expenses                 | 654.50       | 533.84                 |  |  |  |  |
| Employee expenses capitalized           | 98.17        | 80.08                  |  |  |  |  |
| Net Employee Expenses                   | 556.32       | 453.76                 |  |  |  |  |
|   |              |                        |  |  |  |  |
| A&G Expenses                            |              |                        |  |  |  |  |
| Admin & Gen Expenses                    | 216.41       | 88.44                  |  |  |  |  |
| Incremental Admin & Gen Expenses @ 2.5% | 7.96         | 10.23 <sup>#</sup>     |  |  |  |  |
| Gross Admin & Gen Expenses              | 224.36       | 98.67                  |  |  |  |  |
| Admin & Gen expenses capitalized        | 33.65        | 14.80                  |  |  |  |  |
| Net Admin & Gen Expenses                | 190.71       | 83.87                  |  |  |  |  |
|   |              |                        |  |  |  |  |
| R&M Expenses                            |              |                        |  |  |  |  |
| Repair & Maintenance Expenditure        | 191.51       | 152.41                 |  |  |  |  |
| Incremental R&M Expenses @ 2.5%         | 8.92         | 21.24 <sup>#</sup>     |  |  |  |  |

Table -: O&M EXPENSES FOR FY 2015-16 (Rs. Crore)



| Particulars   | ARR Petition | FY 2015-16<br>Approved |  |  |  |
|---|--------------|------------------------|--|--|--|
| Gross Repair & Maintenance Expenses                                       | 200.43       | 173.65                 |  |  |  |
| Total O&M Expenses  | 947.47       | 711.29                 |  |  |  |
| # Cumulative incremental O&M Expenses allocated to Employee Expenses, R&M |              |                        |  |  |  |
| Expenses and A&G Expenses.  |              |                        |  |  |  |

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 2015-16.

## 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 2015-16.

| TABLE -: CAPITAL INVESTMENT PLAN PROPOSED BY THE PETITIONER FOR FY 2015-16 (RS. |
|---|
| CRORE)  |

| CRORE) Capital Investment Plan |          |       |                                  |                  |       |  |
|--------------------------------|----------|-------|----------------------------------|------------------|-------|--|
|                                |          | L     | n                                |                  |       |  |
| Particulars                    | Physical | Loans | Equity /<br>Internal<br>Accruals | Deposit<br>Works | Total |  |
| Replacement of Meters          |          |       |                                  |                  |       |  |
| Single Phase                   | 152000   | 22.19 | 9.51                             |                  | 31.70 |  |
| Three Phase                    | 7800     | 3.15  | 1.35                             |                  | 4.50  |  |
| LT TVM                         | 800      | 0.32  | 0.14                             |                  | 0.45  |  |
| 11 kV TVM                      | 300      | 0.13  | 0.06                             |                  | 0.19  |  |
| 33 kV TVM                      | 100      | 0.05  | 0.02                             |                  | 0.08  |  |
| 11 kV Metering Cubicle         | 160      | 0.47  | 0.20                             |                  | 0.68  |  |
| 33 kV Metering Cubicle         | 40       | 0.16  | 0.07                             |                  | 0.23  |  |
| 11 kV C.T./ P.T Unit           | 200      | 0.34  | 0.15                             |                  | 0.49  |  |
| 33 kV C.T./ P.T Unit           | 80       | 0.11  | 0.05                             |                  | 0.15  |  |
| 11 kV C.T for 33 kV S/S        | 1000     | 0.50  | 0.21                             |                  | 0.71  |  |
| 11 kV P.T for 33 kV S/S        | 200      | 0.21  | 0.09                             |                  | 0.30  |  |
| Double Metering                | 720      | 0.97  | 0.42                             |                  | 1.39  |  |



|   |          | Capital Investment Plan |                                  |                  |        |  |
|---|----------|-------------------------|----------------------------------|------------------|--------|--|
| Particulars   | Physical | Loans                   | Equity /<br>Internal<br>Accruals | Deposit<br>Works | Total  |  |
| AERIAL BUNCHED CONDUCTORS                                       | 900      | 17.60                   | 7.54                             |                  | 25.14  |  |
| Construction of 11 kV Line                                      | 720      | 14.42                   | 6.18                             |                  | 20.60  |  |
| System Improvement of 11 kV Lines                               | 2840     | 18.02                   | 7.72                             |                  | 25.74  |  |
| Construction of 11/0.4 kV Substations                           | 1700     | 52.79                   | 22.62                            |                  | 75.41  |  |
| Capacity Enhancements of 11/0.4 kV<br>Substations               | 2600     | 37.90                   | 16.24                            |                  | 54.14  |  |
| Replacement og 11kV Cable                                       | 96       | 9.51                    | 4.07                             |                  | 13.58  |  |
| Replacement of 11 kV Switchgears                                | 700      | 12.13                   | 5.20                             |                  | 17.33  |  |
| Purchase of mobile transformer trolley -<br>6.6./0.4 kV 400 KVA | 120      | 4.99                    | 2.14                             |                  | 7.13   |  |
|   |          | 0.00                    | 0.00                             |                  | 0.00   |  |
| Capacity Enhancements of 33/11 kV<br>Substations                | 280      | 88.37                   | 37.87                            |                  | 126.24 |  |
| Construction of 33 kV Line                                      | 480      | 43.73                   | 18.74                            |                  | 62.46  |  |
| System Improvement of 33 kV Lines                               | 680      | 26.92                   | 11.54                            |                  | 38.45  |  |
| Construction of 33/11 kV Substations                            | 28       | 42.81                   | 18.35                            |                  | 61.15  |  |
| Replacement of damaged / obsolete 33 kV<br>BCV                  | 44       | 1.58                    | 0.68                             |                  | 2.25   |  |
| Replacement of Distribution Transformers                        | 36       | 1.58                    | 0.68                             |                  | 2.25   |  |
| Rural Electrification   | 28       | 0.18                    | 0.08                             |                  | 0.26   |  |
| Replacement of old and damaged poles                            | 21600    | 4.04                    | 1.73                             |                  | 5.78   |  |
| Earthing works  | 6300     | 4.54                    | 1.95                             |                  | 6.49   |  |
| Replacement of old and damaged conductors                       | 1360     | 2.97                    | 1.27                             |                  | 4.24   |  |
| Plinth & Fencing Works  | 1040     | 1.34                    | 0.57                             |                  | 1.91   |  |
| D.C. Battery / Battery Charger / Relay                          | 340      | 1.00                    | 0.43                             |                  | 1.43   |  |
| Replacement of old switchgears                                  | 300      | 1.58                    | 0.68                             |                  | 2.25   |  |
| Construction / Replacement of LT Line                           | 200      | 2.76                    | 1.18                             |                  | 3.94   |  |
| Guarding of Lines   | 1000     | 0.53                    | 0.23                             |                  | 0.75   |  |
| Other Misc Works  | 100      | 0.18                    | 0.08                             |                  | 0.26   |  |
| Other Misc Works  | 8        | 0.16                    | 0.07                             |                  | 0.23   |  |
| Construction of 11kV Feeders in Rural Areas                     | -        | 131.31                  | 56.27                            |                  | 187.58 |  |
| RGGVY Phase I – Consultancy                                     | -        | 27.59                   | 11.83                            |                  | 39.42  |  |



|   |          | Capital Investment Plan |                                  |                  |         |  |
|---|----------|-------------------------|----------------------------------|------------------|---------|--|
| Particulars                               | Physical | Loans                   | Equity /<br>Internal<br>Accruals | Deposit<br>Works | Total   |  |
| R-APDRP Part A                            | -        | 4.54                    | 1.95                             |                  | 6.49    |  |
| R-APDRP Part B                            | -        | 6.64                    | 2.84                             |                  | 9.48    |  |
| Tehsil Town (PMC)                         | -        | 0.62                    | 0.26                             |                  | 0.88    |  |
| Capital Works under Vyapar Vikas Nidhi    | 0        | 196.96                  | 84.41                            |                  | 281.37  |  |
| Energisation of PTW                       | 23500    | 104.91                  | 44.96                            |                  | 149.88  |  |
| Electrification of villages under Dr. Ram |          |                         |                                  |                  | 0.00    |  |
| Manohar Lohia Samagr Vikas Yojna Scheme   |          |                         |                                  |                  | 0.00    |  |
| 33/11 kV Substations under Tehsil Scheme  | 20       | 61.46                   | 26.34                            |                  | 87.79   |  |
| RGGVY Works                               |          | 8.88                    | 3.80                             |                  | 12.68   |  |
| R-APDRP Non SCADA Works                   |          | 77.81                   | 33.35                            |                  | 111.15  |  |
| R-APDRP SCADA Works                       |          | 297.24                  | 127.39                           |                  | 424.63  |  |
| Deposit Works                             |          |                         |                                  | 337.35           | 337.35  |  |
| Total                                     |          | 1338.14                 | 573.49                           | 337.35           | 2248.97 |  |

- 5.18.2 The Petitioner submitted that the following assumptions were used for projecting GFA and CWIP for FY 2015-16:
  - The opening GFA and CWIP for FY 2014-15 have been taken as per the closing figures from provisional annual accounts of FY 2013-14.
  - 40% 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 Commission in its previous Tariff Orders.
  - The capital investment for FY 2014-15 has been pegged at Rs.
     1,782.70 Crore out of which, deposit works have been envisaged at Rs. 267.40 Crore.
- 5.18.3 The Petitioner submitted a capital investment of Rs. 2,248.97 Crore in FY 2015-16 out of which, deposit works have been estimated at Rs. 337.35 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 2013-14 as per the provisional accounts for FY 2013-14 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:
- 5.18.7 "...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...."
- 5.18.8 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. (Emphasis added)

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."

- 5.18.9 For FY 2015-16 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 October 1, 2014, approves 70% of capital investment proposed by the Petitioner.
- 5.18.10 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 October 1, 2014, 40% of the total investments including opening CWIP, expenses and interest capitalisation during the year have been projected to be capitalised in FY 2015-16.
- 5.18.11 Accordingly, the details of Capitalisation and Work-in-progress up to FY 2015-16 are shown in the Table below:



| Particulars  | Derivation      | ARR Petition | FY 2015-16<br>Approved |
|--|-----------------|--------------|------------------------|
| Opening WIP as on 1 <sup>st</sup> April                | A               | 2,220.95     | 1,869.76               |
| Investments  | В               | 2,248.97     | 1,574.28               |
| Employee Expenses Capitalisation                       | С               | 98.17        | 80.08                  |
| A&G Expenses Capitalisation                            | D               | 33.65        | 14.80                  |
| Interest Capitalisation on Interest on long term loans | E               | 60.33        | 47.16                  |
| Total Investments                                      | F=<br>A+B+C+D+E | 4,662.08     | 3,586.08               |
| Transferred to GFA (Total Capitalisation)              | G=F*40%         | 1,864.84     | 1,434.43               |
| Closing WIP  | H = F-G         | 2,797.24     | 2,151.65               |

#### TABLE -: CAPITALISATION & WIP UP TO FY 2015-16 (Rs. Crore)

#### 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 2013-14. Further, the consumer contributions, capital subsidies and grants for FY 2014-15 and 2015-16 have been considered to be in the same ratio to the total investments, as received by it in FY 2013-14.
- 5.19.3 Thus, the Petitioner submitted that out of the total capital investment of Rs. 2,248.97 Crore in FY 2015-16, the capital investment through deposit works is to the tune of Rs. 337.35 Crore and balance Rs. 1,911.63 Crore has been considered to be funded through debt and equity. Considering a debt equity ratio of 70:30, i.e., Rs. 1,338.14 Crore or 70% of the capital investment is



proposed to be funded through debt and balance 30% equivalent to Rs. 573.49 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 2012-13 based on the audited accounts has been considered and subsequent additions in FY 2013-14 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 2015-16.
- 5.19.6 The Table below summarises the amounts considered towards consumer contributions, capital grants and subsidies up to FY 2015-16:

## Table -: CONSUMER CONTRIBUTIONS, CAPITAL GRANTS AND SUBSIDIES CONSIDERED UP TO FY 2015-16 (Rs. Crore)

| Particulars                                  | Derivation | ARR Petition | FY 2015-16<br>Approved |
|--|------------|--------------|------------------------|
| Opening Balance of Consumer Contributions,   |            |              |                        |
| Grants and Subsidies towards Cost of Capital | A          | 1,078.05     | 993.71                 |
| Assets                                       |            |              |                        |
| Additions during the year                    | В          | 337.35       | 236.15                 |
| Less: Amortization (Depreciation on assets   | С          | 127.01       | 117.86                 |
| created out of Consumer Contribution)        |            |              |                        |
| Closing Balance                              | D=A+B-C    | 1288.39      | 1,111.99               |

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



| Particulars   | Derivation | ARR Petition | FY 2015-16<br>Approved |
|---|------------|--------------|------------------------|
| Investment  | А          | 2,248.97     | 1,574.28               |
| Less:   |            |              |                        |
| Consumer Contribution and Capital<br>Assets Subsidy | В          | 337.35       | 236.15                 |
| Total   | C = A- B   | 1,911.62     | 1,338.14               |
| Investment funded by debt and equity                |            |              |                        |
| Debt Funded   | 70%        | 1,338.14     | 936.70                 |
| Equity Funded                                       | 30%        | 573.49       | 401.44                 |

#### Table -: FINANCING OF THE CAPITAL INVESTMENTS UP TO FY 2015-16 (Rs. Crore)

#### 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 audited accounts for FY 2012-13 and subsequently added the yearly capitalizations for FY 2013-14, 2014-15 and 2015-16. 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 2015-16 as Rs. 489.05 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



2014-15 and FY 2015-16 in the same ratio as per provisional accounts of FY 2013-14.

- 5.20.5 The Petitioner submitted that it has reduced the equivalent depreciation amounting to Rs. 127.01 Crore in FY 2015-16 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 2015-16 is Rs. 362.04 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 2015-16. 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 2014-15, the Commission had considered a weighted average depreciation rate of 7.84%, and hence, it has considered the same for FY 2015-16.
- 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 2015-16 at a weighted average rate of 7.84% as considered by the Commission in its Order dated October 1, 2014 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 2012-13 and has subsequently added the yearly capitalisations for FY 2013-14 as per the provisional accounts to arrive at the opening balance of the GFA for FY 2014-15. Opening and Closing GFA for FY 2015-16 has been estimated based on the capitalisation considered by the Commission for FY 2014-15 and FY 2015-16.
- 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 2015-16, the GFA base approved by the Commission is given in the Table below:

| Particulars       | Derivation | ARR Petition | FY 2015-16<br>Approved |
|-------------------|------------|--------------|------------------------|
| Depreciation Rate | А          | 7.84%        | 7.84%                  |

## Table -: GROSS FIXED ASSETS FOR FY 2015-16 (Rs. Crore)



| Particulars  | Derivation    | ARR Petition | FY 2015-16<br>Approved |
|--|---------------|--------------|------------------------|
| Opening GFA as on 1 <sup>st</sup> April (Depreciable)  | В             |              | 5,071.35               |
| Opening GFA as on 1 <sup>st</sup> April (Non-          | С             | 5,305.49     | 0.02                   |
| Depreciable)   | C             |              | 0.03                   |
| Total Opening GFA as on 1 <sup>st</sup> April          | D=B+C         | 5,305.49     | 5,071.38               |
| Addition to GFA during the year                        | D             |              | 1,434.43               |
| (Depreciable)  | D             | 1,864.84     | 1,434.43               |
| Addition to GFA during the year (Non                   | E             | 1,004.04     |                        |
| Depreciable)   | E             |              |                        |
| Deduction from GFA during the year                     | _             | F            |                        |
| (Depreciable)  | F             |              |                        |
| Closing GFA as on 31 <sup>st</sup> March (Depreciable) | G = B + D - F |              | 6,505.79               |
| Closing GFA as on 31 <sup>st</sup> March (Non          |               | 7,170.33     | 0.02                   |
| Depreciable)   | H = C + E     |              | 0.03                   |
| Total Closing GFA as on 31 <sup>st</sup> March         | l = G + H     | 7,170.33     | 6,505.82               |

- 5.20.12 The Commission has projected the depreciation on assets created out of consumer contributions, capital grants and subsidies for FY 2015-16 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 nonmaintenance 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 has withheld 25% of the allowable depreciation for FY 2014-15. 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 a higher percentage as compared to previous year i.e. 30% of the allowable depreciation for FY 2015-16. The Licensee is further directed to submit the complete details pertaining to Fixed Asset Register for FY 2014-15 along with the ARR Petition for FY 2016-17, 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 2015-16 is shown in the Table below:

| Table -: APPROVED DEPRECIATION FOR FT 2015-10 (RS. CIOTE)                      |               |          |            |  |
|--|---------------|----------|------------|--|
| Particulars  | Derivation    | ARR      | FY 2015-16 |  |
|  |               | Petition | Approved   |  |
| Depreciation Rate  | A             | 7.84%    | 7.84%      |  |
| Opening GFA as on 1 <sup>st</sup> April (Depreciable)                          | В             | 5305.49  | 5,071.35   |  |
| Addition to GFA during the year (Depreciable)                                  | С             | 1,864.84 | 1,434.43   |  |
| Depreciation on Opening GFA + Addition during                                  | D =           | 489.05   | 453.82     |  |
| the year   | (A*B)+(C*A/2) | 469.05   | 455.62     |  |
| Less:  |               |          |            |  |
| Depreciation on assets created from  |               |          |            |  |
| Consumer Contribution and Capital Assets                                       | E             | 127.01   | 117.86     |  |
| Subsidy  |               |          |            |  |
| Allowable Depreciation for 2015-16   | F=D-E         | 362.04   | 335.96     |  |
| Less: Depreciation withheld due to non-<br>maintenance of Fixed Asset Register | G = F*30%     |          | 100.79     |  |

Table -: APPROVED DEPRECIATION FOR FY 2015-16 (Rs. Crore)



| Denticulare                               | Derivation | ARR      | FY 2015-16 |
|---|------------|----------|------------|
| Particulars                               | Derivation | Petition | Approved   |
| Net Allowable Depreciation for FY 2015-16 | H = F – G  | 362.04   | 235.17     |

## 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, 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 2012-13. Also the loan addition during FY 2015-16 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 2015-16. 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 2015-16 |
|--|--------------|------------|
|  |              | Approved   |
| Opening Loan   | 2,334.16     | 1,907.08   |
| Loan Additions (70% of Investments)                    | 1,338.14     | 936.70     |
| Less: Repayments (Depreciation allowable for the year) | 362.04       | 335.96     |
| Closing Loan Balance                                   | 3,310.26     | 2,507.81   |
| Weighted Average Rate of Interest                      | 9.29%        | 9.29%      |
| Interest on long term loan                             | 262.32       | 205.07     |
| Interest Capitalisation Rate                           | 23.00%       | 23.00%     |
| Less: Interest Capitalized                             | 60.33        | 47.16      |
| Net Interest Charged                                   | 201.99       | 157.91     |

#### Table -: INTEREST ON LONG TERM LOANS UP TO FY 2015-16 (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 2015-16 is shown in the Table below:

| Particulars  | Petition | FY 2015-16<br>(Approved) |
|--|----------|--------------------------|
| One month's O&M Expenses   | 89.94    | 59.27                    |
| One-twelfth of the sum of the book value of materials in stores at the end of each month of such financial year.                     | 15.62    | 15.62                    |
| Receivables equivalent to 60 days average billing on consumers   | 1,268.83 | 1,327.67                 |
| Gross Total  | 1,374.39 | 1,402.56                 |
| Less: Total Security Deposits by the Consumers reduced by<br>Security Deposits under section 47(1)(b) of the Electricity Act<br>2003 | 351.40   | 351.40                   |
| Net Working Capital  | 1,022.99 | 1,051.17                 |



| Particulars                          | Petition | FY 2015-16<br>(Approved) |
|--------------------------------------|----------|--------------------------|
| Rate of Interest for Working Capital | 12.50%   | 12.50%                   |
| Interest on Working Capital          | 127.87   | 131.40                   |

#### 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 9.00% for FY 2014-15 and FY 2015-16, 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 / 2014-15 / 489 dated March 4, 2015 has revised the Bank Rate from 8.75% to 8.50% w.e.f. March 4, 2015. Hence, the Commission has recomputed the interest on consumer security deposit at the rate of 8.50%. 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 2015-16 at 8.50% as shown in the Table below:

| Particulars  | Derivation    | Petition | FY 2015-16<br>(Approved) |
|--|---------------|----------|--------------------------|
| Opening Balance of Security Deposits from<br>Consumers           | А             | 310.86   | 310.86                   |
| Projected Closing Balance of Security<br>Deposits from Consumers | В             | 351.40   | 351.40                   |
| Bank Rate (%)  | С             | 9.00%    | 8.50%                    |
| Interest on Security Deposits                                    | D = (A+B)/2*C | 29.80    | 28.15                    |

#### Finance Charges:

- 5.21.16 The Petitioner has submitted that the finance charges towards expenses such as guarantee fees and bank charges is Rs. 0.08 Crore for FY 2015-16 and the same have been computed by extrapolating the actual guarantee fees and bank charges incurred in FY 2013-14 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. 0.08 Crore as bank charges as submitted by the Petitioner for FY 2015-16.
- 5.21.19 As regards discount to consumers, it is to be noted that such rebates / discounts are given to consumers under different heads like power factor rebate, etc., and are provided to the consumers on actual basis. Hence, the Commission allows the Petitioner's request to claim discount to consumers on actual basis during the Truing-up of FY 2015-16 based on the audited accounts. The Petitioner should however, ensure that such discount should have been adjusted in the actual revenue recovered during the year.

#### Summary of Interest and Finance Charges



5.21.20 In view of the above, the approved interest and finance costs including interest on working capital for FY 2015-16 is summarised in the Table below:

| Particulars   | ARR Petition | FY 2015-16<br>(Approved) |
|---|--------------|--------------------------|
| Interest on Long term Loans                         | 262.32       | 205.07                   |
| Interest on Working Capital Loans                   | 127.87       | 131.40                   |
| Sub Total   | 390.19       | 336.47                   |
| Interest on Consumer Security Deposits              | 29.80        | 28.15                    |
| Bank Charges  | 0.08         | 0.08                     |
| Discount to Consumers                               | 0.28         | 0.28                     |
| Sub Total   | 30.16        | 28.50                    |
| Gross Total Interest & Finance Charges              | 420.35       | 364.97                   |
| Less: Capitalization of interest on Long term Loans | 60.33        | 47.16                    |
| % Capitalization                                    | 23.00%       | 23.00%                   |
| Net Interest & Finance Charges                      | 360.02       | 317.80                   |

| TABLE -: INTEREST AND FINANCE CHARGES FOR FY 2015-16 | (RS. CRORF) |
|--|-------------|
| TABLE INTERESTAND INVALUE CHARGESTORT LOIS 10        |             |

#### 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 2015-16 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 <u>Commission</u>. 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 Petitioner has submitted the approach for creation of provision of 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 2015-16.
- 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



# within 3 months from the date of issue of the Order and submit the same to the Commission for its approval.

## 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 2015-16 has been projected to grow at the rate of inflation index from the actual of FY 2013-14.
- 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.35.48 Crore as claimed by the Petitioner for FY 2015-16 and as shown in the Table below:

| Particulars                        | articulars ARR Petition |      |  |  |  |
|------------------------------------|-------------------------|------|--|--|--|
| Income from Contractor & Suppliers | 3.25                    | 3.25 |  |  |  |
| Rental from Staff                  | 0.05                    | 0.05 |  |  |  |
| Miscellaneous Receipts             | 0.23                    | 0.23 |  |  |  |

#### Table -: OTHER INCOME FOR FY 2015-16 (Rs. Crore)



| Particulars  | ARR Petition | Approved<br>FY 2015-16 |
|--|--------------|------------------------|
| Excess Found on physical Verification of<br>Stores | 0.01         | 0.01                   |
| Interest on Fixed Deposit                          | 31.01        | 31.01                  |
| Rental from Staff                                  | 0.01         | 0.01                   |
| Other Recoveries From Consumers                    | 0.91         | 0.91                   |
| Total  | 35.48        | 35.48                  |

5.23.4 Further, any variation on this account would be taken up at the time of Trueup of FY 2015-16 based on the audited accounts.

## 5.24 RETURN ON EQUITY

- 5.24.1 The Petitioner has not claimed any return on equity for the year under review. The Petitioner has stated that they do not want to burden the consumers by proposing return on equity as it will further increase the gap.
- 5.24.2 Hence, the Commission has not approved any amounts towards return on equity for FY 2015-16.

## 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.

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

- 5.26.1 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 2013-14 as per provisional accounts have been considered as base expenses and the same have been escalated for FY 2015-16 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. 31.98 Crore for FY 2015-16 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 2012-13 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 2012-13. 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 2015-16.

## 5.27 GoUP SUBSIDY

- 5.27.1 The Petitioner has submitted that the projected budgeted subsidy for FY 2015-16 for overall Discoms is to the tune of Rs. 5,913 Crore, out of which the share of the Petitioner is pegged to be Rs. 939.84 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. 5,913.00 Crore for FY 2015-16 from GoUP as submitted by the Licensee and its allocation for MVVNL as Rs. 939.84 Crore.

## 5.28 ADDITIONAL SUBSIDY REQUIREMENT

5.28.1 As discussed in the earlier chapters of Truing up of FY 2012-13, the Distribution Licensees have filed an Appeal before the Hon'ble APTEL on applicability of additional subsidy. As the matter is sub-judice, the same approach has been continued by the Commission as adopted in Tariff Order for FY 2014-15 dated October 1, 2014.



- 5.28.2 It can be observed from the earlier section that, the Petitioner has projected the billing determinants for various categories based on the additional consumer addition target provided by the Commission for FY 2015-16. Accordingly, the Commission has approved the billing determinants for FY 2015-16 as projected by the Petitioner. Commission appreciate the spirit of the Licensee to project the consumer addition target as per the targets given by the Commission. Most of these new consumers would be from the rural areas having lower tariffs and are largely subsidised. Large number of addition of such consumer would require large amount of the subsidy to be provided in order to compensate for the lower tariffs as compared with Average Cost of Supply. Commission feels that it won't be appropriate to consider additional subsidy requirement for all of these consumers as these consumers would be added over the time period of the full year therefore considering the subsidy requirement for such large number of consumer for whole of year would inflate the additional subsidy requirement as well as put undue burden on the finances of the Distribution Licensee. However, for realistic computation of additional subsidy requirement, the Commission has considered the sales for below mentioned category based on 3-year CAGR of actual sales for FY 2011-12, FY 2012-13 and FY 2013-14. The additional subsidy requirement would be trued up based on the actual consumer additions and sales during the year.
- 5.28.3 Based on the above, the computation of additional subsidy requirement for FY 2015-16 is represented below:

| Particulars                        | Sales    | Cost of<br>Service | Thru<br>Rate | Loss  | Loss     |
|------------------------------------|----------|--------------------|--------------|-------|----------|
| Particulars                        | (MU)     | (Rs./kWh)          | (Rs./kWh     | (Rs./ | (Rs.     |
|                                    |          |                    | )            | kWh)  | Crore)   |
| LMV-1: (a) Consumer getting supply |          |                    |              |       |          |
| as per "Rural Schedule"            | 1,565.61 | 6.47               | 2.29         | 4.18  | 654.39   |
| LMV-5: PTW                         | 884.82   | 6.47               | 1.37         | 5.10  | 451.54   |
| Total Loss                         | 2,450.42 |                    |              |       | 1,105.94 |
| Subsidy Available                  |          |                    |              |       | 939.84   |
| Additional Subsidy Requirement     |          |                    |              |       | 166.10   |

Table -: ADDITIONAL SUBSIDY REQUIREMENT FOR FY 2015-16 (Rs. Crore)



5.28.4 In line with the approach adopted by the Commission in its earlier Orders, the balance subsidy has been applied as a reduction from the approved ARR for FY 2015-16.

## 5.29 REVENUE FROM SALE OF ELECTRICITY

- 5.29.1 For FY 2015-16, the Petitioner has estimated the revenue from existing tariffs to the tune of Rs. 7,718.70 Crore, i.e., based on approved Tariff as per Tariff Order dated October 1, 2014.
- 5.29.2 The Commission has computed the revenue at existing tariffs by applying the tariff rates as per Tariff Order dated October 1, 2014 to the approved consumption for FY 2015-16. Further, the Commission has also approved tariffs and computed resultant revenue by applying the approved tariff rates to the approved consumption parameters for FY 2015-16. The following Table summarizes the revenue approved by Commission for FY 2015-16 at both existing as well as revised tariffs.

| Consumer Categories             | Approved (At Existing<br>Tariff) | Approved (At<br>Revised<br>Tariff) |
|---------------------------------|----------------------------------|------------------------------------|
| LMV-1: Domestic                 | 2704.23                          | 2815.31                            |
| LMV-2:Non-Domestic              | 791.42                           | 828.75                             |
| LMV-3: Public Lamps             | 274.80                           | 284.08                             |
| LMV-4: Institutions             | 297.64                           | 305.76                             |
| LMV-5: Private Tube Wells       | 151.81                           | 154.09                             |
| LMV 6: Small and Medium Power   | 489.64                           | 508.09                             |
| LMV-7: Public Water Works       | 523.08                           | 539.45                             |
| LMV-8: State Tube Wells         | 538.77                           | 602.51                             |
| LMV-9: Temporary Supply         | 1.48                             | 1.56                               |
| LMV-10: Departmental Employees  | 41.71                            | 44.48                              |
| HV-1: Non-Industrial Bulk Loads | 569.36                           | 584.23                             |
| HV-2: Large and Heavy Power     | 1195.80                          | 1241.38                            |
| HV-3: Railway Traction          | 61.81                            | 63.79                              |
| HV-4: Lift Irrigation           | 96.96                            | 99.66                              |

#### Table -: EXISTING & APPROVED TARIFF REVENUES: FY 2015-16 (Rs. Crore)



| Consumer Categories | Approved (At Existing<br>Tariff) | Approved (At<br>Revised<br>Tariff) |  |
|---------------------|----------------------------------|------------------------------------|--|
| Sub-total           | 7738.50                          | 8073.14                            |  |
| Extra state & Bulk  | 23.64                            | 25.64                              |  |
| Total               | 7762.14                          | 8098.79                            |  |

*Note:* Revenue at approved tariffs depicted in the table above have been considered effective for 9 months in FY 2015-16.

## 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 2015-16. 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 2015-16 on standalone basis. Based on the above, the approved ARR and the revenue from tariffs for FY 2015-16 are summarized in the Table below:

| Particulars   | Petition | FY 2015-16<br>(Approved) |
|---|----------|--------------------------|
| Power Purchase Expenses (including PGCIL charges)                   | 8109.09  | 7801.42                  |
| Apportionment of O&M Expenses & Interest & Finance Charges of UPPCL | 31.98    | 0.00                     |
| Transmission Charges - Intra state (including SLDC Charges)         | 366.54   | 314.87                   |
| Gross O&M Expenses  | 1079.30  | 806.16                   |
| Gross Employee cost   | 654.50   | 533.84                   |
| Gross A&G expenses  | 224.36   | 98.67                    |
| Gross R&M expenses  | 200.43   | 173.65                   |
| Gross Interest & Finance charges                                    | 420.35   | 364.97                   |
| Depreciation  | 362.04   | 235.17                   |
| Total Expenditure   | 10369.30 | 9522.58                  |
| Expense capitalization  | 192.15   | 142.04                   |
| Net Expenditure   | 10177.14 | 9380.55                  |
| Special Appropriations  |          |                          |

#### Table -: ARR, REVENUE AND GAP SUMMARY FOR FY 2015-16 (Rs. Crore)



| Particulars   | Petition | FY 2015-16<br>(Approved) |
|---|----------|--------------------------|
| Provision for Bad & Doubtful debts  | 154.37   | 0.00                     |
| Total net expenditure with provisions                                       | 10331.52 | 9380.55                  |
| Add: Return on Equity   | 0.00     | 0.00                     |
| Less: Non Tariff Income   | 35.48    | 35.48                    |
| Annual Revenue Requirement (ARR)  | 10296.04 | 9345.07                  |
| Less: Subsidy from Govt.  | 939.84   | 939.84                   |
| Annual Revenue Requirement after GoUP Subsidy (ARR)                         | 9356.20  | 8405.23                  |
| Total Revenue Requirement   | 9356.20  | 8405.23                  |
| Revenue at existing tariffs   | 7718.70  | 7762.14                  |
| Net Gap / (Surplus) at Existing Tariff                                      | 1637.50  | 643.09                   |
| Additional Subsidy Requirement  |          | 166.10                   |
| Net Gap / (Surplus) at Existing Tariff after reducing Additional<br>Subsidy | 1637.50  | 476.99                   |

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.
- 6.1.4 In absence of procedures and guidelines from State Transmission Utility (in short 'STU') and State Load Despatch 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.

## 6.2 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 judgement.
- 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 2015-16 is as shown in the Table below:



| Doutiquiare  | Allocati | on %   | Allo     | cation FY 201 | 5-16      |
|--|----------|--------|----------|---------------|-----------|
| Particulars  | Wheeling | Supply | Wheeling | Supply        | Total     |
| Power Purchase Expenses (incl PGCIL charges)                           | 0%       | 100%   | 0.00     | 40,825.88     | 40,825.88 |
| Apportionment of O&M Expenses & Interest<br>& Finance Charges of UPPCL | 0%       | 100%   | 0.00     | 0.00          | 0.00      |
| Transmission Charges - Intra state (incl SLDC Charges)                 | 0%       | 100%   | 0.00     | 1,647.75      | 1,647.75  |
| Gross O&M Expenses   |          |        | 2,140.30 | 1,068.16      | 3,208.46  |
| Gross Employee cost  | 60%      | 40%    | 1,165.27 | 776.85        | 1,942.11  |
| Gross A&G expenses   | 40%      | 60%    | 131.74   | 197.61        | 329.35    |
| Gross R&M expenses   | 90%      | 10%    | 843.29   | 93.70         | 936.99    |
| Gross Interest & Finance charges                                       | 90%      | 10%    | 1,582.16 | 175.80        | 1,757.95  |
| Depreciation   | 90%      | 10%    | 951.42   | 105.71        | 1,057.13  |
| Total Expenditure  |          |        | 4,673.87 | 43,823.29     | 48,497.17 |
| Expense capitalization   |          |        | 415.37   | 170.70        | 586.07    |
| Employee cost capitalized  | 60%      | 40%    | 174.79   | 116.53        | 291.32    |
| Interest capitalized   | 90%      | 10%    | 220.82   | 24.54         | 245.35    |
| A&G expenses capitalized   | 40%      | 60%    | 19.76    | 29.64         | 49.40     |
| Net Expenditure  |          |        | 4,258.50 | 43,652.59     | 47,911.10 |
| Provision for Bad & Doubtful debts                                     | 0%       | 100%   | 0.00     | 0.00          | 0.00      |
| Provision for Contingency Reserve                                      | 0%       | 100%   | 0.00     | 0.00          | 0.00      |
| Total net expenditure with provisions                                  |          |        | 4,258.50 | 43,652.59     | 47,911.10 |
| Add: Return on Equity  | 90%      | 10%    | 0.00     | 0.00          | 0.00      |
| Less: Non Tariff Income  | 0%       | 100%   | 0.00     | 105.98        | 105.98    |
| Annual Revenue Requirement (ARR)                                       |          |        | 4,258.50 | 43,546.61     | 47,805.12 |

## Table -: WHEELING & RETAIL SUPPLY ARR FOR FY 2015-16 (Rs. Crore)

6.3.3 Based on the above, the wheeling charges for FY 2015-16 are as shown in the Table below:

| S. No | Particulars                                | Units     | Approved<br>FY 2015-16 |
|-------|--|-----------|------------------------|
| 1     | Wheeling ARR                               | Rs. Crore | 4,258.50               |
| 2     | Retail sales (PVVNL, DVVNL, MVVNL, PuVVNL) | MU        | 74,001                 |
| 3     | Average Wheeling charge                    | Rs./kWh   | 0.575                  |

#### Table -: WHEELING CHARGES FOR FY 2015-16



- 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 2015-16, 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.

| S. No. | Particulars                                   | Particulars Units |       |
|--------|---|-------------------|-------|
| 1      | Connected at 11 kV                            |                   |       |
| I      | Long Term (@ 80% of Average Wheeling Charge)  | Rs./kWh           | 0.460 |
| П      | Short Term (@ 80% of Average Wheeling Charge) | Rs./kWh           | 0.460 |
| 2      | Connected above 11 kV                         |                   |       |
| I      | Long Term (@ 50% of Average Wheeling Charge)  | Rs./kWh           | 0.288 |
| Ш      | Short Term (@ 50% of Average Wheeling Charge) | Rs./kWh           | 0.288 |

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 2014-15 as well as submitted by Petitioner during the proceedings in the matter of ARR / Tariff determination of FY 2015-16.
- 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.
- 6.4.3 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;

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. 6.63 / kWh considering the cost of marginal power purchase sources of Harduaganj, Bajaj Hindustan, Parabati ST – III and Rosa Power Project.

D is the wheeling charges.

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).



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<br>Charge (D) | Wt. Avg. Power<br>Purchase Cost (C) | System<br>Loss (L) | Total Cost |
|-------|---------------------------|------------------------|-------------------------------------|--------------------|------------|
| 1     | HV Categories above 11 KV | 0.288                  | 6.63                                | 4.00%              | 7.18       |
| 2     | HV Categories at 11 KV    | 0.460                  | 6.63                                | 8.00%              | 7.62       |

#### Table -: COST OF SUPPLY APPROVED BY THE COMMISSION FOR FY 2015-16

- 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 2015-16 is as given in the Table below:

| 2013-10 |                            |                         |   |  |                                     |  |  |  |  |
|---------|----------------------------|-------------------------|---|--|-------------------------------------|--|--|--|--|
| S No.   | Categories                 | Average<br>Billing Rate | Average Billing<br>Rate (inclusive of<br>Regulatory<br>Surcharge) "T" | Cost of Supply<br>for computing<br>CSS | Cross Subsidy<br>Surcharge<br>"CSS" |  |  |  |  |
| 1       | HV-1 (Supply at 11 kV)     | 8.66                    | 9.28  | 7.62                                   | 1.66                                |  |  |  |  |
| 2       | HV-1 (Supply above 11 kV)  | 7.66                    | 8.21  | 7.18                                   | 1.03                                |  |  |  |  |
| 3       | HV-2 (Supply at 11 kV)     | 7.61                    | 8.15  | 7.62                                   | 0.53                                |  |  |  |  |
| 4       | HV-2 (Supply above 11 kV ) | 6.92                    | 7.42  | 7.18                                   | 0.23                                |  |  |  |  |
| 5       | HV-3 (Supply above 11 kV ) | 7.34                    | 7.86  | 7.18                                   | 0.68                                |  |  |  |  |

## Table -: CROSS SUBSIDY SURCHARGE APROVED BY THE COMMISSISON FOR FY



| S No. | Categories                 | Average<br>Billing Rate | Average Billing<br>Rate (inclusive of<br>Regulatory<br>Surcharge) "T" | Cost of Supply<br>for computing<br>CSS | Cross Subsidy<br>Surcharge<br>"CSS" |
|-------|----------------------------|-------------------------|---|--|-------------------------------------|
| 6     | HV-4 (Supply at 11 kV)     | 7.53                    | 8.06  | 7.62                                   | 0.44                                |
| 7     | HV-4 (Supply above 11 kV ) | 7.20                    | 7.71  | 7.18                                   | 0.53                                |

#### 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 FY 2015-16 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 2015-16 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  $\pm$  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 2015-16. 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 2015-16 (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 last Tariff Order the fixed charges for unmetered domestic category of LMV-1 and unmetered commercial category of LMV-2 was specified in Rs/kW terms



instead of Rs/connection basis. 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 directed the Licensees to ascertain the actual load of consumer and accorded a time period of 3 months to complete such exercise by the time for such consumers tariff rate as per Tariff Order for FY 2013-14 was made applicable. Further, the Commission has extended the relief to the above categories of consumers by March 31, 2015 and directed the Licensees to prioritize the exercise and get it completed by March 31, 2015. The Commission has perceived that the exercise of load ascertainment has been completed by the Licensees by now. In cognizance to the approach followed in Tariff Order for FY 2014-15, the fixed charges of the unmetered consumers under LMV-1, LMV-2 upto 2 kW has now been linked with their contracted load in Rs/kW terms.

- 7.1.9 To incentivise the 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.
- 7.1.10 The Commission in its pursuit of achieving the mandate of 100% metering has also increased the tariff of un-metered consumers in LMV-1 category beyond December 31, 2015. Further, to discourage unmetered connections the Commission has also given the tariff for unmetered category in LMV-10 (Departmental Employees and Pensioners) only upto December 31, 2015 beyond which they would be billed as per other domestic consumers categories.
- 7.1.11 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 Commission expressing its utmost concern, directs the Distribution Licensees to ensure that all the unmetered consumers in LMV-1 and LMV-10 (Departmental Employees and Pensioners) get converted into metered connection by December 31, 2015 beyond which, the Tariff for unmetered LMV-1 category would be increased by 10% and consumers of LMV-10 would be billed as per other domestic consumers as specified in the Rate Schedule.

## Merger of Slabs based on consumption

7.1.12 Tariff has been designed in such a way that the effective tariff for the high consumption consumers would be higher than those who consume less electricity. The Commission has also aligned and designed the tariff slabs so that they are more reflective of the Average cost of supply. This would encourage the consumers to use electricity efficiently and will contribute in electricity savings.

## **Billable Demand Multiplier**

- 7.1.13 As per the proposal of Licensee the Commission has approved that for the purpose of billing below 10 kW load, the fixed charge will be computed on the basis of contracted load in kW and energy charge will be calculated on kWh basis. Therefore, consumer upto 10 kW load will have to pay fixed charges as per their contracted load.
- 7.1.14 For all consumers with contracted load of 10 KW / 13.4 BHP and above 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.



### Time of Day Tariff

- 7.1.15 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. Licensees also submitted the load pattern of UP over the last 3 years. The Licensees in view of the same proposed to revise the TOD slabs for peak hours, normal hours and off-peak hours. Licensees have proposed to have separate TOD slabs during summer season (i.e. April to September) and winter season (i.e. October to March).
- 7.1.16 It has been observed that apart from shifting the timings for the peak hours, normal hours and the off-peak hours, the Licensees have also increased the number of hours applicable for the peak period and has reduced the number of hours applicable for off-peak and normal period which will effectively increase the tariff for the consumers. 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 conducted an exercise to study the TOD structure of other states which was considered as one of the input along with the load curve for last three years submitted by the Licensee for



determination of optimum peak hours; off peak hours and normal hours for TOD consumers where it found the existing Tariff structure for TOD to be in coherence with the result. The ToD tariff should be a tool only to effectively undertake the DSM measure and flatten the load curve but not as a source of additional revenue. Further, any revision in the ToD Tariff should not have any additional impact on the total revenue as the Distribution Licensees are already getting benefited by better power purchase planning and savings in power purchase expenses. Thus, the Commission is of the view that accepting any substantial modification in the existing TOD structure which would increase the effective tariff of the consumers would not be appropriate and would unduly burden the consumers. The Commission in this Tariff Order has introduced an optional TOD structure 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 as specified in the Tariff Order for FY 2014-15 which will be applicable for LMV-6 and HV-2 categories. Through introduction of this new optional TOD structure, Commission has encouraged the consumers to actually shift their usage pattern to benefit from higher rebate. The TOD structure has been detailed in the Rate Schedule which is provided subsequently in this Order.

## Life-line consumers

- 7.1.17 Licensees submitted the proposal to restrict the consumption norm for lifeline consumers to 50 units per month keeping fixed charge of Rs. 50 per kW per month and energy charge of Rs. 2.00 per kWh constant thereby abolishing the consumption slab of 51 150 units under this category.
- 7.1.18 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 2014-15 the Commission in this Order, has decided not to change the slabs for the lifeline consumers. However, to ensure that the



genuine poor consumers don't get over burdened, the Commission has kept the Tariff for the lower slab constant and has increased the tariff in the higher slab as depicted in the Rate Schedule.

## Scheme for advance deposit for future monthly energy bills

7.1.19 The Commission in this Order has introduced 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 bank rate as specified by RBI from time to time, 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:**

7.1.20 The Commission has decided to continue with a rebate of 0.25% to the consumers who pays 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:**

7.1.21 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. The detailed Order in the matter of "Fixation of Tariff for Prepaid Metering" issued on May 11, 2015 by the Commission may be referred in this regard, which is annexed to this order.

#### Charges for exceeding contracted demand



7.1.22 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:

7.1.23 To discourage the late payment of electricity bills the Commission has revised 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

7.1.24 As depicted in the Rate Schedule the Commission has decided to continue with a specified maximum limit of 10% for the single point buyer to charge the end consumers over and above the actual Rate & other applicable charges., The Commission may issue a detail Order in this regard and other important matters subsequently.

## Rebate for using Solar Water Heater.

7.1.25 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.



#### Increase in tariff

7.1.26 The Commission has approved a nominal increase in various categories endeavouring that the tariff for various categories should remain within the range of +/-20% of the average cost of supply. However, as the increase in tariff is not only due to increase in ACOS but also for the part recovery of the large accumulated revenue gap for previous years, the tariff for few categories is nominally beyond the limit of +/- 20% of ACOS.

#### **One Time Settlement (OTS) Scheme**

7.1.27 The Commission feels that the Licensees lose revenue by repeatedly having OTS schemes and also the same discourages the honest consumers. The Distribution Licensees should also understand that OTS scheme is a only a short term measure to generate instantaneous cash flows but the loss of the Discoms in terms of surcharge waiver is always to be borne by the Licensee. Thus, after detailed deliberations on OTS scheme the Commission has decided to abolish the OTS scheme subsequent to applicability of this Order

#### Rural tariff to rural schedule

7.1.28 The Commission has received grievances from the consumers during the Public Hearing process that they are supplied as per rural schedule however they are charged as per urban tariff. The Commission is of the opinion that consumers getting supply from feeders fed in accordance with rural schedule should be levied rural tariff and consumers getting supply from other feeders should be levied tariff other than rural schedule. Appropriate changes have been made in the Rate Schedule of this Order to address this issue.

#### **Facilitation Charge for Online Payment**



7.1.29 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.

# Inclusion of Guest Houses of Govt., Semi-Govt., Public Sector Undertaking and Hospitals & Colleges those are providing free services

7.1.30 The Commission has decided to extend the LMV-4(A) tariff (i.e. Public Institutions) to Guest houses of Government, Semi-Government, and Public Sector Undertaking Organisations along with Hospitals & Colleges which are providing services free of cost or at the charges not exceeding those of Government operated institutions.

## Fuel and Power Purchase Cost Adjustment Surcharge

- 7.1.31 Considering the submissions made by the Licensees, the Commission has approved revised mechanism for computation of FPPCA. 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.
- 7.1.32 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

7.1.33 The detailed mechanism for computation of the same has been discussed in this Order.

## kVAh Tariff

- 7.1.34 Introduction 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).
- 7.1.35 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.
- 7.1.36 In order to make the existing system more efficient, the Commission is working on reducing the existing ceiling on contracted load 10 kW / 13.4 BHP for applicability of kVAh tariff which will be notified subsequently by a separate Order.

# Minimum Consumption Charges for LMV-2(c) (Non-domestic light, Fan and Power) Category

7.1.37 The Licensee in its Petition for FY 2014-15 had proposed minimum consumption charge for LMV-2(c) category of consumers which was not



considered in the Order for FY 2014-15 by the Commission as the Petition was not a part of the original submissions made during the proceedings of the ARR and was not circulated in the public domain by the Licensee.

- 7.1.38 The Petitioner in its reply to the deficiency note on the Petition filed for determination of ARR for FY 2015-16 has submitted to consider the petition for imposition of minimum consumption guarantee charge for LMV-2(c) category of consumers filed on July 2, 2014 vide Letter No. 1651/RAU/Petition.
- 7.1.39 The Petitioner has submitted that the minimum consumption charges is strictly not a part of tariff and basically is a mechanism to recover basic minimum charges from all consumers to distribute the burden of fixed cost recovery as uniformly as possible and to deter the consumers indulging in the malpractice of artificially suppressing their consumption through unauthorized means. Minimum consumption charges of Rs. 700.00 have been proposed for LMV-2(c) category of consumers by the Licensee for FY 2015-16.
- 7.1.40 The Commission understands that the consumption pattern of the consumers is not uniform throughout the year and varies seasonally. In view of the same and taking the submission of the Petitioner into consideration appropriate minimum charges have been decided for summer and winter season as detailed in the Rate Schedule.

## LMV-5-PTW Consumers

7.1.41 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.



- 7.1.42 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 2015-16 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.
- 7.1.43 The Commission after considering the submission made by Licensee and the rustic 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.

## Applicability of tariff category:

- 7.1.44 The Commission has observed that there is overlap in the provisions as defined in the rate schedule of FY 2014-15 and Electricity Supply code Regulations, 2005, as amended from time to time, regarding the contracted load for applicability of HT or LT tariff.
- 7.1.45 As per the Tariff Order for FY 2014-15, eligible contracted load as per applicability of tariff for the few category is less-than/ upto / above 75 kW(100 HP). However, as per clause 3.2(ii)(b) "Classification of Supply" of the Electricity Supply Code Regulations, 2005 "Contracted load exceeding 56 KVA and up to 3000 KVA should be given supply at 3 Phase at 6.6 / 11 kV".
- 7.1.46 The Commission has continued the provision of applicability of tariff category as per contracted load as per the rate schedule of Tariff Order for FY 2014-15 in this Tariff Order. However, the Commission is working towards aligning the provision of the rate schedule defined in this tariff order and provisions of the



Electricity Supply Code Regulations 2005 and may issue a separate Order in this regard.

7.1.47 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 . In case of any inconformity, the Rate schedule shall prevail over the details given in the various sections of this Order.



#### 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 2015-16 is worked out as under:

# Table -: REVENUE FROM SALE OF POWER AT APPROVED TARIFF FOR FY 2015-16 FOR MVVNL (Rs. Crore)

| Consumer categories             | Approved Revenue<br>FY 2015-16 |
|---------------------------------|--------------------------------|
| LMV-1: Domestic                 | 2815.31                        |
| LMV-2:Non-Domestic              | 828.75                         |
| LMV-3: Public Lamps             | 284.08                         |
| LMV-4: Institutions             | 305.76                         |
| LMV-5: Private Tube Wells       | 154.09                         |
| LMV 6: Small and Medium Power   | 508.09                         |
| LMV-7: Public Water Works       | 539.45                         |
| LMV-8: State Tube Wells         | 602.51                         |
| LMV-9: Temporary Supply         | 1.56                           |
| LMV-10: Departmental Employees  | 44.48                          |
| HV-1: Non-Industrial Bulk Loads | 584.23                         |
| HV-2: Large and Heavy Power     | 1241.38                        |
| HV-3: Railway Traction          | 63.79                          |
| HV-4: Lift Irrigation           | 99.66                          |
| Sub-total                       | 8073.14                        |
| Extra State & Bulk              | 25.64                          |
| Total                           | 8098.79                        |

8.1.2 The revenue increase due to revision in Tariff for MVVNL would be Rs. 336.64 Crore (Rs. 8,098.79 Crore – Rs. 7,762.14 Crore).



8.1.3 The estimated gap / surplus after incorporating impact of revised Tariff for FY 2015-16 for the period of 9 months is given in the Table below:

| Table -: ESTIMATION OF ARR GAP/SURPLUS AT REVISED TARIFF FOR FY 2015-16 |
|---|
| (Rs. Crore)   |

| Particulars   | Petitioner | Approved |
|---|------------|----------|
| Revenue Gap for FY 2012-13  | 2246.71    | 1603.54  |
| Revenue Gap / (Surplus) for FY 2015-16 (at existing Tariff)                         | 1,637.50   | 476.99   |
| Increase in Revenue due to revision in Tariff                                       | 576.26     | 336.64   |
| Total approved revenue for FY 2015-16 (Excluding Regulatory Surcharge)              | 8,294.96   | 8,098.79 |
| Net Revenue Gap for FY 2015-16 after tariff increase (Including gap for FY 2012-13) | 3,307.95   | 1,743.89 |

## 8.2 AVERAGE COST OF SUPPLY

- 8.2.1 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 2015-16, the average billing rate (ABR) at existing Tariff would have been Rs. 4.89 / kWh (Consolidated for Distribution Licensees' namely DVVNL, MVVNL, PVVNL and PuVVNL), while the average cost of supply is Rs. 6.46 /kWh (Consolidated for Distribution Licensees' namely DVVNL, PVVNL and PuVVNL) as against the ACOS of Rs. 7.10 / kWh projected by the Licensees. Thus, the Tariff would have been 75.73 % of ACOS approved by the Commission. After revision of the Tariff, as approved in this Order, the average billing rate (ABR) would be Rs. 5.16 / kWh, thus, the Tariff would be 79.87 % 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).

|                                 | Existing                   | g Tariff                           | Revised Tariff                |                                    |  |
|---------------------------------|----------------------------|------------------------------------|-------------------------------|------------------------------------|--|
| Consumer Categories             | Avg Revenue<br>(Rs. / kWh) | Avg Revenue<br>/ unit % of<br>ACOS | Avg<br>Revenue<br>(Rs. / kWh) | Avg Revenue<br>/ unit % of<br>ACOS |  |
| LMV-1: Domestic                 | 3.75                       | 58%                                | 3.93                          | 61%                                |  |
| LMV-2:Non-Domestic              | 6.67                       | 103%                               | 7.14                          | 111%                               |  |
| LMV-3: Public Lamps             | 6.27                       | 97%                                | 6.70                          | 104%                               |  |
| LMV-4: Institutions             | 7.21                       | 112%                               | 7.47                          | 116%                               |  |
| LMV-5: Private Tube Wells       | 1.47                       | 23%                                | 1.51                          | 23%                                |  |
| LMV 6: Small and Medium Power   | 7.46                       | 115%                               | 7.83                          | 121%                               |  |
| LMV-7: Public Water Works       | 7.13                       | 110%                               | 7.42                          | 115%                               |  |
| LMV-8: State Tube Wells         | 6.51                       | 101%                               | 7.57                          | 117%                               |  |
| LMV-9: Temporary Supply         | 7.27                       | 113%                               | 7.72                          | 120%                               |  |
| LMV-10: Departmental Employees  | 2.95                       | 46%                                | 3.22                          | 50%                                |  |
| HV-1: Non-Industrial Bulk Loads | 8.11                       | 125%                               | 8.39                          | 130%                               |  |
| HV-2: Large and Heavy Power     | 6.96                       | 108%                               | 7.31                          | 113%                               |  |
| HV-3: Railway Traction          | 7.05                       | 109%                               | 7.34                          | 114%                               |  |
| HV-4: Lift Irrigation           | 7.07                       | 109%                               | 7.33                          | 113%                               |  |
| Sub-total                       | 4.89                       | 76%                                | 5.16                          | 80%                                |  |
| Extra state & Bulk              | 3.83                       | 59%                                | 4.27                          | 66%                                |  |
| Total                           | 4.89                       | 76%                                | 5.16                          | 80%                                |  |

# Table -: REVENUE REALIZED AS % OF ACOS

# 8.3 REGULATORY SURCHARGE

8.3.1 The Commission, in its Suo-motu 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 is 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 years 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 25<sup>th</sup> 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 6<sup>th</sup> 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 Order is 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 6<sup>th</sup> 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 15<sup>th</sup> 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 Thus, 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 is 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 upOrders dated May 21, 2013 and Tariff Orders May 31, 2013 i.e. Rs. 1243.96 Crore

| Particulars  | Formula                   | DVVNL  | MVVNL  | PVVNL  | PuVVNL  |
|--|---------------------------|--------|--------|--------|---------|
| Target Distribution Losses for FY 2014-15 as                     | А                         | 28.00% | 21.03% | 23.00% | 21.72%  |
| approved in Tariff Orders for FY 2014-15                         | А                         | 20.00% | 21.05% | 25.00% | 21.7270 |
| 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                              | С                         | 36.56% | 24.84% | 28.16% | 25.66%  |
| considered as base)  |                           |        |        |        |         |
| Regulatory Surcharge applicable for FY 2014-                     | D                         | 2.84%  | 2.84%  | 2.84%  | 2.84%   |
| 15   | D                         | 2.04/0 | 2.04/0 | 2.04/0 | 2.04%   |
| Regulatory Surcharge applicable for FY<br>2015-16 (Max of 2.84%) | E = D x (C-<br>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 inthe Table below:



| Distribution<br>Licensee | Regulatory Surcharge - 1 (Applicable for FY<br>2014-15) (As approved in Order dated June<br>6, 2014) | Regulatory Surcharge - 1<br>(Applicable for FY 2015-16) (As<br>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 is 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 - 2 applicable for FY 2014-15 and FY 2015-16 is shown in |
|---|
| the Table below:  |

|                       | the ruble below.   |  |
|-----------------------|--|--|
| Distribution Licensee | Regulatory Surcharge - 2<br>(Applicable for FY 2014-15)<br>(As approved in Order dated<br>Oct 1, 2014) | Regulatory Surcharge - 2<br>(Applicable for FY 2015-16) (As<br>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 would continue to be applicable 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 would 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 However, the Commission has decided to revise the Regulatory Surcharge-2 as 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 Further, there was some inadvertent error in the computation of carrying cost in Tariff Order for FY 2014-15, which has been rectified by the Commission as detailed below:
- 8.4.4 The net revenue gap computed by the Commission in its Tariff order for FY 2014-15 is specified below:

"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 6<sup>th</sup> 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. The details are provided in the table below:

| Particulars   | PVVNL    | MVVNL   | DVVNL   | PuVVNL  | Consolidate<br>d for 4<br>Discoms |
|---|----------|---------|---------|---------|-----------------------------------|
| Revenue Gap for FY 2008-09                                  | 197.75   | 764.56  | 710.34  | 829.75  | 2502.41                           |
| Revenue Gap for FY 2009-10                                  | 346.92   | 795.07  | 779.27  | 711.56  | 2632.81                           |
| Revenue Gap for FY 2010-11                                  | 75.10    | 702.74  | 1087.94 | 934.66  | 2800.45                           |
| Revenue Gap for FY 2011-12                                  | 876.71   | 1441.65 | 1285.31 | 1661.09 | 5264.77                           |
| <i>Revenue Gap for FY 2008-09 to FY 2011-12</i>             | 1496.49  | 3704.02 | 3862.86 | 4137.06 | 13200.44                          |
| Revenue Gap / (Surplus) for FY 2014-15 (at existing Tariff) | -767.64  | 325.91  | 335.39  | 188.90  | 82.57                             |
| Increase in Revenue due to Tariff revision                  | 445.66   | 252.22  | 257.73  | 387.02  | 1342.63                           |
| Total approved revenue for FY 2014-15                       | 11313.28 | 6354.40 | 6780.85 | 7082.02 | 31530.55                          |

Table 12-5: REGULATORY SURCHARGE FOR FY 2014-15



| Particulars   | PVVNL  | MVVNL   | DVVNL   | PuVVNL  | Consolidate<br>d for 4<br>Discoms |
|---|--------|---------|---------|---------|-----------------------------------|
| Net Revenue Gap for FY 2014-15<br>after tariff increase (Including<br>gap for FY 2008-09 to FY 2011-<br>12)           | 283.19 | 3777.71 | 3940.53 | 3938.95 | 11940.38                          |
| Carrying Cost on the Regulatory<br>Asset  | 8.26   | 110.16  | 114.90  | 114.86  | 348.18                            |
| Recovery through Regulatory<br>Surcharge  | 133.35 | 74.90   | 79.93   | 83.48   | 371.65                            |
| Net Revenue Gap after<br>considering part recovery of<br>Regulatory Asset admitted by<br>the Commission in this Order | 158.10 | 3812.97 | 3975.51 | 3970.33 | 11916.90                          |

- 8.4.5 With regard to above, it must be noted that the Commission has recomputed the carrying cost as determined in the Tariff Order for FY 2014-15 and the impact of the same has been appropriately dealt in this Order.
- 8.4.6 Further, the Commission in its Tariff Order of PuVVNL for FY 2014-15 has allowed efficiency gain of Rs. 71.02 Crore during Truing up of FY 2011-12. However, inadvertently the amount has not been considered in the total ARR approved by the Commission for FY 2011-12. Accordingly, the Commission has revised the revenue gap for FY 2014-15 as depicted below:

| Particulars  | PVVNL    | MVVNL    | DVVNL    | PuVVNL   | Consolidated<br>for 4<br>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<br>@ 10%                 | 74.2     | 183.7    | 191.6    | 208.7    | 658.12                           |
| Revenue Gap / (Surplus) for FY 2014-15<br>(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                          |

Table -: REVISED REVENUE GAP FOR FY 2014-15



| Particulars  | PVVNL | MVVNL  | DVVNL  | PuVVNL | Consolidated<br>for 4<br>Discoms |
|--|-------|--------|--------|--------|----------------------------------|
| Net Revenue Gap for FY 2014-15 after<br>tariff increase (Including gap for FY<br>2008-09 to FY 2011-12)                                | 357.4 | 3961.4 | 4132.1 | 4218.6 | 12669.50                         |
| Recovery through Regulatory<br>Surcharge   | 133.3 | 74.9   | 79.9   | 83.5   | 371.65                           |
| Net Revenue Gap after considering<br>part recovery of Regulatory Asset<br>admitted by the Commission in Order<br>dated October 1, 2014 | 224.0 | 3886.5 | 4052.2 | 4135.2 | 12297.85                         |

8.4.7 The consolidated revenue gap admitted by the Commission after undertaking the Truing up of FY 2012-13 and determining the ARR and revenue for FY 2015-16 is summarised in the table below:

| Particulars   | Petitioner | Approved |
|---|------------|----------|
| Revenue Gap for FY 2012-13  | 10349.88   | 5706.71  |
| Revenue Gap / (Surplus) for FY 2015-16 (at existing Tariff)                         | 10642.91   | 3339.97  |
| Increase in Revenue due to revision in Tariff                                       | 3001.46    | 1485.05  |
| Total approved revenue for FY 2015-16 (Excluding Regulatory Surcharge)              | 38960.68   | 37687.47 |
| Net Revenue Gap for FY 2015-16 after tariff increase (Including gap for FY 2012-13) | 17991.33   | 7561.63  |

## Table -: SUMMARY OF CONSOLIDATED REVENUE GAP FOR 4 STATE OWNED DISTRIBUTION LICENSEES ADMITTED BY THE COMMISSION (Rs. Crore)

- 8.4.8 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.
- 8.4.9 Thus, the Commission for liquidation of the Regulatory asset for past years has decided to revise the Regulatory Surcharge-2 from existing level of 2.38% to



4.28% applicable on "RATE" as defined in the Rate Schedule for FY 2015-16. Such surcharge would be applicable in the supply areas of DVVNL, MVVNL, PVVNL and PuVVNL. The details are provided in the table below:

| Particulars  | PVVNL    | MVVNL   | DVVNL   | PuVVNL  | Consolidat<br>ed for 4<br>Discoms |
|--|----------|---------|---------|---------|-----------------------------------|
| Net Revenue Gap after considering part<br>recovery of Regulatory Asset admitted<br>by the Commission in Order dated<br>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<br>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<br>for the Revenue Gap of FY 2012-13 @<br>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<br>(Including Gap of Previous Years )  | 1312.46  | 6006.09 | 6119.51 | 6249.70 | 19687.76                          |
| Revenue Gap / (Surplus) for FY 2015-16<br>(at existing Tariff)   | -82.46   | 476.99  | 1717.30 | 1228.14 | 3339.97                           |
| Increase in Revenue due to Tariff  | 504 27   | 226.64  | 220.04  | 24.0.20 | 4 4 9 5 9 5                       |
| revision   | 501.27   | 336.64  | 328.84  | 318.30  | 1485.05                           |
| Total approved revenue for FY 2015-16<br>Net Revenue Gap for FY 2015-16 after  | 12791.89 | 8098.79 | 8691.82 | 8104.96 | 37687.47                          |
| tariff increase  | -583.73  | 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<br>recovery of Regulatory Asset admitted<br>by the Commission in this Order                     | 293.74   | 5871.03 | 7212.41 | 6883.92 | 20261.10                          |

8.4.10 As discussed in the earlier section, the Commission through its various Orders in the past had linked the performance parameters to the Regulatory Surcharge, considering the fact that, this performance linked Regulatory Surcharge will hopefully motivate the Licensee to take concrete steps towards reduction of losses and achieve the target consumer addition. The above



philosophy of the Commission can be supported by the fact, that in the deficit scenario prevailing in the State the under-achievement of the Distribution Losses results in lower sales which further, results in lower overall revenue. Also, the higher number of consumer base can result in higher revenue realisation for the Licensees. Further, as the recovery of Regulatory Surcharge is also proportionate to actual Revenue for the year, therefore the higher losses and lower consumer base would result in lower recovery of Regulatory Surcharge.

- 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).
- 8.4.12 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.



|                           | Linking of Performance of the Licensees to Regulatory Surcharge of FY 2016-17 |   |        |  |  |  |
|---------------------------|---|---|--------|--|--|--|
| Distribution<br>Licensees | Target number of<br>Consumers to be added<br>in FY 2015-16                    | rs to be added Connection in FY 2015-16 (20% of the |        |  |  |  |
|                           | (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% |  |  |  |

# TABLE -: LINKING OF PERFORMANCE OF THE LICENSEES TO REGULATORY SURCHARGEOF FY 2016-17

- 8.4.13 It may be clarified that the reduction in revenue to be recovered from Regulatory Surcharge 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.
- 8.4.14 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 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.
- 8.4.15 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, number of unmetered connection converted to metered connection and additional target consumers added in FY 2015-16 by 15<sup>th</sup> April, 2016.



- 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.
- Further, the Commission in its Tariff Order for FY 2014-15 has also linked the 8.4.17 consumer addition targets for FY 2014-15 to the tariff approvals for FY 2015-16 (i.e. in case the Licensee is not able to achieve the consumer addition targets in FY 2014-15, then the tariff for FY 2015-16 shall be deducted by 10% from the level to be approved for FY 2015-16). In this regard, the Commission is of the view that the Distribution Licensees have shown its sincere efforts to the direction given by the Commission. 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 achievement of the Licensees with regard to the consumer addition target, the Commission has not deducted any tariff from the level to be approved for FY 2015-16.
- 8.4.18 Further, the huge and ever increasing cumulative outstanding revenue gap to be recovered from the consumers is a matter of great concern for the Commission as well as the Licensees.

#### 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 and October 1, 2014. The status of compliance as submitted by the Licensee is as detailed in the following Table:

| SI.<br>No | Description of Directive  | Time Period<br>for compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of Compliance as submitted by<br>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 humbly submits that the<br>process of allocation of PPAs to the<br>Discoms has already been sent to the<br>GoUP for notification and the matter is<br>still pending at their level.                                    | Petitioner should<br>pursue the matter with<br>GoUP and complete the<br>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<br>months  | The Petitioner humbly submits that the<br>matter is being handled through the<br>holding company namely UPPCL on<br>behalf of all the Discoms which is<br>pressingly pursuing the matter with<br>the GoUP for the finalization of the | The Licensee should<br>expedite the process of<br>finalization of transfer<br>scheme and submit the<br>status of the same in |

#### TABLE -: STATUS OF COMPLIANCE OF DIRECTIVES OF TARIFF ORDER DATED MAY 31, 2013



| SI.<br>No | Description of Directive   | Time Period<br>for compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of Compliance as submitted by<br>Petitioner in Petition   | Commission's Direction   |
|-----------|--|---|--|--|
|           |  |   | Transfer Scheme.   | next Tariff filling.   |
| 3         | The Commission reiterates its direction to the<br>Licensee to ensure proper maintenance of<br>detailed fixed assets registers as specified in the<br>Distribution Tariff Regulations.<br>As the fixed asset registers are pending since the<br>creation of Discom, the Commission directs the<br>Licensee to submit a status report and provide<br>the proposed timelines / milestones for clearing<br>the backlog.<br>The Commission understands that clearing the<br>backlog would take substantive time. In order to<br>ensure that fixed asset registers are timely and<br>regularly prepared going forward, the<br>Commission directs the Licensee to prepare the<br>fixed asset registers duly accounting for the<br>yearly capitalisations from FY 2012-13 onwards.<br>The capitalisation for the period before that may<br>be shown on gross level basis. This dispensation<br>is merely to ensure that the proper asset | Immediate   | The Petitioner humbly submits that it<br>has not been able to finalise the<br>preparation of the FARs due to the<br>huge backlog of previous financial<br>years. The Petitioner humbly seeks<br>time extension in this regard. | It has been observed<br>that the Petitioner has<br>neither submitted the<br>status report on<br>clearance of backlog<br>nor has it submitted the<br>Fixed Asset Registers for<br>FY 2012-13 onwards.<br>The Commission cannot<br>give indefinite time for<br>preparation of the FAR.<br>Licensee should submit<br>the same in next ARR<br>filling. |



| SI.<br>No | Description of Directive   | Time Period<br>for compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of Compliance as submitted by<br>Petitioner in Petition  | Commission's Direction  |
|-----------|--|---|---|---|
|           | registers capturing all necessary details of the<br>asset, including the costs incurred, date of<br>commissioning, location of asset, and all other<br>technical details are maintained for the ensuing<br>years. However, the Licensee would also be<br>required to clear the backlog in a time bound<br>manner. Upon finalisation of the Transfer<br>Scheme and clearing of backlog, the Licensee<br>may update the fixed asset registers<br>appropriately by passing necessary adjustments. |   |   |   |
| 4         | The Commission directs the Licensee to frame an<br>appropriate policy on capitalization of (i)<br>employee costs, and (ii) A&G expenses.   | Along with the<br>petition for FY<br>2014-15                                      | The Petitioner's policy on capitalization<br>of (i) employee costs, and (ii) A&G<br>expenses has been provided in the<br>Notes on Accounts annexed with the<br>audited accounts which is reproduced<br>below:<br>"Due to multiplicity of functional units<br>as well as multiplicity of function at<br>particular unit, employee cost and<br>general & administration expenses to | The Commission in its<br>Order dated October 1,<br>2014 had directed the<br>Petitioner that the<br>Licensee has quoted the<br>extract of the audited<br>accounts, however, the<br>Licensee has not framed<br>any policy in the same.<br>Licensee should frame a |



| SI.<br>No | Description of Directive   | Time Period<br>for compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of Compliance as submitted by<br>Petitioner in Petition   | Commission's Direction  |
|-----------|--|---|--|---|
|           |  |   | capital works are capitalised @ 15% on<br>distribution and deposit work, 11% on<br>other works on the amount of total<br>expenditure."   | policy for capitalization<br>of (i) employee costs,<br>and (ii) A&G expenses.   |
| 5         | The Commission directs the Licensee to submit<br>Fresh Actuarial Valuation Study Report in respect<br>to employee expenses.  | Along with the<br>petition for FY<br>2014-15                                      | The Petitioner submits that the matter<br>would be taken up at UPPCL level as<br>the employees of the Licensee are not<br>its core employees but common<br>employees across all 4 Discoms,<br>UPPTCL and UPPCL.  | As directed in the<br>previous Order, the<br>Licensee should submit<br>the Fresh Actuarial<br>Valuation Study Report<br>in respect to employee<br>expenses in its next ARR<br>filing.                       |
| 6         | As lack of approved transparent policy on<br>identifying and writing off bad debts is hindering<br>allowance of bad debts as an ARR component;<br>the Commission directs the Licensee to submit<br>ten sample cases of LT & HT consumers where<br>orders have been issued for writing off bad<br>debts, clearly depicting the procedure adopted<br>for writing off bad debts along with policy | Within 1<br>month   | The Petitioner submits that it has<br>framed a policy for identifying and<br>writing off old arrears and a copy of<br>the same was submitted to the<br>Hon'ble Commission during the<br>proceedings in respect of ARR and<br>Tariff Petition for FY 2014-15.<br>Appropriate directions have been | The Petitioner has<br>submitted the approach<br>for creation of provision<br>of bad debts instead of<br>the policy followed by it<br>for identification of<br>actual bad debts and<br>writing off the same. |



| SI.<br>No | Description of Directive  | Time Period<br>for compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of Compliance as submitted by<br>Petitioner in Petition  | Commission's Direction   |
|-----------|---|---|---|--|
|           | framework for managing bad debts for the<br>Commission's perusal. |   | issued to the field units to compile the<br>sample cases based on such order<br>issued by the licensee. | Thus, the Licensee<br>should submit<br>appropriate policy with<br>regard to the same.<br>Further, it is observed<br>that the Petitioner has<br>not yet submitted any<br>such sample data on the<br>consumer indicating the<br>policy framework for<br>managing bad debts for<br>the Commission's<br>perusal. In this regards<br>the Petitioner should<br>submit ten sample<br>cases of LT & HT<br>consumers where<br>orders have been issued<br>for writing off bad debts<br>and steps undertaken<br>by it to ensure |



| SI.<br>No | Description of Directive   | Time Period<br>for compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of Compliance as submitted by<br>Petitioner in Petition  | Commission's Direction   |
|-----------|--|---|---|--|
|           |  |   |   | compliance with the directive.   |
| 7         | The Commission directs the Licensee to evolve<br>principles for prudent segregation of ARR<br>towards wheeling function and retail supply<br>function embedded in the distribution function in<br>accordance with Clause 2.1.2 of the Distribution<br>Tariff Regulations.  | Within 4<br>months  | The Licensee submitted that the same<br>would be taken up subsequent to the<br>notification of the Multi Year Tariff<br>Regulations which are currently under<br>formulation. | The Petitioner should<br>comply with the<br>direction of Commission<br>as per the time lines<br>mentioned in the<br>UPERC MYT,<br>Regulations, 2014. |
| 8         | The Commission directs the Licensee to submit a<br>long term business plan in accordance with<br>Clause 2.1.7 of the Distribution Tariff<br>Regulations.<br>The Licensee in such business plan shall identify<br>capex projects for the ensuing year and<br>subsequent four years and submit detailed<br>capital investment plan along with a financing<br>plan for undertaking the identified projects in<br>order to meet the requirement of load growth,<br>refurbishment and replacement of equipment, | Within 3<br>months  | The Licensee submitted that the same<br>would be taken up subsequent to the<br>notification of the Multi Year Tariff<br>Regulations which are current under<br>formulation.   |  |



| SI.<br>No | Description of Directive  | Time Period<br>for compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of Compliance as submitted by<br>Petitioner in Petition  | Commission's Direction  |
|-----------|---|---|---|---|
|           | reduction in distribution losses, improvement of<br>voltage profile, improvement in quality of supply,<br>system reliability, metering, communication and<br>computerization, etc.  |   |   |   |
| 9         | The Commission directs the Licensee to conduct<br>benchmarking studies to determine the desired<br>performance standards in accordance with<br>Clause 2.1.8 of the Distribution Tariff<br>Regulations.  | Within 3<br>months  | The Petitioner submits that as per the<br>Uttar Pradesh Electricity Regulatory<br>Commission (Multi Year Distribution<br>Tariff) Regulations, 2014 the<br>benchmarking studies have to be<br>completed by 30.09.2015. Accordingly,<br>the same would be completed in the<br>stipulated timeframe. |   |
| 10        | The Commission directs the Licensee to conduct<br>proper loss estimate studies for assessment of<br>technical and commercial losses under its<br>supervision so that the Commission may set the<br>base line losses in accordance with Clause 3.2.3<br>and Clause 3.2.4 of the Distribution Tariff<br>Regulations and submit the report to the<br>Commission. |   | The PFC Consulting Ltd has submitted<br>a draft approach paper which is in<br>discussion stage. Once the approach<br>paper is finalised, the Petitioner would<br>submit the same to the Hon'ble<br>Commission.  | The Petitioner should<br>expedite the process as<br>the time period allowed<br>for conducting the<br>study was 3 months. In<br>this regard, the<br>Petitioner should<br>submit a tentative date |



| SI.<br>No | Description of Directive  | Time Period<br>for compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of Compliance as submitted by<br>Petitioner in Petition  | Commission's Direction   |
|-----------|---|---|---|--|
|           | 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.). |   |   | for submission of the<br>report and complete<br>the study at the<br>earliest.  |
| 11        | The Commission directs the Licensee to conduct<br>Cost of Service studies which would serve as a<br>tool for alignment of costs and charges and<br>submit details regarding the cost of service<br>studies for each category or voltage level.  | Within 6<br>months  | The PFC Consulting Ltd. has submitted<br>a draft approach paper which is in<br>discussion stage. Once the approach<br>paper is finalised, the Petitioner would<br>submit the same to the Hon'ble<br>Commission. | The Petitioner should<br>expedite the process as<br>the time period allowed<br>for conducting the<br>study was 3 months. In<br>this regard, the<br>Petitioner should<br>submit a tentative date<br>for submission of the<br>report and complete<br>the study at the<br>earliest. |



| SI.<br>No | Description of Directive   | Time Period<br>for compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of Compliance as submitted by<br>Petitioner in Petition   | Commission's Direction   |
|-----------|--|---|--|--|
| 12        | Commission directs the Licensee to submit a road<br>map for 100% metering in its licensed area.<br>However, based on the ground realities, if the<br>Distribution Licensee seeks exemption towards<br>its metering obligation for any particular<br>category of consumers, it must provide the<br>Commission revised norms specific for its supply<br>area, based on fresh studies, for assessment of<br>consumption for these categories. Sales forecast<br>for un-metered categories shall be validated with<br>norms approved by the Commission on the basis<br>of above study carried out by the Licensee. | Within 2<br>months  | The Petitioner submits that as per the<br>Uttar Pradesh Electricity Regulatory<br>Commission (Multi Year Distribution<br>Tariff) Regulations, 2014 the study for<br>assessment of metered and<br>unmetered consumers has to be<br>completed by 30.09.2015 and<br>31.12.2015 respectively.<br>Accordingly, the same would be<br>completed in the stipulated<br>timeframe. | The Petitioner should<br>submit the same as per<br>the stipulated time<br>frame.           |
| 13        | The Commission directs the Licensee to install<br>electronic meters in the residential consumers<br>under LMV-10 category and submit a progress<br>report every month.   | Within one<br>month   | The Petitioner submits that Section 23<br>(7) of Electricity Reforms Act, 1999<br>provides that "terms and condition of<br>service of the personnel shall not be<br>less favourable to the terms and<br>condition which were applicable to<br>them before the transfer". The same<br>spirit has been echoed under first  | statutory provision<br>nowhere specifies that<br>the LMV- 10 consumers<br>can be unmetered |



| SI.<br>No | Description of Directive   | Time Period<br>for compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of Compliance as submitted by<br>Petitioner in Petition  | Commission's Direction   |
|-----------|--|---|---|--|
|           |  |   | proviso of section 133 (2) of the<br>Electricity Act, 2003. The benefits for<br>employees / pensioners as provided in<br>section 12 (b) (ii) of the Uttar Pradesh<br>Reform Transfer Scheme, 2000 include<br>"concessional rate of electricity",<br>which means concession in rate of<br>electricity to the extent it is not<br>inferior to what was existing before<br>14th January, 2000. | Commission again<br>directs the Licensee to<br>install electronic meters<br>in the residential<br>consumers under LMV-<br>10 category.           |
| 14        | The Commission directs the Licensee to submit<br>data related to its peak demand and off peak<br>demand in MW along with its sales projections in<br>accordance with Clause 3.1.4 of the Distribution<br>Tariff Regulations. | Along with the<br>petition for FY<br>2014-15                                      |   | Petitioner should<br>submit the details<br>sought by the<br>Commission regarding<br>peak and off peak<br>demand alongwith next<br>tariff filing. |
| 15        | The Commission directs the Licensee to reconcile<br>the inter-unit balances lying un-reconciled either<br>itself or through independent chartered  | Along with the petition for FY 2014-15  | The Petitioner submits that the determination of tariff is done by the Hon'ble Commission on normative  | The Commission has trued-up the ARR for various years. However,  |



| SI.<br>No | Description of Directive  | Time Period<br>for compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of Compliance as submitted by<br>Petitioner in Petition   | Commission's Direction   |
|-----------|---|---|--|--|
|           | accountant firms.   |   | basis based on the Tariff Regulations.<br>As such the inter-unit reconciliation<br>has no forbearance on the ARR and<br>Tariff determination and assessment<br>of revenue gap.                               | it has been observed<br>that the amount shown<br>in head of inter-unit<br>balance is very high and<br>a detailed reconciliation<br>and breakup of the<br>same should be<br>submitted to the<br>Commission within 1<br>month of this Order.<br>The above details<br>should be submitted for<br>FY 2011-12, FY 2012-13<br>and 2013-14. |
| 16        | The Commission directs the Licensee to file<br>submissions in respect of FPPCA in a timely and<br>regular manner. | Every quarter<br>as per the time<br>frame<br>prescribed in<br>the<br>Regulations  | The Petitioner states that a decision on<br>the Petition filed towards<br>clarification/modification of the FPPCA<br>formula is still pending with the<br>Hon'ble Commission.<br>Once the final order of the | The Licensee is directed<br>to file FPPCA regularly<br>as per the formula<br>approved in this order.   |



| SI.<br>No | Description of Directive  | Time Period<br>for compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of Compliance as submitted by<br>Petitioner in Petition | Commission's Direction   |
|-----------|---|---|--|--|
|           |   |   | Commission is issued, the Petitioner                           |  |
|           |   |   | would file such submissions.                                   |  |
| 17        | The Commission directs the Licensee to depict<br>the regulatory surcharge distinctly in the<br>electricity bills of the consumers and create<br>separate accounting fields to capture the<br>amounts collected as regulatory surcharge in<br>both of its financial and commercial statements.<br>The Commission directs the Licensee to provide<br>the details of the regulatory surcharge so<br>collected for FY 2013-14 duly certified by the<br>statutory auditor. | By 30 <sup>th</sup><br>September<br>2014  |  | Licensee should submit<br>the details of the<br>regulatory surcharge in<br>the true up petition for<br>FY 2013-14. |



| SI.<br>No | Description of Directive  | Time<br>Period for<br>compliance<br>from the<br>date of<br>issue of the<br>Tariff Order | Status of Compliance   | Commission's Direction   |
|-----------|---|---|--|--|
| 1         | The Licensees are directed to arrange for quarterly<br>meetings between the MDs of the Licensees and the<br>consumer representatives for solving various<br>grievances of the consumers and submit a status<br>report containing details of such meetings along<br>with the next ARR filing.                              | Immediate   | The Petitioner humbly submits that the<br>Tariff Order for FY 2014-15 was issued<br>only recently. A status report for the<br>quarter Oct-Dec and Jan-March would<br>be submitted after the financial year-<br>end in the month of April 2015. | The Petitioner should<br>submit status report for<br>the quarter Oct-Dec and<br>Jan-March at the earliest.   |
| 2         | The Commission directs the Licensee to pay the<br>applicable interest on consumer's security deposit<br>as per the Orders of the Commission and submit the<br>compliance report with the next ARR filing.<br>Licensees are directed to ensure the timely payment<br>of the interest on security deposit to the consumers. | Immediate   | The Petitioner submits that the interest<br>on consumer security deposit is being<br>credited to the consumer's account in<br>terms of the Supply Code and Tariff<br>Orders of the Hon'ble Commission.   | Petitioner should submit<br>the details of the actual<br>interest on consumer<br>security deposit paid to<br>the consumers in FY<br>2014-15 along with next<br>ARR filing. |
| 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   | Immediate   | The Petitioner has noted the directions<br>of the Hon'ble Commission and<br>appropriate action towards prompt<br>address and disposal of consumer  | Licensee should submit<br>the advertisement given<br>regarding CGRF to bring<br>awareness amongst the  |

# TABLE -: STATUS OF COMPLIANCE OF DIRECTIVES OF TARIFF ORDER DATED OCTOBER 1, 2014



| SI.<br>No | Description of Directive  | Time<br>Period for<br>compliance<br>from the<br>date of<br>issue of the<br>Tariff Order | Status of Compliance  | Commission's Direction   |
|-----------|---|---|---|--|
|           | appropriate action on the same. Further, the<br>Licensee must ensure that proper advertising<br>regarding CGRF is done to bring awareness amongst<br>the consumers. The chairperson of the CGRF should<br>also be part of such public hearings so that a direct<br>interaction may take place and the grievances of the<br>consumers could be settled in a more appropriate<br>manner |   | grievances has been initiated. The<br>Petitioner also welcomes the<br>suggestion of the Hon'ble Commission<br>towards proper advertising of the<br>CGRFs and is working towards it.   | consumers alongwith<br>next ARR filing.                                    |
| 4         | To provide accurate and effective consumption<br>norms, the Commission directs the Petitioners to<br>conduct a detailed study which should include all<br>the relevant details pointed out by the Commission.   | Within 6<br>months<br>from issue<br>of this<br>Order                                    | The Petitioner submits that as per the<br>Uttar Pradesh Electricity Regulatory<br>Commission (Multi Year Distribution<br>Tariff) Regulations, 2014 the study for<br>assessment of metered and unmetered<br>consumers has to be completed by<br>30.09.2015 and 31.12.2015<br>respectively.<br>Accordingly, the same would be<br>completed in the stipulated timeframe. | submit the study report<br>as per the time lines<br>mentioned in the UPERC |



| SI.<br>No | Description of Directive  | Time<br>Period for<br>compliance<br>from the<br>date of<br>issue of the<br>Tariff Order | Status of Compliance  | Commission's Direction   |
|-----------|---|---|---|--|
| 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 31 <sup>st</sup> 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<br>from issue<br>of this<br>Order  | The Petitioner submits that the licensee<br>is endeavouring to comply with the<br>targets set by the Hon'ble Commission<br>in terms of metering.<br>The roadmap for 100% metering is<br>under preparation and would be<br>submitted within the stipulated<br>timeline.    | Licensee should submit<br>the road map for 100%<br>metering as per given<br>timelines.                   |
| 6         | The Commission directs the Distribution Licensees<br>to formulate a mechanism so as to make their<br>officials accountable by providing incentives or<br>disincentives for achievement or non-achievement<br>of the distribution loss and the collection efficiency<br>targets. The Policy should include all the relevant<br>details pointed out by the Commission in this Order                                       | Within 2<br>months<br>from the<br>issue of this<br>Order                                | The Petitioner humbly seeks some<br>more time to comply with the directives<br>of the Hon'ble Commission. However<br>presently monthly review meetings are<br>been conducted in the form of<br>teleconference wherein the progress<br>for each division is been monitored | The Licensee must<br>expedite the process to<br>comply with the<br>direction given by the<br>Commission. |
| 7         | The Commission further directs the Petitioner to  | Within 2  | The Petitioner humbly seeks some  | The Licensee must  |



| SI.<br>No | Description of Directive  | Time<br>Period for<br>compliance<br>from the<br>date of<br>issue of the<br>Tariff Order | Status of Compliance  | Commission's Direction   |
|-----------|---|---|---|--|
|           | sign the MoUs to be implemented at all levels and<br>submit the copy of the same to the Commission<br>within 2 months from the date of this Order.  | months<br>from the<br>date of<br>issuance of<br>this Order                              | more time to comply with the directives of the Hon'ble Commission.  | expedite the process to<br>comply with the<br>direction given by the<br>Commission.                  |
| 8         | The Commission directs the Petitioner to provide<br>the actual power purchase data in the format<br>specified by the Commission along with the ARR<br>Petition for FY 2015-16.  | Next ARR<br>filing  | The Petitioner humbly submits that it<br>has enclosed a detailed power<br>procurement plan for the ensuing year<br>FY 2015-16 along with the ARR Petition.  |  |
| 9         | As regards timely filing of FPPCA the Commission<br>once again directs the Licensees that they should<br>file FPPCA in a timely and regular manner in<br>accordance with the Distribution Tariff Regulations,<br>2006 failing which the Commission may have to<br>resort to take strict action against the Licensees. | Immediate   | The Petitioner states that a decision on<br>the Petition filed towards clarification/<br>modification of the FPPCA formula is<br>still pending with the Hon'ble<br>Commission.<br>Once the final order of the Commission<br>is issued, the Petitioner would file such<br>submissions. | The Licensee is directed<br>to file FPPCA regularly as<br>per the formula<br>approved in this order. |
| 10        | As regards the increasing number of unmetered   | By 31 <sup>st</sup>   | The Petitioner is committed to the  | The Licensee should  |



| SI.<br>No | Description of Directive  | Time<br>Period for<br>compliance<br>from the<br>date of<br>issue of the<br>Tariff Order | Status of Compliance  | Commission's Direction  |
|-----------|---|---|---|---|
|           | consumers the Commission accords a final<br>opportunity to the Distribution Licensees and<br>directs them to ensure that all their unmetered<br>consumers get converted into metered connection.  | March,<br>2015  | target set by the Hon'ble Commission in<br>the Tariff Order for FY 2014-15 towards<br>metering of consumers and is working<br>towards it.   | expedite the process and<br>complete the metering<br>as per this direction of<br>the Commission.  |
| 11        | As regards the RPO Obligation the Licensees are<br>directed to ensure that they procure renewable<br>energy in accordance with Regulation 4 of the<br>UPERC (Promotion of Green Energy through<br>Renewable Purchase Obligation) Regulations, 2010<br>during FY 2014-15 to meet their obligation. | Next ARR<br>filing  | The Petitioner is procuring power from<br>various renewable energy sources such<br>as bagasse based co-generation plants,<br>small hydro power stations, biomass<br>based renewable energy plants, solar,<br>etc with a view to promote green<br>energy sources and compliance with<br>the UPERC RPO Obligations. | Petitioner should<br>demonstrate that how it<br>is going to comply with<br>the RPO obligation in FY<br>2015-16 separately<br>showing the<br>procurement and<br>obligation from solar &<br>non solar sources in next<br>tariff filing. |
| 12        | As regards the choice of connection, the Licensee, in<br>accordance with the provisions of the supply code<br>wherein the consumer has the choice to opt the<br>supplier, is directed to release connections to all   | Next ARR<br>filing  | Wherever feasible (both technical and economical), the Petitioner is complying with the provisions of the Supply Code.  |   |



| SI.<br>No | Description of Directive   | Time<br>Period for<br>compliance<br>from the<br>date of<br>issue of the<br>Tariff Order | Status of Compliance  | Commission's Direction   |
|-----------|--|---|---|--|
|           | such consumers who desire to disconnect their<br>connections from the single point supplier and<br>instead wish to take connections directly from the<br>Licensee and submit the status report on the same<br>along with next ARR filing   |   |   |  |
| 13        | The Licensees are directed to provide the monthly<br>MRI reports to all the applicable consumers through<br>email. The consumers would be required to register<br>their email to the Licensee and submit the status<br>report on the same along with next ARR filing   | Immediate   | The MRI reports are being provided to<br>the consumers. However, the<br>possibilities of sending the same by<br>email are being explored by the<br>Petitioner.  | The Licensee must<br>expedite the process to<br>comply with the<br>direction given by the<br>Commission and submit<br>the compliance of the<br>same at the earliest. |
| 14        | The Licensee is directed to file a separate Petition<br>for approval of prior period expenses / incomes. The<br>Petition should clearly indicate the head-wise year-<br>wise bifurcation of prior period expenses / incomes<br>clearly indicating the impact of such expenses /<br>incomes on various ARR components, and such | 1 month<br>from the<br>date of<br>issuance of<br>this Order                             | The Petitioner submits that the prior<br>period expenses / incomes are<br>recognised in the financial statements<br>in compliance with the Accounting<br>Standards (AS 5) (Revised) on 'Net<br>Profit or Loss for the Period, Prior |  |



| SI.<br>No | Description of Directive  | Time<br>Period for<br>compliance<br>from the<br>date of<br>issue of the<br>Tariff Order | Status of Compliance  | Commission's Direction |
|-----------|---|---|---|------------------------|
|           | impact should not exceed the normative expenses<br>for any particular year. |   | Period Items and Changes in Accounting<br>Policies' which does not require year<br>wise classification of prior period items.<br>As there was no statutory requirement<br>of classifying the prior items with<br>respect to the each year to which they<br>pertain, such information was not<br>specifically depicted in the audited<br>accounts.<br>Considering this, the expenses and<br>incomes which are omitted to be<br>accounted for in one or more financial<br>years are accounted for as and when<br>such omissions or errors are detected.<br>However, given the directive by the<br>Hon'ble Commission, the Petitioner has<br>instructed the field units to compile<br>such information. The information<br>made available by the field units would |                        |



| SI.<br>No | Description of Directive   | Time<br>Period for<br>compliance<br>from the<br>date of<br>issue of the<br>Tariff Order | Status of Compliance  | Commission's Direction   |
|-----------|--|---|---|--|
|           |  |   | be compiled at the zonal level and then<br>zonal accounts would be compiled at<br>the corporate level.<br>Given the complexity of this task, the<br>Petitioner seeks waival from immediate<br>submission of this information. |  |
| 15        | The Licensee is directed to submit a note detailing<br>the area-wise actual number of supply hours<br>provided to rural areas by the end of FY 2014-15.  | By end of<br>FY 2014-15   | The details would be submitted at the<br>end of the financial year as per the<br>stipulated time period.  | As the financial year has<br>ended. The Licensee<br>should submit a note<br>detailing the area-wise<br>actual number of supply<br>hours provided to rural<br>areas during FY 2014-15<br>at the earliest. |
| 16        | The Licensees are directed to depict the Regulatory<br>Surcharge separately and distinctly in the electricity<br>bills of the consumers. The Commission directs the<br>Licensee to maintain separate accounting fields for | Immediate   | Suitable instructions have been issued<br>to the billing agents and field units to<br>create a separate and distinct head<br>under which the regulatory surcharges  |  |



| SI.<br>No | Description of Directive   | Time<br>Period for<br>compliance<br>from the<br>date of<br>issue of the<br>Tariff Order | Status of Compliance   | Commission's Direction  |
|-----------|--|---|--|---|
|           | both the regulatory surcharges approved vis-a vis<br>the Commission's Order dated 6 <sup>th</sup> June, 2014 and<br>that approved in this Order, and capture the two<br>different amounts collected as Regulatory<br>Surcharges in both of its financial and commercial<br>statements. This would enable the Licensee to<br>correctly report the amounts collected towards<br>Regulatory Surcharges. |   | would be collected.  |   |
| 17        | The Distribution Licensees are directed to submit<br>the actual Regulatory Surcharge recovered in FY<br>2014-15 on account of the Revenue Gap /<br>Regulatory Asset admitted by the Commission in<br>this Order along with the actual Distribution Losses<br>achieved in FY 2014-15 and additional target<br>consumers added in FY 2014-15 by 15 <sup>th</sup> April, 2015.                          | By 15 <sup>th</sup><br>April, 2015  | The Petitioner humbly states that it would be able to submit the figures of actual regulatory surcharge recovered in FY 2014-15 by 30 <sup>th</sup> June 2015. This is due to the reason that the commercial statements are finalised with a time lag of 2 months. | Licensees are directed to<br>submit the actual<br>Regulatory Surcharge<br>recovered in FY 2014-15 |



| SI.<br>No | Description of Directive | Time<br>Period for<br>compliance<br>from the<br>date of<br>issue of the<br>Tariff Order | Status of Compliance | Commission's Direction   |
|-----------|--------------------------|---|----------------------|--|
|           |                          |   |                      | along with the actual<br>Distribution Losses<br>achieved in FY 2014-15<br>and additional target<br>consumers added by<br>June 30, 2015 |



- 9.1.2 The Commission once again directs the Licensee to comply with the balance directives issued in the previous Tariff Order. 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:

| Sl.No. | Description of Directive   | Time Period for compliance<br>from the date of issue of<br>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. | Within 3 months   |

### TABLE -: DIRECTIVES ISSUED UNDER THE PRESENT TARIFF ORDER



| Sl.No. | Description of Directive   | Time Period for compliance<br>from the date of issue of<br>the Tariff Order |
|--------|--|---|
| 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   |
| 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                                      |
| 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                                      |
| 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. | Within 1 month  |
| 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                                      |



| Sl.No. | Description of Directive  | Time Period for compliance<br>from the date of issue of<br>the Tariff Order |
|--------|---|---|
| 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                                      |
| 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.  | Immediate   |
| 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 31 <sup>st</sup> 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<br>Order  |
| 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<br>the date of issuance of this<br>Order           |
| 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   |



| SI.No. | Description of Directive  | Time Period for compliance<br>from the date of issue of<br>the Tariff Order |  |
|--------|---|---|--|
| 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   |  |
| 13     | As regards the RPO Obligation the Licensees 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   |  |
| 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   | Next ARR filing   |  |
| 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                             |  |
| 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.   | By end of FY 2015-16  |  |



| Sl.No. | Description of Directive   | Time Period for compliance<br>from the date of issue or<br>the Tariff Order |  |  |
|--------|--|---|--|--|
| 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 15 <sup>th</sup> April, 2016.  | By 15 <sup>th</sup> April, 2016   |  |  |
| 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<br>stipulated in MYT<br>Regulations, 2014             |  |  |
| 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<br>stipulated in MYT<br>Regulations, 2014             |  |  |
|        | 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. |   |  |  |
| 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<br>stipulated in MYT<br>Regulations, 2014             |  |  |



| Sl.No. | Description of Directive  | Time Period for compliance<br>from the date of issue of<br>the Tariff Order                      |
|--------|---|--|
| 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<br>stipulated in MYT<br>Regulations, 2014                                  |
| 22     | The Petitioner should complete the Assessment Study of metered consumers as per the Regulations16.2 notified vide MYT Regulations, 2014 and subsequently submit the report to the Commission  | As per the Time frame<br>stipulated in MYT<br>Regulations, 2014                                  |
| 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<br>stipulated in MYT<br>Regulations, 2014                                  |
| 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<br>stipulated in MYT<br>Regulations, 2014                                  |
| 25     | The Commission reiterates that the Licensees should conduct a detailed study to provide accurate<br>and effective consumption norms as specified by the Commission in its earlier Orders and as per<br>the provisions outlined in Uttar Pradesh Electricity Regulatory Commission (Multi Year<br>Distribution Tariff) Regulations, 2014 in the time bound manner. | As per the Time frame<br>stipulated in MYT<br>Regulations, 2014                                  |
| 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<br>end , for each quarter of<br>Tariff Period 1.4.2015 to<br>31.3.2020 |



| SI.No. | Description of Directive   | Time Period for compliance<br>from the date of issue of<br>the Tariff Order |
|--------|--|---|
| 27     | The Petitioner should submit Roadmap for Reduction of Cross Subsidy as per the Regulation 39 notified vide MYT Regulations, 2014           | Immediately   |
| 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  |
| 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                                   |
| 30     | Licensee should provide online facility for submission of application for new connection, name change, load enhancement and load reduction | Within 3 months   |
| 31     | Licensee should develop the mobile application for online payments of bills including other services for facilitation to consumers         | Within 3 months   |
| 32     | The Petitioner should submit Standards of Performance parameters as per the tariff formats of Distribution Tariff Regulations, 2006.       | Within one month from<br>issue of this Order                                |
| 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                                   |



| SI.No. | Description of Directive   | Time Period for compliance<br>from the date of issue of<br>the Tariff Order |
|--------|--|---|
| 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                                  |
| 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 and power cost payable to UPPCL in its true-up petitions for future years. | Next ARR filing   |
| 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   |

- 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 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 and regulatory surcharge 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.

(I. B. Pandey) Member (Meenakshi Singh) Member (Desh Deepak Verma) Chairman

Dated: June 18, 2015 Lucknow.



#### 11. ANNEXURES

# 11.1 COMMISSION FORECAST OF CONSUMPTION PARAMETERS FOR FY 2015-16

# TABLE -: COMMISSION'S APPROVAL OF NUMBER OF CONSUMERS FOR FY 2015-16

| Consumer categories                     | FY 11-12  | FY 12-13  | FY 13-14  | Recompute<br>d for FY 14-<br>15 | Approved<br>for FY 2015-<br>16 |
|---|-----------|-----------|-----------|---------------------------------|--------------------------------|
| LMV-1: Domestic                         |           |           |           |                                 |                                |
| Rural (unmetered)                       | 8,31,834  | 8,48,076  | 8,88,464  | 7,99,618                        | 6,21,925                       |
| Rural (metered)                         | 3,09,094  | 2,94,001  | 3,36,631  | 5,85,661                        | 15,64,274                      |
| Bulk Load                               | 22        | 28        | 27        | 28                              | 29                             |
| Other Metered                           | 12,11,129 | 12,84,543 | 12,86,322 | 13,63,501                       | 14,45,311                      |
| BPL                                     | 1,89,960  | 2,33,885  | 3,21,308  | 3,79,143                        | 4,47,389                       |
| SUBTOTAL (LMV-1)                        | 25,42,039 | 26,60,533 | 28,32,752 | 31,27,952                       | 40,78,928                      |
| LMV-2:Non-Domestic                      |           |           |           |                                 |                                |
| Rural (unmetered)                       | 21,412    | 21,069    | 20,609    | 21,846                          | 23,156                         |
| Rural (metered)                         | 13,215    | 26,232    | 24,034    | 28,841                          | 34,609                         |
| Advertising                             | 6,981     | 6,981     | -         | -                               | -                              |
| Other Metered                           | 2,27,180  | 2,18,492  | 2,20,277  | 2,24,683                        | 2,29,176                       |
| SUBTOTAL (LMV-2)                        | 2,68,788  | 2,72,774  | 2,64,920  | 2,75,369                        | 2,86,941                       |
| LMV-3: Public Lamps                     |           |           |           |                                 |                                |
| Unmetered - Gram<br>Panchayat           | 1,525     | 1,480     | 3,683     | 3,720                           | 3,757                          |
| Unmetered - Nagar<br>Palika & Panchayat | 4,287     | 4,383     | 148       | 154                             | 160                            |
| Unmetered - Nagar<br>Nigam              | 40        | 36        | 44        | 46                              | 49                             |
| Metered - Gram<br>Panchayat             | 5         | 2         | -         | -                               | -                              |
| Metered - Nagar Palika<br>& Panchayat   | 82        | 85        | 97        | 106                             | 115                            |
| Metered - Nagar Nigam                   | 63        | 71        | 57        | 67                              | 78                             |
| SUBTOTAL (LMV-3)                        | 6,002     | 6,057     | 4,029     | 4,092                           | 4,159                          |
| LMV-4: Institutions                     |           |           |           |                                 |                                |
| Public                                  | 12,911    | 14,479    | 15,064    | 16,269                          | 17,571                         |



Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Consumer categories              | FY 11-12 | FY 12-13 | FY 13-14 | Recompute<br>d for FY 14-<br>15 | Approved<br>for FY 2015-<br>16 |
|----------------------------------|----------|----------|----------|---------------------------------|--------------------------------|
| Private                          | 2,946    | 1,796    | 2,239    | 2,418                           | 2,612                          |
| SUBTOTAL (LMV-4)                 | 15,857   | 16,275   | 17,303   | 18,687                          | 20,182                         |
|                                  |          |          |          |                                 |                                |
| LMV-5: Private Tube<br>Wells     |          |          |          |                                 |                                |
| Rural (unmetered)                | 1,26,701 | 1,30,578 | 1,36,615 | 1,36,615                        | 1,36,615                       |
| Rural (metered)                  | 302      | 404      | 1,064    | 1,330                           | 1,663                          |
| Urban (metered)                  | 6,623    | 6,475    | 6,181    | 6,923                           | 7,753                          |
| SUBTOTAL (LMV-5)                 | 1,33,626 | 1,37,457 | 1,43,860 | 1,44,868                        | 1,46,031                       |
| LMV 6: Small and<br>Medium Power |          |          |          |                                 |                                |
| Power Loom: Rural                | 1,574    | 8,236    | 9,794    | 10,969                          | 12,286                         |
| Power Loom: Urban                | 9,889    | 1,518    | 1,382    | 1,451                           | 1,524                          |
| Others: Rural                    | 11,212   | 12,495   | 11,093   | 12,202                          | 13,423                         |
| Others: Urban                    | 11,421   | 12,870   | 12,747   | 13,512                          | 14,323                         |
| SUBTOTAL (LMV-6)                 | 34,096   | 35,119   | 35,016   | 38,135                          | 41,554                         |
| LMV-7: Public Water<br>Works     |          |          |          |                                 |                                |
| Rural: Jal Nigam                 | 355      | 346      | 281      | 284                             | 287                            |
| Rural: Jal Sansthan              | 38       | 28       | 64       | 69                              | 75                             |
| Rural: Other PWWs                | 139      | 178      | 219      | 267                             | 326                            |
| Urban: Jal Nigam                 | 134      | 188      | 235      | 296                             | 373                            |
| Urban: Jal Sansthan              | 599      | 622      | 649      | 701                             | 757                            |
| Urban: Other PWWs                | 404      | 366      | 323      | 339                             | 356                            |
| SUBTOTAL (LMV-7)                 | 1,669    | 1,728    | 1,771    | 1,956                           | 2,173                          |
| LMV-8: State Tube<br>Wells       |          |          |          |                                 |                                |
| Metered STW                      | 1,059    | 203      | 439      | 492                             | 551                            |
| Unmetered STW                    | 8,128    | 8,847    | 8,712    | 8,886                           | 9,064                          |
| Unmetered Laghu Dal<br>Nahar     | 10       | 14       | 94       | 120                             | 154                            |
| SUBTOTAL (LMV-8)                 | 9,197    | 9,064    | 9,245    | 9,498                           | 9,769                          |
| LMV-9: Temporary                 |          |          |          |                                 |                                |



Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Consumer categories                | FY 11-12 | FY 12-13 | FY 13-14 | Recompute<br>d for FY 14-<br>15 | Approved<br>for FY 2015-<br>16 |
|------------------------------------|----------|----------|----------|---------------------------------|--------------------------------|
| Supply                             |          |          |          |                                 |                                |
| Metered: Individual residential    | 1,687    | 1,604    | 125      | 131                             | 138                            |
| Metered: Others                    | -        | -        | -        | -                               | -                              |
| Unmetered:<br>Ceremonies           | 25       | -        | -        | -                               | -                              |
| Unmetered: Temp<br>shops           | -        | -        | -        | -                               | -                              |
| SUBTOTAL (LMV-9)                   | 1,712    | 1,604    | 125      | 131                             | 138                            |
| LMV-10: Departmental<br>Employees  |          |          |          |                                 |                                |
| Class IV                           | 3,446    | 3,665    | 2,648    | 2,780                           | 2,919                          |
| Class III                          | 3,752    | 5,166    | 3,926    | 4,005                           | 4,085                          |
| Junior Engineers                   | 2,782    | 332      | 351      | 365                             | 380                            |
| Assistant Engineers                | 96       | 103      | 106      | 110                             | 115                            |
| Executive Engineers                | 589      | 586      | 45       | 46                              | 47                             |
| Deputy General<br>Manager          | 8        | 7        | 6        | 6                               | 6                              |
| CGM/GM                             | 1        | 1        | 1        | 1                               | 1                              |
| Pensioners                         | 10,935   | 12,402   | 16,470   | 17,788                          | 19,211                         |
| SUBTOTAL (LMV-10)                  | 21,609   | 22,262   | 23,553   | 25,101                          | 26,763                         |
| HV-1: Non-Industrial<br>Bulk Loads |          |          |          |                                 |                                |
| Urban: 11 kV                       | 476      | 510      | 655      | 721                             | 793                            |
| Urban: Above 11 kV & up to 66 kV   | 1        | 14       | 16       | 18                              | 19                             |
| Urban: Above 66 kV & up to 132 kV  | 4        | 8        | -        | -                               | -                              |
| Urban: Above 132 kV                | -        | -        | -        | -                               | -                              |
| Rural: At 11 kV                    | -        | 3        | 5        | 5                               | 6                              |
| Rural: Above 11 kV & up to 66 kV   | 1        | -        | 4        | 4                               | 4                              |
| SUBTOTAL (HV-1)                    | 482      | 535      | 680      | 748                             | 822                            |
| HV-2: Large and Heavy<br>Power     |          |          |          |                                 |                                |



| Consumer categories               | FY 11-12  | FY 12-13  | FY 13-14  | Recompute<br>d for FY 14-<br>15 | Approved<br>for FY 2015-<br>16 |
|-----------------------------------|-----------|-----------|-----------|---------------------------------|--------------------------------|
| Urban: 11 kV                      | 899       | 1,005     | 1,001     | 1,031                           | 1,062                          |
| Urban: Above 11 kV & up to 66 kV  | 98        | 76        | 126       | 139                             | 152                            |
| Urban: Above 66 kV & up to 132 kV | 25        | 13        | 13        | 13                              | 14                             |
| Urban: Above 132 kV               | 1         | 1         | 3         | 3                               | 3                              |
| Rural: At 11 kV                   | 103       | 109       | 125       | 138                             | 151                            |
| Rural: Above 11 kV & up to 66 kV  | -         | 1         | 1         | 1                               | 1                              |
| SUBTOTAL (HV-2)                   | 1,126     | 1,205     | 1,269     | 1,324                           | 1,383                          |
| HV-3: Railway Traction            |           |           |           |                                 |                                |
| At 132 kV and above               | 2         | 4         | 5         | 5                               | 6                              |
| Below 132 kV                      | -         | -         | -         | -                               | -                              |
| Metro traction                    | -         | -         | -         | -                               | -                              |
| SUBTOTAL (HV-3)                   | 2         | 4         | 5         | 5                               | 6                              |
| HV-4: Lift Irrigation             |           |           |           |                                 |                                |
| At 11kV                           | 12        | 12        | 12        | 13                              | 15                             |
| Above 11kV & up to 66kV           | 4         | 5         | 5         | 5                               | 6                              |
| Above 66 kV & up to 132kV         | 1         | 1         | 1         | 1                               | 1                              |
| SUBTOTAL (HV-4)                   | 17        | 18        | 18        | 19                              | 21                             |
| Bulk & Extra State                |           |           |           |                                 |                                |
| Extra state & others              | 1         | 1         | 1         | 1                               | 1                              |
| Bulk supply – NPCL                | -         | -         | -         | -                               | -                              |
| Bulk supply – KESCO               | -         | -         | -         | -                               | -                              |
| Bulk supply – Others              | -         | -         | -         | -                               | -                              |
| SUBTOTAL (Bulk &<br>Extra State)  | 1         | 1         | 1         | 1                               | 1                              |
| GRAND TOTAL                       | 30,36,223 | 31,64,636 | 33,34,547 | 36,47,887                       | 46,18,872                      |



| Consumer categories                     | FY 11-12  | FY 12-13  | FY 13-14  | Recompute<br>d for FY 14-<br>15 | Approved<br>for FY<br>2015-16 |
|---|-----------|-----------|-----------|---------------------------------|-------------------------------|
| LMV-1: Domestic                         |           |           |           |                                 |                               |
| Rural (unmetered)                       | 11,77,968 | 11,98,461 | 12,86,645 | 11,57,981                       | 9,00,652                      |
| Rural (metered)                         | 2,66,734  | 2,17,960  | 2,84,609  | 5,11,918                        | 13,67,308                     |
| Bulk Load                               | 22,234    | 27,326    | 27,145    | 27,404                          | 28,500                        |
| Other Metered                           | 18,80,740 | 20,44,412 | 20,97,447 | 22,23,294                       | 23,56,691                     |
| BPL                                     | 1,67,065  | 2,13,336  | 3,01,973  | 3,56,328                        | 4,20,467                      |
| SUBTOTAL (LMV-1)                        | 35,14,741 | 37,01,495 | 39,97,819 | 42,76,924                       | 50,73,618                     |
|   |           |           |           |                                 |                               |
| LMV-2:Non-Domestic                      | 25 570    | 25 500    | 26.405    | 20.267                          | 10.000                        |
| Rural (unmetered)                       | 35,570    | 35,506    | 36,195    | 38,367                          | 40,669                        |
| Rural (metered)                         | 36,342    | 74,839    | 66,002    | 82,282                          | 98,738                        |
| Advertising                             | 11,503    | 11,503    | -         | -                               | -                             |
| Other Metered                           | 5,66,132  | 5,70,020  | 5,87,374  | 5,99,121                        | 6,11,104                      |
| SUBTOTAL (LMV-2)                        | 6,49,547  | 6,91,868  | 6,89,571  | 7,19,770                        | 7,50,511                      |
| LMV-3: Public Lamps                     |           |           |           |                                 |                               |
| Unmetered - Gram<br>Panchayat           | 9,419     | 8,999     | 15,489    | 15,644                          | 15,800                        |
| Unmetered - Nagar<br>Palika & Panchayat | 17,824    | 18,521    | 13,762    | 650                             | 676                           |
| Unmetered - Nagar<br>Nigam              | 3,253     | 5,213     | 5,275     | 6,690                           | 7,025                         |
| Metered - Gram<br>Panchayat             | 3,024     | 24        | -         | -                               | -                             |
| Metered - Nagar Palika &<br>Panchayat   | 7,835     | 9,521     | 13,510    | 11,843                          | 12,909                        |
| Metered - Nagar Nigam                   | 44,392    | 51,790    | 40,294    | 48,646                          | 56,916                        |
| SUBTOTAL (LMV-3)                        | 85,747    | 94,068    | 88,330    | 83,473                          | 93,326                        |
| LMV-4: Institutions                     |           |           |           |                                 |                               |
| Public                                  | 90,593    | 92,213    | 92,204    | 1,03,614                        | 1,11,903                      |
| Private                                 | 23,089    | 21,465    | 26,870    | 29,020                          | 31,341                        |
| SUBTOTAL (LMV-4)                        | 1,13,682  | 1,13,678  | 1,19,074  | 1,32,633                        | 1,43,244                      |
| LMV-5: Private Tube<br>Wells            |           |           |           |                                 |                               |

# TABLE -: COMMISSION'S APPROVAL OF CONNECTED LOAD (kW) FOR FY 2015-16



| Consumer categories                | FY 11-12 | FY 12-13 | FY 13-14 | Recompute<br>d for FY 14-<br>15 | Approved<br>for FY<br>2015-16 |
|------------------------------------|----------|----------|----------|---------------------------------|-------------------------------|
| Rural (unmetered)                  | 5,25,467 | 5,36,971 | 5,74,104 | 5,74,104                        | 5,74,104                      |
| Rural (metered)                    | 945      | 2,612    | 5,810    | 8,599                           | 10,749                        |
| Urban (metered)                    | 31,591   | 29,869   | 30,001   | 33,601                          | 37,633                        |
| SUBTOTAL (LMV-5)                   | 5,58,003 | 5,69,452 | 6,09,915 | 6,16,304                        | 6,22,486                      |
| LMV 6: Small and<br>Medium Power   |          |          |          |                                 |                               |
| Power Loom: Rural                  | 11,258   | 35,365   | 40,305   | 47,102                          | 52,754                        |
| Power Loom: Urban                  | 44,870   | 7,071    | 6,957    | 7,305                           | 7,670                         |
| Others: Rural                      | 79,754   | 1,06,575 | 1,02,826 | 1,13,109                        | 1,24,419                      |
| Others: Urban                      | 1,56,433 | 1,62,914 | 1,63,829 | 1,85,071                        | 1,96,175                      |
| SUBTOTAL (LMV-6)                   | 2,92,315 | 3,11,925 | 3,13,917 | 3,52,586                        | 3,81,018                      |
| LMV-7: Public Water<br>Works       |          |          |          |                                 |                               |
| Rural: Jal Nigam                   | 9,717    | 13,116   | 8,910    | 10,759                          | 10,866                        |
| Rural: Jal Sansthan                | 553      | 487      | 5,234    | 5,653                           | 6,105                         |
| Rural: Other PWWs                  | 5,619    | 3,667    | 5,036    | 10,801                          | 13,177                        |
| Urban: Jal Nigam                   | 9,338    | 9,840    | 7,254    | 9,140                           | 11,516                        |
| Urban: Jal Sansthan                | 31,622   | 36,046   | 37,964   | 41,001                          | 44,281                        |
| Urban: Other PWWs                  | 20,472   | 12,707   | 16,965   | 17,813                          | 18,704                        |
| SUBTOTAL (LMV-7)                   | 77,321   | 75,863   | 81,363   | 95,166                          | 1,04,649                      |
| LMV-8: State Tube Wells            |          |          |          |                                 |                               |
| Metered STW                        | 14,376   | 4,247    | 6,461    | 10,287                          | 11,521                        |
| Unmetered STW                      | 1,22,801 | 1,29,975 | 1,30,901 | 1,34,257                        | 1,36,942                      |
| Unmetered Laghu Dal<br>Nahar       | 3,458    | 3,536    | 4,698    | 30,389                          | 38,898                        |
| SUBTOTAL (LMV-8)                   | 1,40,635 | 1,37,758 | 1,42,060 | 1,74,933                        | 1,87,361                      |
| LMV-9: Temporary<br>Supply         |          |          |          |                                 |                               |
| Metered: Individual<br>residential | 4,889    | 5,139    | 267      | 421                             | 442                           |
| Metered: Others                    | -        | -        | -        | -                               | -                             |
| Unmetered: Ceremonies              | 510      | -        | -        | -                               | -                             |
| Unmetered: Temp shops              | -        | -        | -        | -                               | -                             |



Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Consumer categories                                | FY 11-12 | FY 12-13 | FY 13-14 | Recompute<br>d for FY 14-<br>15 | Approved<br>for FY<br>2015-16 |
|--|----------|----------|----------|---------------------------------|-------------------------------|
| SUBTOTAL (LMV-9)                                   | 5,399    | 5,139    | 267      | 421                             | 442                           |
| LMV-10: Departmental<br>Employees                  |          |          |          |                                 |                               |
| Class IV   | 8,368    | 9,962    | 8,022    | 8,423                           | 8,844                         |
| Class III  | 12,811   | 19,953   | 12,906   | 15,467                          | 15,776                        |
| Junior Engineers                                   | 12,254   | 1,187    | 1,418    | 1,647                           | 1,713                         |
| Assistant Engineers                                | 471      | 526      | 602      | 626                             | 651                           |
| Executive Engineers                                | 1,122    | 1,120    | 278      | 284                             | 289                           |
| Deputy General Manager                             | 34       | 32       | 29       | 30                              | 30                            |
| CGM/GM   | 7        | 7        | 7        | 7                               | 7                             |
| Pensioners   | 40,147   | 46,324   | 55,229   | 66,440                          | 71,756                        |
| SUBTOTAL (LMV-10)                                  | 75,214   | 79,111   | 78,491   | 92,923                          | 99,066                        |
| HV-1: Non-Industrial<br>Bulk Loads<br>Urban: 11 kV | 1.94.764 | 1.05.420 | 2 54 222 | 2 70 765                        | 2 07 742                      |
|  | 1,84,764 | 1,95,429 | 2,54,332 | 2,79,765                        | 3,07,742                      |
| Urban: Above 11 kV & up<br>to 66 kV                | 3,230    | 7,713    | 8,254    | 9,079                           | 9,987                         |
| Urban: Above 66 kV & up<br>to 132 kV               | 458      | 6,564    | -        | -                               | -                             |
| Urban: Above 132 kV                                | -        | -        | -        | -                               | -                             |
| Rural: At 11 kV                                    | -        | 553      | 724      | 760                             | 798                           |
| Rural: Above 11 kV & up<br>to 66 kV                | 212      | -        | 380      | 399                             | 419                           |
| SUBTOTAL (HV-1)                                    | 1,88,664 | 2,10,259 | 2,63,690 | 2,90,004                        | 3,18,946                      |
| HV-2: Large and Heavy<br>Power                     |          |          |          |                                 |                               |
| Urban: 11 kV                                       | 2,98,340 | 3,18,898 | 3,13,998 | 3,23,418                        | 3,33,120                      |
| Urban: Above 11 kV & up<br>to 66 kV                | 58,478   | 68,160   | 88,335   | 97,169                          | 1,06,885                      |
| Urban: Above 66 kV & up<br>to 132 kV               | 41,861   | 35,065   | 33,265   | 33,930                          | 34,609                        |
| Urban: Above 132 kV                                | 4,500    | 4,500    | 23,500   | 23,500                          | 23,500                        |
| Rural: At 11 kV                                    | 21,067   | 27,871   | 32,166   | 35,383                          | 38,921                        |
| Rural: Above 11 kV & up<br>to 66 kV                | -        | 212      | 212      | 212                             | 212                           |



Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Consumer categories              | FY 11-12  | FY 12-13  | FY 13-14  | Recompute<br>d for FY 14-<br>15 | Approved<br>for FY<br>2015-16 |
|----------------------------------|-----------|-----------|-----------|---------------------------------|-------------------------------|
| SUBTOTAL (HV-2)                  | 4,24,246  | 4,54,706  | 4,91,476  | 5,13,611                        | 5,37,248                      |
|                                  |           |           |           |                                 |                               |
| HV-3: Railway Traction           |           |           |           |                                 |                               |
| At 132 kV and above              | 12,925    | 22,425    | 31,100    | 32,655                          | 34,288                        |
| Below 132 kV                     | -         | -         | -         | -                               | -                             |
| Metro traction                   | -         | -         | -         | -                               | -                             |
| SUBTOTAL (HV-3)                  | 12,925    | 22,425    | 31,100    | 32,655                          | 34,288                        |
| HV-4: Lift Irrigation            |           |           |           |                                 |                               |
| -                                | 24 724    | 24 724    | 0.500     | 0.450                           | 10.405                        |
| At 11kV                          | 24,724    | 24,724    | 8,599     | 9,459                           | 10,405                        |
| Above 11kV & up to 66kV          | -         | -         | 12,252    | 12,865                          | 13,508                        |
| Above 66 kV & up to<br>132kV     | -         | -         | 2,250     | 2,250                           | 2,250                         |
| SUBTOTAL (HV-4)                  | 22,800    | 22,961    | 23,101    | 24,574                          | 26,163                        |
| 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<br>State) | 5,000     | 5,000     | 5,000     | 5,000                           | 5,000                         |
| GRAND TOTAL                      | 61,66,239 | 64,95,708 | 69,35,174 | 74,10,977                       | 83,77,366                     |



| Consumer categories                     | FY 11-12 | FY 12-13 | FY 13-14 | Recomput<br>ed for FY<br>14-15 | Approved<br>for FY<br>2015-16 |
|---|----------|----------|----------|--------------------------------|-------------------------------|
| LMV-1: Domestic                         |          |          |          |                                |                               |
| Rural (unmetered)                       | 935      | 937      | 1,108    | 1,501                          | 1,167                         |
| Rural (metered)                         | 244      | 255      | 251      | 510                            | 1,395                         |
| Bulk Load                               | 98       | 102      | 82       | 86                             | 92                            |
| Other Metered                           | 2,384    | 2,515    | 2,812    | 2,979                          | 3,253                         |
| BPL                                     | 134      | 188      | 240      | 336                            | 406                           |
| SUBTOTAL (LMV-1)                        | 3,794    | 3,996    | 4,493    | 5,412                          | 6,313                         |
| LMV-2:Non-Domestic                      |          |          |          |                                |                               |
| Rural (unmetered)                       | 28       | 30       | 37       | 50                             | 53                            |
| Rural (metered)                         | 53       | 75       | 62       | 121                            | 148                           |
| Advertising                             | 7        | 2        | 5        | -                              | -                             |
| Other Metered                           | 735      | 754      | 829      | 850                            | 893                           |
| SUBTOTAL (LMV-2)                        | 822      | 861      | 933      | 1,021                          | 1,095                         |
| LMV-3: Public Lamps                     |          |          |          |                                |                               |
| Unmetered - Gram<br>Panchayat           | 26       | 33       | 40       | 56                             | 57                            |
| Unmetered - Nagar Palika<br>& Panchayat | 61       | 65       | 63       | 3                              | 3                             |
| Unmetered - Nagar Nigam                 | 20       | 9        | 16       | 29                             | 30                            |
| Metered - Gram Panchayat                | 4        | 3        | 0        | -                              | -                             |
| Metered - Nagar Palika &<br>Panchayat   | 19       | 35       | 52       | 59                             | 66                            |
| Metered - Nagar Nigam                   | 177      | 180      | 137      | 232                            | 280                           |
| SUBTOTAL (LMV-3)                        | 308      | 325      | 308      | 379                            | 436                           |
| LMV-4: Institutions                     |          |          |          |                                |                               |
| Public                                  | 257      | 247      | 223      | 296                            | 328                           |
| Private                                 | 59       | 52       | 59       | 75                             | 83                            |
| SUBTOTAL (LMV-4)                        | 316      | 298      | 282      | 370                            | 410                           |
| LMV-5: Private Tube Wells               |          |          |          |                                |                               |
| Rural (unmetered)                       | 503      | 509      | 603      | 947                            | 947                           |
| Rural (metered)                         | 2        | 2        | 10       | 23                             | 29                            |

# TABLE -: COMMISSION'S APPROVAL OF ENERGY SALES (MU) FOR FY 2015-16



Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Consumer categories                | FY 11-12 | FY 12-13 | FY 13-14 | Recomput<br>ed for FY<br>14-15 | Approved<br>for FY<br>2015-16 |
|------------------------------------|----------|----------|----------|--------------------------------|-------------------------------|
| Urban (metered)                    | 99       | 112      | 118      | 132                            | 148                           |
| SUBTOTAL (LMV-5)                   | 604      | 623      | 731      | 1,103                          | 1,124                         |
|                                    |          |          |          |                                |                               |
| LMV 6: Small and Medium<br>Power   |          |          |          |                                |                               |
| Power Loom: Rural                  | 15       | 59       | 99       | 117                            | 134                           |
| Power Loom: Urban                  | 127      | 63       | 26       | 65                             | 70                            |
| Others: Rural                      | 85       | 95       | 93       | 121                            | 136                           |
| Others: Urban                      | 229      | 267      | 271      | 307                            | 335                           |
| SUBTOTAL (LMV-6)                   | 457      | 484      | 489      | 610                            | 675                           |
| LMV-7: Public Water<br>Works       |          |          |          |                                |                               |
| Rural: Jal Nigam                   | 30       | 43       | 46       | 56                             | 57                            |
| Rural: Jal Sansthan                | 3        | 16       | 25       | 185                            | 200                           |
| Rural: Other PWWs                  | 17       | 27       | 29       | 79                             | 97                            |
| Urban: Jal Nigam                   | 29       | 38       | 36       | 45                             | 57                            |
| Urban: Jal Sansthan                | 142      | 181      | 145      | 206                            | 223                           |
| Urban: Other PWWs                  | 86       | 82       | 93       | 115                            | 121                           |
| SUBTOTAL (LMV-7)                   | 307      | 388      | 374      | 687                            | 754                           |
| LMV-8: State Tube Wells            |          |          |          |                                |                               |
| Metered STW                        | 41       | 77       | 45       | 185                            | 208                           |
| Unmetered STW                      | 725      | 798      | 853      | 570                            | 581                           |
| Unmetered Laghu Dal<br>Nahar       | 18       | 22       | 24       | 8                              | 10                            |
| SUBTOTAL (LMV-8)                   | 784      | 896      | 922      | 763                            | 799                           |
| LMV-9: Temporary Supply            |          |          |          |                                |                               |
| Metered: Individual<br>residential | 11       | 16       | 1        | 2                              | 2                             |
| Metered: Others                    | -        | -        | -        | -                              | -                             |
| Unmetered: Ceremonies              | 1        | -        | -        | -                              | -                             |
| Unmetered: Temp shops              | -        | -        | -        | -                              | -                             |
| SUBTOTAL (LMV-9)                   | 12       | 16       | 1        | 2                              | 2                             |
| LMV-10: Departmental               |          |          |          |                                |                               |



Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Consumer categories                  | FY 11-12 | FY 12-13 | FY 13-14 | Recomput<br>ed for FY<br>14-15 | Approved<br>for FY<br>2015-16 |
|--------------------------------------|----------|----------|----------|--------------------------------|-------------------------------|
| Employees                            |          |          |          |                                |                               |
| Class IV                             | 10       | 12       | 9        | 9                              | 10                            |
| Class III                            | 10       | 14       | 14       | 14                             | 15                            |
| Junior Engineers                     | 14       | 10       | 1        | 1                              | 1                             |
| Assistant Engineers                  | 1        | 1        | 1        | 1                              | 1                             |
| Executive Engineers                  | 1        | 1        | 1        | 1                              | 1                             |
| Deputy General Manager               | -        | -        | 0        | 0                              | 0                             |
| CGM/GM                               | -        | -        | 1        | 1                              | 1                             |
| Pensioners                           | 86       | 97       | 106      | 115                            | 128                           |
| SUBTOTAL (LMV-10)                    | 122      | 135      | 132      | 142                            | 156                           |
| HV-1: Non-Industrial Bulk<br>Loads   |          |          |          |                                |                               |
| Urban: 11 kV                         | 374      | 380      | 492      | 587                            | 645                           |
| Urban: Above 11 kV & up<br>to 66 kV  | 14       | 16       | 18       | 39                             | 43                            |
| Urban: Above 66 kV & up<br>to 132 kV | 6        | 12       | 9        | -                              | -                             |
| Urban: Above 132 kV                  | -        | -        | 0        | -                              | -                             |
| Rural: At 11 kV                      | 1        | -        | 4        | 11                             | 11                            |
| Rural: Above 11 kV & up to 66 kV     | -        | -        | 0        | 0                              | 0                             |
| SUBTOTAL (HV-1)                      | 395      | 408      | 523      | 637                            | 700                           |
| HV-2: Large and Heavy<br>Power       |          |          |          |                                |                               |
| Urban: 11 kV                         | 818      | 887      | 858      | 966                            | 995                           |
| Urban: Above 11 kV & up<br>to 66 kV  | 187      | 224      | 260      | 451                            | 496                           |
| Urban: Above 66 kV & up<br>to 132 kV | 66       | 72       | 78       | 79                             | 81                            |
| Urban: Above 132 kV                  | 16       | 5        | 9        | 28                             | 28                            |
| Rural: At 11 kV                      | 43       | 46       | 57       | 72                             | 79                            |
| Rural: Above 11 kV & up to 66 kV     | -        | 4        | 0        | 4                              | 4                             |
| SUBTOTAL (HV-2)                      | 1,130    | 1,239    | 1,263    | 1,601                          | 1,684                         |
| HV-3: Railway Traction               |          |          |          |                                |                               |



Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

| Consumer categories              | FY 11-12 | FY 12-13 | FY 13-14 | Recomput<br>ed for FY<br>14-15 | Approved<br>for FY<br>2015-16 |
|----------------------------------|----------|----------|----------|--------------------------------|-------------------------------|
| At 132 kV and above              | 31       | 34       | 80       | 84                             | 88                            |
| Below 132 kV                     | -        | 1        | 0        | -                              | -                             |
| Metro traction                   | -        | -        | -        | -                              | -                             |
| SUBTOTAL (HV-3)                  | 31       | 35       | 80       | 84                             | 88                            |
| HV-4: Lift Irrigation            |          |          |          |                                |                               |
| At 11kV                          | 36       | 36       | 37       | 41                             | 45                            |
| Above 11kV & up to 66kV          | 60       | 65       | 67       | 74                             | 77                            |
| Above 66 kV & up to 132kV        | 14       | 15       | 13       | 15                             | 15                            |
| SUBTOTAL (HV-4)                  | 110      | 117      | 117      | 129                            | 137                           |
| Bulk & Extra State               |          |          |          |                                |                               |
| Extra state & others             | 43       | 59       | 62       | 62                             | 62                            |
| Bulk supply – NPCL               | -        | -        | -        | -                              | -                             |
| Bulk supply – KESCO              | -        | -        | -        | -                              | -                             |
| Bulk supply – Others             | -        | -        | -        | -                              | -                             |
| SUBTOTAL (Bulk & Extra<br>State) | 43       | 59       | 62       | 62                             | 62                            |
| GRAND TOTAL                      | 9,235    | 9,880    | 10,711   | 13,001                         | 14,435                        |



# 11.2 RATE SCHEDULE FOR FY 2015-16

### **RETAIL TARIFFS FOR FINANCIAL YEAR 2015-16:**

#### **GENERAL PROVISIONS:**

These provisions shall apply to all categories unless specified otherwise and are integral part of the Rate Schedule.

### 1. NEW CONNECTIONS:

 (i) 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 the purpose of billing below 10 kW load, the fixed charge will be computed on the basis of contracted load in kW and energy charge will be calculated on kWh basis.

For all consumers with contracted load of 10 KW / 13.4 BHP and above 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. 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; up-to 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 **non-domestic & industrial** consumer having TVM / TOD / Demand recording meter exceeds the contracted load / demand, then such excess load / demand shall be levied equal to twice the normal rate apart from the normal fixed / demand charge as per the maximum load / demand recorded by the meter.
- b) If the maximum load / demand in any month of a domestic consumer having TVM / TOD / Demand recording meters exceeds the contracted load / demand, then such excess load / demand shall be levied equal to once 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.

- 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.
- (iii) In respect of the consumers with or without static TVMs, excluding consumers under LMV-1 category up to connected load of 10 kW and LMV-2 category up to connected 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 any thing 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. PROVISION RELATED TO SURCHARGE WAIVER SCHEME FOR RECOVERY OF BLOCKED ARREARS:

In the past, Commission has allowed OTS scheme as special case to achieve a bigger objective of 100% metering as all unmetered consumers who avail the benefit of the OTS Scheme, would had to undertake to become metered consumers. However, the Commission expresses its concern that regular implementation of OTS Scheme incentivise the delayed payments which also appears to discriminate against honest and paying consumers. OTS scheme is only a short term measure to generate instantaneous cash flows but the loss of the revenue in terms of surcharge waiver is always to be borne by the Distribution Licensees. Thus, after detailed deliberations on OTS scheme the Commission has decided to abolish the OTS scheme subsequent to applicability of this Order.

#### **10. 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.

#### 11. ROUNDING OFF:

All bills will be rounded off to the nearest rupee.



## 12. OPTION OF MIGRATION TO 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.

## **13. PRE-PAID METERS / AUTOMATIC METER READING SYSTEM:**

- (i) The detailed Order in the matter of "Fixation of Tariff for Pre-paid Metering" issued on May 11, 2015 by the Commission may be referred in this regard. (Enclosed at Annexure )
- (ii) Any consumer having prepaid meters shall also be entitled to a discount of 1.25% on Rate as defined in the Tariff Order.
- (iii) 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.

# 14. 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.

**15.** 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.



#### **16.** 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.

## 17. REBATE ON PAYMENT ON OR BEFORE DUE DATE:

A rebate at 0.25% 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. Suitable changes in the billing software should be made by the Licensee to ensure such rebate is provided to all eligible consumers.

# 18. REBATE TO CONSUMERS WHO SHIFT FROM UNMETERED TO METERED CONNECTION:

- (i) As per the direction given by the Commission in Tariff Order for FY 2014-15 dated October 1, 2014, Consumers who have shifted from unmetered to metered connection by March 31, 2015 shall be given a rebate of 10% on Rate which shall be applicable till end of FY 2016-17.
- (ii) Similarly, the unmetered consumers who shall shift from unmetered to metered connection by December 31, 2015 shall be entitled to a rebate of 10% on Rate w.e.f the date of conversion from unmetered to metered connection, which shall be applicable till end of FY 2017-18.



## **19.** RURAL TARIFF TO RURAL SCHEDULE

The consumers getting supply from feeders fed in accordance with rural schedule shall be levied rural tariff and consumers getting supply from other feeders shall be levied tariff other than rural schedule.

## 20. 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 bills. On such advance deposit the consumers shall be paid Interest at bank rate as specified by RBI from time to time, 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, separate accounting of advance deposit and interest paid thereon must be maintained by the Licensee and quarterly report regarding the same must be submitted to the Commission.

## 21. FACILITATION CHARGE FOR ONLINE PAYMENT

- The detailed Order issued by the Commission on May 29, 2015 in the matter of "Levy of Facilitation Charges when payment is done through internet" may be referred in this regard. (Annexure - )
- (ii) No transaction charge shall be collected from the consumers making their payment through internet banking.
- (iii) 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.

#### 22. 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 is



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.



# RATE SCHEDULE LMV – 1:

## DOMESTIC LIGHT, FAN & POWER:

## 1. APPLICABILITY:

This schedule shall apply to:

- a) Premises for residential / domestic purpose, Paying Guests / 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

- Registered Societies, Residential Colonies / Townships, Residential Multi-Storied Buildings with mixed loads (getting supply at single point) with the condition that 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:

| Description                | Description     | Fixed charge            | Energy charge) |
|----------------------------|-----------------|-------------------------|----------------|
|                            | Load up to 2 kW | Rs. 180 / kW /<br>month | Nil            |
| i) Un-metered <sup>*</sup> | Load above 2 kW | Rs. 200 / kW /<br>month | Nil            |
| ii) Metered                | All Load        | Rs. 50 / kW /<br>month  | Rs. 2.20 / kWh |

# (a) Consumers getting supply as per 'Rural Schedule':

\***Note:** All the 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%.

(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,<br>Residential Colonies, multi-storied<br>residential complexes (including lifts,<br>water pumps and common lighting within<br>the premises) with loads 50 kW and<br>above with the restriction that at least<br>70% of the total contracted load is meant<br>exclusively for the domestic light, fan and<br>power purposes and for Military Engineer<br>Service (MES) for Defence Establishments<br>(Mixed load without any load restriction). | Rs. 85.00 / kW /<br>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 10% additional charge on the above specified Rate from its end consumers apart from other applicable charges such as Regulatory Surcharge, Penalty, Rebate and Electricity Duty on actual basis.

The 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 a certain billing cycle. If he fails to do so, then the consumers may approach the Consumer Grievance Redressal Forum having jurisdiction over their local area for the redressal of their grievances.

# (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<br>consumption up to 50 kWh /<br>month (0 to 50 kWh / month)                            | Rs. 50.00 / kW / month | Rs. 2.00 / kWh |
| Loads of 1 kW only and for<br>consumption above 50 kWh /<br>month up to 150 kWh / month<br>(51 to 150 kWh / month) | N3. 30.007 KW 7 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  |
|-------------|---------------------------------------|------------------|----------------|
|             | Upto 150 kWh / month                  |                  | Rs. 4.40 / kWh |
| All loads   | 151 - 300 kWh / month                 | Rs. 90.00 / kW / | Rs. 4.95 / kWh |
|             | 301 – 500 kWh / month                 | month            | Rs. 5.60 / kWh |
|             | Above 500 kWh / month                 |                  | Rs. 6.20 / kWh |
|             | (From 501 <sup>st</sup> unit onwards) |                  |                |

## 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.



# 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:

| Description   | Description | Fixed charge            | Energy charge) |
|---------------|-------------|-------------------------|----------------|
| i) Un-metered | All Load    | Rs. 450 / kW /<br>month | Nil            |
| ii) Metered   | All Load    | Rs. 65 / kW /<br>month  | Rs. 3.00 / kWh |

#### (a) Consumers getting supply as per 'Rural Schedule':



# (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 |

\*Minimum bill payable by a consumer under the category "(b) Private Advertising / Sign Posts / Sign Boards / Glow Signs / Flex category" shall be Rs. 1500 / 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.

| Consumption Range   | Fixed Charge | Energy Charge |
|---|--------------|---------------|
| Upto 300 kWh / month  |              | Rs. 6.70/ kWh |
| 301 – 1000 kWh / month  | Rs. 225.00 / | Rs. 7.10/ kWh |
| Above 1001 kWh / month<br>(From 1001 <sup>st</sup> unit<br>onwards) | kW / month   | Rs. 7.25/ kWh |

**Note:** Minimum bill payable by a consumer under the category "(c) In all other cases" shall be Rs. 600 / kW / month (From April to September) and Rs. 475 / 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<br>Nagar Panchayat | Nagar Nigam  |
|--|----------------|-------------------------------------|--|
| To be billed on the basis of<br>total connected load<br>calculated as the<br>summation of individual<br>points | •              |                                     | Rs. 3000 per<br>kW or part<br>thereof per<br>month |



| Description | Gram Panchayat             |                   | escription Gram Panchayat Nagar Palika and Nagar Panchayat |                   | Naga                       | r Nigam           |
|-------------|----------------------------|-------------------|--|-------------------|----------------------------|-------------------|
| All loads   | Fixed<br>Charges           | Energy<br>Charges | Fixed<br>Charges   | Energy<br>Charges | Fixed<br>Charges           | Energy<br>Charges |
|             | Rs. 120 /<br>kW /<br>month | Rs. 5.75<br>/ kWh | Rs. 150 /<br>kW /<br>month                                 | Rs. 6.00 /<br>kWh | Rs. 160 /<br>kW /<br>month | Rs. 6.25 /<br>kWh |

# (b) Metered Supply:

# 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 ".



# 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 Institutions 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                     | Fixed Charge            | Energy Charge  |
|---------------------------------|-------------------------|--|
| (A) For Public                  | Rs. 200 / kW /          | 0 – 1000 kWh / month – Rs. 6.75/ kWh   |
| Institutions                    | month                   | Above 1000 kWh / month – Rs. 7.00 / kWh  |
| (B) For Private<br>Institutions | Rs. 225 / kW /<br>month | 0 – 1000 kWh / month – Rs. 7.10 / kWh<br>Above 1000 kWh / month – Rs. 7.30 / 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.



# 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:

| Consumption Range      | Fixed Charge         | Energy Charge  |
|------------------------|----------------------|----------------|
| 0 – 1000 kWh / month   | Rs. 225 / kW / month | Rs. 6.60 / kWh |
| Above 1000 kWh / month | Rs. 225 / kW / month | Rs. 7.10 / kWh |

## 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 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:

| Hours                 | TOD Rates                    |
|-----------------------|------------------------------|
| 06:00 hrs – 22:00 hrs | Restricted Load as specified |
| 22:00 hrs – 06:00 hrs | -15%                         |

# **Optional TOD Structure for Specific Consumers**

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 22.00 – 06.00 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:



- 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. 230.00 / kW / month | Rs. 7.10 / 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 /<br>month  | Rs. 6.80 / kWh |
| Un-metered  | Rs. 1800.00 / BHP /<br>month | Nil            |

**4.** For finding out net load during any quarter of the year for this category refer ANNEXURE



# 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 <i>for illumination / public address /</i>                   | Rs. 3000.00 / 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. 250.00 / day / |                   |  |
| festivals / melas or otherwise and having load up to 2KW shop                  |                   |  |



# B. Metered\*:

| Descrip                 | otion       | Energy Charge   |
|-------------------------|-------------|---|
| Individual construction | Residential | Rs. 6.50 / kWh  |
|                         |             | From 3 <sup>rd</sup> year onwards: Base Tariff<br>applicable for current year plus<br>additional 10% of the applicable tariff |
| Others                  |             | Rs. 7.85 / kWh  |
|                         |             | From 3 <sup>rd</sup> year onwards: Base Tariff<br>applicable for current year plus<br>additional 10% of the applicable tariff |

\*Minimum bill payable by a consumer under the category "Metered" shall be Rs. 150.00 / 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:

The unmetered consumers of LMV-10 category shall be converted into metered consumers by December 31, 2015.

The consumers under this category shall be billed as per the Rate specified under category "Rate (A)" till December 31, 2015 beyond which, the tariff specified under category "Rate (B)" shall be applicable for these category of consumers.

#### RATE (A): (Up to December 31, 2015)

**Un-metered:** 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:

| Category                               | Fixed charge /<br>month | Fixed Monthly<br>Energy Charge |
|--|-------------------------|--------------------------------|
| Class IV employees / Operating staff   | Rs. 160.00              | Rs. 180.00                     |
| Class III employees                    | Rs. 190.00              | Rs. 225.00                     |
| Junior Engineers & equivalent posts    | Rs. 260.00              | Rs. 425.00                     |
| Assistant Engineers & equivalent posts | Rs. 280.00              | Rs. 560.00                     |
| Executive Engineers & equivalent posts | Rs. 300.00              | Rs. 595.00                     |



| Category  | Fixed charge /<br>month | Fixed Monthly<br>Energy Charge |
|---|-------------------------|--------------------------------|
| Superintending Engineers / Deputy General<br>Managers & equivalent posts        | Rs. 550.00              | Rs. 700.00                     |
| Chief Engineers (I & II) / General Managers and above                           | Rs. 600.00              | Rs. 810.00                     |
| Additional charge for employees using Air<br>Conditioners. (April to September) | •                       | er month per Air<br>litioner   |

**Metered:** Metered consumers under this category shall be given 50% rebate on rate of charge applicable to "other metered consumers" under LMV-1 category.

# 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.

## 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.

**Note:** In case of retired / voluntary retired or deemed retired employees, the rate shall be the same as applicable to the post from which he / she has retired.

Section 23 (7) of 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 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 electricity", which means concession in rate of electricity to the extent it is not inferior to what was existing before 14<sup>th</sup> January, 2000. The rates and charges indicated above for this category are strictly in adherence of above statutory provisions.

# 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.
- (viii) In case of Multi-Storied / Societies where the electricity connection are provided at single point with HT metering, the employees / pensioners / family pensioners, shall be provided through a separate meter and shall be given adjustment towards HT side metered energy at single point. Fixed charges equivalent to sanctioned load of the departmental employee shall also be adjusted. One percent of energy consumed by LMV-10 consumer shall also be added towards transformation losses for giving adjustment
- (ix) LMV-10 consumers will have to give an undertaking regarding use of Air conditioners.

## 5. MODE OF PAYMENT:

- (i) The Disbursing Officer shall compulsorily and regularly deduct the amount due monthly from the salary bill of each and every employee / pensioners drawing pay / pension from his unit each month. The Drawing Officer shall ensure that each employee / pensioner has given the declaration about the connection in his name together with details of S.C. No. / Book No. and name of the billing division, before the disbursement of pay / pension.
- (ii) The monthly amount due from a consumer of this category can also be deposited by the concerned officer / employee to the concerned division in case the said amount is not being deducted from his salary / pension.
- (iii) Revenue and Energy Statistics in respect of the category of employee / pensioner shall be regularly prepared by the Divisions in the same manner as for every other manually billed category.



- Recovery from the salary shall be sent to the billing units in accordance with the instructions contained in circular No. 362-CAO/C-177 (Misc.) dated 5.5.89 and No. 380-CAO dated 12.5.89 from Chief Accounts Officer of erstwhile UPSEB, Lucknow.
- (v) In case of metered consumption, the mode of payment shall be similar to the domestic consumer.



#### 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 |
|----------------|-----------------------------|-----------------------------|
| Demand Charges | Rs. 270.00 / kVA /<br>month | Rs. 250.00 / kVA / month    |
| Energy Charges | Rs. 7.10 / kVAh             | Rs. 6.90 / 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 & above |
|----------------|-----------------------------|-----------------------------|
| Demand Charges | Rs. 250.00 / kVA /<br>month | Rs. 240.00 / kVA / month    |
| Energy Charges | Rs. 6.90 / kVAh             | Rs. 6.70 / 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 10% additional charge on the above specified Rate from its end consumers apart from other applicable charges such as Regulatory Surcharge, Penalty, Rebate and Electricity Duty on actual basis.

The 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 a certain billing cycle. If he fails to do so, then the consumers may approach the Consumer Grievance



Redressal Forum having jurisdiction over their local area for the redressal of their grievances.



## 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:

|                          | For supply at<br>11 kV      | For supply<br>above 11 kV<br>and up to &<br>including 66<br>kV | For supply<br>above 66 kV and<br>up to &<br>including 132 kV | For supply<br>above 132 kV  |
|--------------------------|-----------------------------|--|--|-----------------------------|
| BASE RATE                |                             |  |  |                             |
| Demand Charges           | Rs. 250.00 /<br>kVA / month | Rs. 240.00 /<br>kVA / month                                    | Rs. 220.00 / kVA /<br>month                                  | Rs. 220.00 / kVA /<br>month |
| Energy Charges           | Rs. 6.65 /<br>kVAh          | Rs. 6.35 / kVAh  | Rs. 6.15 / kVAh  | Rs. 5.95 / kVAh             |
| TOD RATE                 |                             |  |  |                             |
| 22:00 hrs – 06:00<br>hrs | (-) 7.5%                    | (-) 7.5%   | (-) 7.5%   | (-) 7.5%                    |
| 06:00 hrs – 17:00<br>hrs | 0%                          | 0%   | 0%   | 0%                          |
| 17:00 hrs – 22:00<br>hrs | (+) 15%                     | (+) 15%  | (+) 15%  | (+) 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 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:

| Hours                 | TOD Rates                    |
|-----------------------|------------------------------|
| 06:00 hrs – 22:00 hrs | Restricted Load as specified |

## **Optional TOD Structure for Specific Consumers**



| Hours                 | TOD Rates |
|-----------------------|-----------|
| 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 22.00 – 06.00 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. 280.00 / kVA / month |  |
| Below 132 kV                                   | Rs. 290.00 / kVA / month |  |
| (b) Energy Charge (all consumption in a month) |                          |  |
| For supply at and above 132 kV                 | Rs. 6.35 / kVAh          |  |
| Below 132 kV                                   | Rs. 6.60 / 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. 250.00 / kVA / month |  |
| For supply at 33 kV and 66 kV | Rs. 240.00 / kVA / month |  |
| For supply at 132 kV          | Rs. 230.00 / kVA / month |  |

#### (b) Energy Charges:

| Voltage Level                 | Rate of Charge  |
|-------------------------------|-----------------|
| For supply at 11 kV           | Rs. 6.75 / kVAh |
| For supply at 33 kV and 66 kV | Rs. 6.50 / kVAh |
| For supply at 132 kV          | Rs. 6.25 / 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 sub - stations, 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**

| SI. 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  | <b>D M I</b>           |                 |
|         | d. Maximum Demand Indicator   | Per Meter              | 350.00          |
|         | e. Tri-vector Meters  | Per Meter              | 1000.00         |
|         | f. Ammeters and Volt Meters   | Per Meter<br>Per Meter | 50.00<br>400.00 |
|         | <ul><li>g. Special Meters / Net Meters</li><li>h. Initial Testing of Meters</li></ul> | Per Meter              | 400.00<br>Nil   |
|         | II. IIIItial resting of Meters  | Fel Metel              | INII            |
| 2.      | Disconnection and Reconnection of supply for any                                      |                        |                 |
|         | reason whatsoever (Disconnection &  |                        |                 |
|         | Reconnection to be separately treated as single                                       |                        |                 |
|         | job)  |                        |                 |
|         | 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   | Per Job                | 100.00          |
|         | consumer's request  |                        |                 |
| 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.   |                        |                 |
| 5.      | Resealing of Meters on account of any reason in                                       | Per Meter              | 100.00          |
| 5.      | addition to other charges payable in terms of   |                        | 100.00          |
|         | addition to other charges payable in terms of   |                        |                 |



| SI. 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     |

#### CHARGES FOR TATKAL VIDYUT SANYOJAN (TATKAL CONNECTION):

For urban consumers of LMV-1, LMV-2 and LMV-9 categories, desirous of getting connection within 24 hours of making the application, provided such release of connection does not require extension of distribution mains or commissioning of substation or augmenting capacity of transformers, shall have to pay following additional charges apart from the regular connection charges:

## **1. FOR PERMANENT ELECTRICITY CONNECTION:**

- a. Single Phase Domestic light and fan : Rs. 550 per connection
  - b. Three Phase Domestic light and fan : Rs. 800 per connection
  - c. Single Phase Commercial : Rs. 800 per connection
  - d. Three Phase Commercial : Rs. 1100 per connection

#### 2. FOR TEMPORARY ELECTRICITY CONNECTION:

- a. Single Phase (Up to 4 kW) : Rs. 800 per connection
  - b. Three Phase (from 5 kW to 24 kW)

Page 374

- : Rs. 1100 per connection



## 11.4 LIST OF POWER FACTOR APPARATUS

# FOR MOTORS:

| SI. 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. | Name Plate Rating in KVA of Individual | Capacity of the Capacitors |
|-----|--|----------------------------|
| No. | Welding Transformer                    | (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                          |
| 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                         |



| SI.<br>No. | Name Plate Rating in KVA of Individual<br>Welding Transformer | Capacity of the Capacitors<br>(KVAR) |
|------------|---|--------------------------------------|
| 33.        | 33  | 25                                   |
| 34.        | 34  | 26                                   |
| 35.        | 35  | 27                                   |



## 11.5 LIST OF PERSONS WHO HAVE ATTENDED PUBLIC HEARING AT SITAPUR, GHAZIABAD, ORAI and GORAKHPUR IN RESPECT OF PROCEEDINGS FOR ARR & TARIFF DETERMINATION FOR FY 2015-16

#### LIST OF PERSONS WHO HAVE ATTENDED PUBLIC HEARING AT SITAPUR

| List of Pe | List of Persons who attended Public Hearing at Sitapur on April 9, 2015 |                                  |  |
|------------|---|----------------------------------|--|
| SI. No.    | Name  | Organisation                     |  |
| 1          | Shri Sahaj Ram  | Consumer                         |  |
| 2          | Shri Sita Ram   | Consumer                         |  |
| 3          | Shri Hooripal   | Consumer                         |  |
| 4          | Shri Ramgopal   | Consumer                         |  |
| 5          | Shri Ramchandra   | Consumer                         |  |
| 6          | Shri Bagu Ram   | Consumer                         |  |
| 7          | Shri Ram vereyan  | Consumer                         |  |
| 8          | Shri Ramlakhan  | Consumer                         |  |
| 9          | Shri Rakesh Goyel   | Consumer                         |  |
| 10         | Shri P.N. Kalki   | Consumer                         |  |
| 11         | Shri Umes Pandey  | Consumer                         |  |
| 12         | Shri Pankaj Bajpai  | Consumer                         |  |
| 13         | Shri Dinesh   | Consumer                         |  |
| 14         | Shri Vijay Bansal   | Consumer                         |  |
| 15         | Shri Amit Bhargava  | Director (Tariff), UPERC         |  |
| 16         | Shri Saurabh Garg   | Consultant, UPERC                |  |
| 17         | Shri Abinash Agrawal  | Consultant, UPERC                |  |
| 18         | Shri Subrat Swain   | Consultant, UPERC                |  |
| 19         | Shri S.B. Srivastava  | PuVVNL                           |  |
| 20         | Shri S.K. Verma   | LESA                             |  |
| 21         | Shri Anwar  | Consumer                         |  |
| 22         | Shri R.S. Pandey  | Consumer                         |  |
| 23         | Shri Madhusudan Raizada   | Consultant, UPERC                |  |
| 24         | Shri Pradeep Tandon   | Director (Technical),            |  |
|            |   | MVVNL                            |  |
| 25         | Shri Pramod Khandalkar  | Director (Commercial),<br>UPPTCL |  |
| 26         | Shri Mohit Goyal  | Consultant, UPPCL                |  |
| 20         | Shri Sayed Abbaj Rizvi  | UPPCL                            |  |
| 27         | Shri Manoj Jain   | NPCL                             |  |
| 28         | Shri A.K. Arora   | NPCL                             |  |
| 30         | Shri S. Joshi   | UPPCL                            |  |
| 50         | 3111 3. JUSIII  | UFFCL                            |  |



| List of Persons who attended Public Hearing at Sitapur on April 9, 2015 |                          |                          |
|---|--------------------------|--------------------------|
| Sl. No.   | Name                     | Organisation             |
| 31  | Shri S.K. Bhattacharya   | UPPTCL                   |
| 32  | Shri Shaitendra Grav     | UPPTCL                   |
| 33  | Shri S.K. Chaurasya      | UPPTCL                   |
| 34  | Shri Ramesh Kumar        | KESCO                    |
| 35  | Shri Jay Jay Ram Pandey  | CGRF                     |
| 36  | Shri Nisar Ahmad         | CGRF                     |
| 37  | Shri Ashsok Mishra       | CGRF                     |
| 38  | Shri Deepak Kumar        | CGRF                     |
| 39  | Shri R.K.S. Singer       | Mohali Sagar Mill        |
| 40  | Shri Sohan Prasad        | UP State Suger Corporate |
|   |                          | Ltd.                     |
| 41  | Shri Lovkush Yadav       | Consumer                 |
| 42  | Shri Lallan Bajpai       | Consumer                 |
| 43  | Shri K.K. Dixit          | Consumer                 |
| 44  | Shri Shehslesh           | Consumer                 |
| 45  | Shri V.K. Nigam          | CGRF                     |
| 46  | Shri P.K. Diwedi         | Consumer                 |
| 47  | Shri Akhil Kumar         | Consumer                 |
| 48  | Shri Nakul               | CGRF                     |
| 49  | Smt. Richa Dixit         | CGRF                     |
| 50  | Shri Vivek               | CGRF                     |
| 51  | Shri Abhishek Srivastava | CGRF                     |
| 52  | Shri A.K. Agarwal        | CGRF                     |
| 53  | Shri Ram Shebrli         | MVVNL                    |
| 54  | Shri Hari Prakash        | MVVNL                    |
| 55  | Shri N.K. Srivastava     | MVVNL                    |
| 56  | Shri A.K. Singh          | MVVNL                    |
| 57  | Shri R.P. Singh          | PVVNL                    |
| 58  | Shri R.K. Verma          | UPPCL                    |
| 59  | Shri S.K. Singh          | UPPTCL                   |
| 60  | Shri V.K. Sharma         | UPPCL                    |
| 61  | Shri Ashutosh Kumar      | MVVNL                    |
| 62  | Shri Mohit               | MVVNL                    |
| 63  | Shri Ram Saran           | MVVNL                    |
| 64  | Shri Svdesh Gupta        | NBT                      |
| 65  | Shri Chandra Sekhar      | MVVNL                    |
| 66  | Shri G. Dhupriyar        | Consumer                 |
| 67  | Shri Sudhir Kumar        | Consumer                 |
| 68  | Shri Satesh Kumar        | Consumer                 |



| List of Persons who attended Public Hearing at Sitapur on April 9, 2015 |                              |              |
|---|------------------------------|--------------|
| Sl. No.   | Name                         | Organisation |
| 69  | Shri K.D. Nishad             | Consumer     |
| 70  | Shri S.K. Verma              | Consumer     |
| 71  | Shri Ashutosh Pandey         | Consumer     |
| 72  | Smt Beena Pandey             | Consumer     |
| 73  | Shri Santosh Mishra          | Consumer     |
| 74  | Shri Ujjawal Srivastava      | Consumer     |
| 75  | Shri Kanti Prakash           | Consumer     |
| 76  | Shri Raju Gautam             | Consumer     |
| 77  | Shri Janab Khan              | Consumer     |
| 78  | Shri Akhilesh Chandrashekher | Consumer     |
| 79  | Shri Gopal Tandan            | Consumer     |
| 80  | Shri Rahul Jaiswal           | Consumer     |
| 81  | Shri Mahesh Sharma           | Consumer     |
| 82  | Shri Pradeep Kumar           | Consumer     |
| 83  | Shri Indu Singh Chauhan      | Consumer     |
| 84  | Shri Deepti Mishra           | Consumer     |
| 85  | Shri G.C. Mishra             | Advocate     |
| 86  | Shri R.C. Verma              | UPPCL        |
| 87  | Shri A.K. Singh              | MVVNL        |
| 88  | Shri A.K. Kaushal            | MVVNL        |
| 89  | Shri K.P. Khan               | MVVNL        |
| 90  | Shri M.K. Jaiswal            | Consumer     |
| 91  | Shri A.N. Singh              | MVVNL        |
| 92  | Smt Maya Devi                | Consumer     |
| 93  | Shri Shivakant Tripathi      | Consumer     |
| 94  | Shri Chandra Prakash Awasthi | Consumer     |
| 95  | Shri K.K. Mishra             | Consumer     |
| 96  | Shri R.P. Sharma             | Consumer     |
| 97  | Shri Ajay Singh              | Consumer     |
| 98  | Shri Sachhidanand            | Consumer     |
| 99  | Shri Shiv Balak              | Consumer     |
| 100   | Shri Bhawgoti Prasad         | Consumer     |
| 101   | Shri V.K. Gupta              | Consumer     |
| 102   | Shri DevBhanu Singh          | Consumer     |
| 103   | Shri Sunil Singh Gour        | Consumer     |



| List of Persons who attended Public Hearing at Sitapur on April 9, 2015 |                            |              |
|---|----------------------------|--------------|
| SI. No.   | Name                       | Organisation |
| 104   | Shri Servesh Pandey        | Consumer     |
| 105   | Shri Kisori Lal Srivastava | Consumer     |
| 106   | Shri Sudhir Shukla         | Consumer     |
| 107   | Shri Satish Tiwari         | Consumer     |
| 108   | Shri Saral Kumar           | Consumer     |
| 109   | Shri Atul Gupta            | Consumer     |
| 110   | Shri Ganpati               | Consumer     |
| 111   | Shri Sagar Sharan Bhargava | Consumer     |
| 112   | Shri Ram Chandra           | Consumer     |
| 113   | Shri PyareLal              | Consumer     |
| 114   | Shri Yogendra Nath Mishra  | Consumer     |
| 115   | Shri SidheShwri Devi       | Consumer     |
| 116   | Shri Amardeep Singh        | Consumer     |
| 117   | Shri Rama pati             | Consumer     |
| 118   | Shri Kamlesh Kumar         | Consumer     |
| 119   | Shri Satrohan Lal          | Consumer     |
| 120   | Shri Shri Ram              | Consumer     |
| 121   | Shri Ashok Yadav           | Consumer     |
| 122   | Shri Om Prakash Mishra     | Amar Ujala   |
| 123   | Shri Ram Prakash ken       | Consumer     |
| 124   | Shri Amit Srivastava       | Consumer     |
| 125   | Shri J.B. Singh            | Consumer     |
| 126   | Shri Satyapal              | Consumer     |
| 127   | Shri S.P. Pal              | Consumer     |
| 128   | Shri Ravi Kumar            | Consumer     |
| 129   | Shri V.P. Verma            | Consumer     |
| 130   | Shri Mukesh Kumar          | Consumer     |
| 131   | Shri Umesh Pandey          | Consumer     |
| 132   | Shri Prem Agarwal          | Consumer     |
| 133   | Shri Asheesh Mishra        | Consumer     |
| 134   | Shri Tushar Sahani         | Consumer     |



| List of Persons who attended Public Hearing at Sitapur on April 9, 2015 |                    |              |
|---|--------------------|--------------|
| SI. No.   | Name               | Organisation |
| 135   | Shri Ram Narayan   | Consumer     |
| 136   | Shri Lalta Prashad | Consumer     |
| 137   | Shri Kali Chaaran  | Consumer     |
| 138   | Shri Tanveer Alam  | Consumer     |

# LIST OF PERSONS WHO HAVE ATTENDED PUBLIC HEARING AT IN GHAZIABAD

| List of Persons who attended Public Hearing at Ghaziabad on April 15, 2015 |                          |                          |
|--|--------------------------|--------------------------|
| Sr. No.  | Name                     | Organisation             |
| 1  | Shri Rajpal Singh        | Consumer                 |
| 2  | Shri Sushil Agarwal      | Consumer                 |
| 3  | Shri Anil Pandit         | Consumer                 |
| 4  | Shri Atul Shrma          | Consumer                 |
| 5  | Shri Veerpal Malik       | Consumer                 |
| 6  | Shri S.K. Mahrotra       | Consumer                 |
| 7  | Shri Davandra Malik      | Consumer                 |
| 8  | Shri Ram Prasad Singh    | Consumer                 |
| 9  | Shri Anil Kumar Bharti   | Consumer                 |
| 10   | Shri Narendra Kumar      | Consumer                 |
| 11   | Shri P.K. Gupta          | Consumer                 |
| 12   | Shri Awadh Narayan Singh | Consumer                 |
| 13   | Shri S.P. Sharma         | Consumer                 |
| 14   | Shri Z. Rehman           | Consumer                 |
| 15   | Shri Visharash Gupta     | Consumer                 |
| 16   | Shri V.K. Mittal         | Consumer                 |
| 17   | Shri Lalit Kumar Gupta   | Consumer                 |
| 18   | Shri Amit Bhargava       | Director (Tariff), UPERC |
| 19   | Shri Vivek Sharma        | Consumer                 |
| 20   | Shri Ravi Bansal         | Consumer                 |
| 21   | Shri Mittal Bman         | Consumer                 |
| 22   | Shri Ajay Chauhan        | Consumer                 |
| 23   | Shri Rajeev Yadav        | Consumer                 |
| 24   | Shri Vijay Karan         | Consumer                 |
| 25   | Shri Sabir Malik         | Consumer                 |
| 26   | Shri Boblu Chaudhry      | Consumer                 |



| List of Persons who attended Public Hearing at Ghaziabad on April 15, 2015 |                              |                       |
|--|------------------------------|-----------------------|
| Sr. No.  | Name                         | Organisation          |
| 27   | Shri Mohit Goyal             | Aligarh Rolling Mills |
| 28   | Shri Omdutt Gupta            | Consumer              |
| 29   | Shri Rajeev Mahrotra         | Consumer              |
| 30   | Shri Vipendra Sudha Valimiki | Consumer              |
| 31   | Shri N.K. Puri               | Consumer              |

#### LIST OF PERSONS WHO HAVE ATTENDED PUBLIC HEARING AT ORAI

| List of Persons who attended Public Hearing at Orai on April 21, 2015 |                          |                          |
|---|--------------------------|--------------------------|
| Sr. No.   | Name                     | Organisation             |
| 1   | Shri Dileep Singh        | CGRF                     |
| 2   | Shri Vinod Kumar         | CGRF                     |
| 3   | Shri M. Gufran           | UPPCL                    |
| 4   | Shri Kishor Kumar Sharma | DVVNL                    |
| 5   | Shri R.L. Yadav          | DVVNL                    |
| 6   | Shri R.D. Yadav          | UPPTCL                   |
| 7   | Shri S.K. Chaursiya      | UPPTCL                   |
| 8   | Shri G.R. Ambwani        | Consumer                 |
| 9   | Shri A.K. Arora          | NPCL                     |
| 10  | Shri A.K. Pandey         | KESCO                    |
| 11  | Shri Amit Bhargava       | Director (Tariff), UPERC |
| 12  | Shri R.K. Trivedi        | CGRF                     |
| 13  | Shri Arun Kumar          | CGRF                     |
| 14  | Mohd Saif islam          | DVVNL                    |
| 15  | Shri Ram Krishna         | Consumer                 |
| 16  | Shri Sanjeev Rana        | PVVNL                    |
| 17  | Shri Rakesh Kumar        | Consumer                 |
| 18  | Shri Prashant Singh      | Consumer                 |
| 19  | Shri V.K. Verma          | Consumer                 |
| 20  | Shri Deepak Singh        | KESCO                    |
| 21  | Shri Gurdeep Singh       | KESCO                    |
| 22  | Shri Desh Raj            | Consumer                 |
| 23  | Shri Pradyuman Tripthi   | KESCO                    |
| 24  | Shri D.Paehose           | DVVNL                    |
| 25  | Shri Er. Ramesh Kumar    | Consumer                 |
|   |                          |                          |



| List of Persons who attended Public Hearing at Orai on April 21, 2015 |                           |                        |
|---|---------------------------|------------------------|
| Sr. No.   | Name                      | Organisation           |
| 26  | Shri A.K.S                | KESCO                  |
| 27  | Shri Pankaj Saxena        | KESCO                  |
| 28  | Shri D.C. Verma           | Consumer               |
| 29  | Shri Saurabh Garg         | ABPS-Consultant, UPERC |
| 30  | Shri Abhinas Agarwal      | ABPS-Consultant, UPERC |
| 31  | Shri Hemant Tiwari        | Consumer               |
| 32  | Shri G.K. Singh           | KESCO                  |
| 33  | Shri Vinod Kumar          | KESCO                  |
| 34  | Shri Manoj Kumar Agrahari | KESCO                  |
| 35  | Shri Vishnu Kumar         | CGRF                   |
| 36  | Shri Rakesh Srivastava    | Consumer               |
| 37  | Shri Santosh Kumar        | KESCO                  |
| 38  | Shri Narendra             | Consumer               |
| 39  | Shri Taran Veer Singh     | Consumer               |
| 40  | Shri S.S. Prasad          | Consumer               |
| 41  | Shri Adarsh Kumar Kaushal | MVVNL                  |
| 42  | Shri K.P. Khan            | MVVNL                  |
| 43  | Shri Sunit Kumar          | Consumer               |
| 44  | Shri G.C. Jha             | KESCO                  |
| 45  | Shri S.B. Verma           | KESCO                  |
| 46  | Shri R.B. Singh           | CGRF                   |
| 47  | Shri R.B. Chandai         | Consumer               |
| 48  | Shri Tirthankar Sarkar    | Hindustan United Itd   |
| 49  | Shri Manish Gupta         | Consumer               |
| 50  | Shri Udai Chauhan         | Hindustan United Itd   |
| 51  | Shri Yogesh Agarwal       | Rimjim Ispat Ltd.      |
| 52  | Shri Harikesh             | Consumer               |
| 53  | Shri V.N. Kumar           | Consumer               |
| 54  | Shri Vijay Singh          | Consumer               |
| 55  | Shri Arun Kumar Sexsena   | Consumer               |
| 56  | Shri Sahav Singh Chauhan  | Consumer               |
| 57  | Shri Rajveer Singh        | Consumer               |
| 58  | Shri Balram Singh         | Consumer               |
| 59  | Shri Surendra Singh       | Consumer               |
| 60  | Shri jagdish Tiwari       | Consumer               |



| List of | List of Persons who attended Public Hearing at Orai on April 21, 2015 |              |  |
|---------|---|--------------|--|
| Sr. No. | Name  | Organisation |  |
| 61      | Shri Pravesh Kumar  | Consumer     |  |
| 62      | Shri P.M. Prabhakar   | Consumer     |  |
| 63      | Shri M. Gufran  | Consumer     |  |
| 64      | Shri Balkesh Rajput   | Consumer     |  |
| 65      | Shri Rajeev Singh   | Consumer     |  |
| 66      | Shri Harikarn Gupta   | Consumer     |  |
| 67      | Shri Ajay Gupta   | Consumer     |  |
| 68      | Shri Ajay Kumar   | Consumer     |  |
| 69      | Shri G.D. Diwedi  | Consumer     |  |
| 70      | Moh. Israr ahmad  | Consumer     |  |
| 71      | Shri Ram Prakas   | Consumer     |  |
| 72      | Shri Shivam Kumar   | Consumer     |  |
| 73      | Shri Rajesh   | Consumer     |  |
| 74      | Shri Mahendra Kumar Verma   | Consumer     |  |
| 75      | Shri Shyam Baran Singh  | Consumer     |  |
| 76      | Shri Rajendra Kumar Yadav   | Consumer     |  |
| 77      | Shri Pramod Kumar   | Consumer     |  |
| 78      | Shri Anil Kumar   | Consumer     |  |
| 79      | Shri Bhupendra Kumar  | Consumer     |  |
| 80      | Shri Ramesh Rajput  | Consumer     |  |
| 81      | Shri Dilip Kumar Verma  | Consumer     |  |
| 82      | Smt Kishori Devi  | Consumer     |  |
| 83      | Shri Kailash Singh Yadav  | Consumer     |  |
| 84      | Shri Babu Lal   | Consumer     |  |
| 85      | Shri Kamar Khan   | Consumer     |  |
| 86      | Shri Amir Khan  | Consumer     |  |
| 87      | Shri Ankur Khan   | Consumer     |  |
| 88      | Shri Ankur Tiwari   | Consumer     |  |
| 89      | Shri Surendra Kumar   | Consumer     |  |
| 90      | Shri Vijay Krishna Gupta  | Consumer     |  |
| 91      | Shri Ajay Kumar   | Consumer     |  |
| 92      | Shri B.K. Chaudhary   | Consumer     |  |
| 93      | Shri Virendra Kumar Verma   | Consumer     |  |
| 94      | Shri Santosh Kumar  | Consumer     |  |
| 95      | Shri Rakesh Singh   | Consumer     |  |



# LIST OF PERSONS WHO HAVE ATTENDED PUBLIC HEARING AT GORAKHPUR

| List of Persons who attended Public Hearing at Gorakhpur on April 27,<br>2015 |                         |                          |
|---|-------------------------|--------------------------|
| Sr. No.   | Name                    | Organisation             |
| 1   | Shri S.P. Pandey        | PVVNL                    |
| 2   | Shri D.K. Singh         | UPPCL                    |
| 3   | Shri Ravindra Kumar     | PVVNL                    |
| 4   | Shri Akhil              | PVVNL                    |
| 5   | Shri S.P. Tripathi      | PVVNL                    |
| 6   | Shri Sudhanshu Diwedi   | PuVVNL                   |
| 7   | Shri Amit Bhargava      | Director (Tariff), UPERC |
| 8   | Shri Ajit Singh         | PuVVNL                   |
| 9   | Shri Vivek Dekshit      | UPPCL                    |
| 10  | Shri Sanjay Kumar Singh | UPPCL                    |
| 11  | Shri A.K. Singh         | PuVVNL                   |
| 12  | Shri O.P. Gupta         | PuVVNL                   |
| 13  | Shri L.B. Sharma        | PuVVNL                   |
| 14  | Shri G.C. Dwivedi       | Consumer                 |
| 15  | Shri B.R.S. Chauhan     | Consumer                 |
| 16  | Shri A.K. Singh         | Consumer                 |
| 17  | Shri C.P. Gupta         | Consumer                 |
| 18  | Shri Sanjay Yadav       | Consumer                 |
| 19  | Shri M.N. Goyal         | Consumer                 |
| 20  | Shri V.K. Singh         | Consumer                 |
| 21  | Shri Dheeraj Singh      | Consumer                 |
| 22  | Shri A.K. Arora         | NPCL                     |
| 23  | Shri Ramesh Kumar       | KESCO                    |
| 24  | Shri Mohit Goyal        | UPPCL                    |
| 25  | Shri D.K. Lal           | Consumer                 |
| 26  | Shri Rajat Jureja       | Consumer                 |
| 27  | Shri Ashok Kumar        | Consumer                 |
| 28  | Shri Pradyuma Tripathi  | PuVVNL                   |
| 29  | Shri B.L. Anand         | Consumer                 |
| 30  | Shri Sanjay Kumar Singh | Consumer                 |
| 31  | Shri Subodh Verma       | Consumer                 |
| 32  | Shri Vishal Mishra      | Consumer                 |
| 33  | Shri S.A. Rizvi         | UPPCL                    |



| List of Persons who attended Public Hearing at Gorakhpur on April 27,<br>2015 |                             |              |
|---|-----------------------------|--------------|
| Sr. No.   | Name                        | Organisation |
| 34  | Shri Pradeep Kumar          | Consumer     |
| 35  | Shri Rajesh Ranjan Singh    | Consumer     |
| 36  | Shri S. Joshi               | Consumer     |
| 37  | Shri R.A.P                  | Consumer     |
| 38  | Shri Khalil Fazal           | Consumer     |
| 39  | Shri MK Gaur                | Consumer     |
| 40  | Shri Ram Sharda             | MVVNL        |
| 41  | Shri Vinod Kumar            | Consumer     |
| 42  | Shri Lalit Kumar            | Consumer     |
| 43  | Shri Sudhir Rastogi         | MVVNL        |
| 44  | Shri V.P. Singh             | Consumer     |
| 45  | Shri V.K. Singh             | Consumer     |
| 46  | Shri A.K. Singh             | Consumer     |
| 47  | Shri B. Prasad              | Consumer     |
| 48  | Shri H.R. Azmi              | Consumer     |
| 49  | Shri Ghanshyam Mishra       | Consumer     |
| 50  | Shri S.P.N. Singh           | Consumer     |
| 51  | Shri Lal Chand Rai          | Consumer     |
| 52  | Shri Rajesh Kumar Prajapati | Consumer     |
| 53  | Smt. Neeti Mishra           | Consumer     |
| 54  | Shri Mahendra Mishra        | Consumer     |
| 55  | Shri A.K. Chaudhary         | Consumer     |
| 56  | Shri A.K. Singh             | Consumer     |
| 57  | Shri Ajay Kumar Singh       | Consumer     |
| 58  | Shri Ashish                 | Consumer     |
| 59  | Shri Shachindra Jaiswal     | Consumer     |
| 60  | Shri R.N. Mishra            | Consumer     |
| 61  | Shri Avinash Kumar Singh    | Consumer     |
| 62  | Shri Krishna Kuamr          | Consumer     |
| 63  | Shri Bipin Kumar Singh      | Consumer     |
| 64  | Shri C.K. Chaurasiya        | UPPCL        |
| 65  | Shri Hemant Kumar Singh     | UPPCL        |
| 66  | Shri Abhishek Singh         | UPPCL        |
| 67  | Shri Naveen                 | UPPCL        |
| 68  | Shri Akanksha Jaiswal       | UPPCL        |



| List of Pe | List of Persons who attended Public Hearing at Gorakhpur on April 27, 2015 |              |  |  |  |  |  |  |
|------------|--|--------------|--|--|--|--|--|--|
| Sr. No.    | Name   | Organisation |  |  |  |  |  |  |
| 69         | Shri Er. S.K. Singh  | UPPCL        |  |  |  |  |  |  |
| 70         | Shri Arush Kumar Rahman  | UPPCL        |  |  |  |  |  |  |
| 71         | Shri P. Ram  | Consumer     |  |  |  |  |  |  |
| 72         | Shri M.N. Bharti   | Consumer     |  |  |  |  |  |  |
| 73         | Shri Nagendra Nath   | Consumer     |  |  |  |  |  |  |
| 74         | Shri Satya Prakash Singh   | Consumer     |  |  |  |  |  |  |
| 75         | Shri RamJanak Singh  | Consumer     |  |  |  |  |  |  |
| 76         | Shri Vinod kumar Srivastava  | Consumer     |  |  |  |  |  |  |
| 77         | Shri Nitin Kumar Gupta   | Consumer     |  |  |  |  |  |  |
| 78         | Shri Mohd. Rizwan Siddiqui   | Consumer     |  |  |  |  |  |  |
| 79         | Shri Sanjay Kumar Yadav  | Consumer     |  |  |  |  |  |  |
| 80         | Shri Yesh hural Verma  | Consumer     |  |  |  |  |  |  |
| 81         | Shri K.L. Yadav  | Consumer     |  |  |  |  |  |  |
| 82         | Shri Kamlesh Kumar   | Consumer     |  |  |  |  |  |  |
| 83         | Shri Mrityunjaya Sharma  | Consumer     |  |  |  |  |  |  |
| 84         | Shri Mukesh Kumar  | Consumer     |  |  |  |  |  |  |
| 85         | Shri R.C. Yadav  | Consumer     |  |  |  |  |  |  |
| 86         | Shri A.K. Chaudhary  | Consumer     |  |  |  |  |  |  |
| 87         | Shri Girish Chaube   | Consumer     |  |  |  |  |  |  |
| 88         | Shri Bhagesh wari gupta  | Consumer     |  |  |  |  |  |  |
| 89         | Shri Gaurav Singh  | Consumer     |  |  |  |  |  |  |
| 90         | Shri Kush Singh  | Consumer     |  |  |  |  |  |  |
| 91         | Shri Bharat Tiwari   | Consumer     |  |  |  |  |  |  |

\* The above list may not be exhaustive and does not include names of some of the stakeholders whose names were illegible.



## 11.6 FUEL AND POWER PURCHASE COST ADJUSTMENT SURCHARGE

#### TABLE -: APPROPRIATION OF APPROVED POWER PURCHASE FOR FY 2015-16: FPPCA

|   |          |          |          |          |          | FY 2015-16 |          |          |          |          |          |          |           |
|---|----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|----------|----------|-----------|
| PVVNL   | Apr      | May      | June     | July     | Aug      | Sept       | Oct      | Nov      | Dec      | Jan      | Feb      | Mar      | Total     |
| Allocation of<br>Approved Power<br>Purchase (MU)          | 2,780.57 | 3,056.47 | 3,047.38 | 3,050.79 | 3,078.04 | 2,579.60   | 2,564.84 | 2,290.08 | 2,382.05 | 2,432.00 | 2,137.94 | 2,491.04 | 31,890.80 |
| Approved average<br>power power per<br>unit (Rs/Unit)     |          |          |          |          |          |            |          |          |          |          |          |          | 4.27      |
| Allocated<br>Approved Power<br>Purchase Cost (Rs.<br>Crs) | 1,186.71 | 1,304.47 | 1,300.59 | 1,302.04 | 1,313.67 | 1,100.95   | 1,094.65 | 977.38   | 1,016.63 | 1,037.95 | 912.45   | 1,063.15 | 13,610.64 |
|   |          |          |          |          |          | FY 2015-16 |          |          |          |          |          |          |           |
| DVVNL   | Apr      | May      | June     | July     | Aug      | Sept       | Oct      | Nov      | Dec      | Jan      | Feb      | Mar      | Total     |
| Allocation of<br>Approved Power<br>Purchase (MU)          | 2,329.29 | 2,560.42 | 2,552.81 | 2,555.66 | 2,578.49 | 2,160.95   | 2,148.58 | 1,918.41 | 1,995.45 | 2,037.30 | 1,790.96 | 2,086.76 | 26,715.08 |
| Approved average<br>power power per<br>unit (Rs/Unit)     |          |          |          |          |          |            |          |          |          |          |          |          | 4.27      |
| Allocated<br>Approved Power<br>Purchase Cost (Rs.<br>Crs) | 994.12   | 1,092.76 | 1,089.51 | 1,090.73 | 1,100.47 | 922.27     | 916.99   | 818.76   | 851.64   | 869.50   | 764.36   | 890.61   | 11,401.70 |



Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

|   | FY 2015-16 |          |          |          |          |            |          |          |          |          |          |          |           |
|---|------------|----------|----------|----------|----------|------------|----------|----------|----------|----------|----------|----------|-----------|
| MVVNL   | Apr        | May      | June     | July     | Aug      | Sept       | Oct      | Nov      | Dec      | Jan      | Feb      | Mar      | Total     |
| Allocation of<br>Approved Power<br>Purchase (MU)          | 1,680.85   | 1,847.63 | 1,842.14 | 1,844.20 | 1,860.67 | 1,559.37   | 1,550.44 | 1,384.35 | 1,439.94 | 1,470.14 | 1,292.38 | 1,505.83 | 19,277.93 |
| Approved average<br>power power per<br>unit (Rs/Unit)     |            |          |          |          |          |            |          |          |          |          |          |          | 4.27      |
| Allocated<br>Approved Power<br>Purchase Cost (Rs.<br>Crs) | 717.37     | 788.55   | 786.20   | 787.08   | 794.11   | 665.52     | 661.71   | 590.82   | 614.55   | 627.44   | 551.57   | 642.67   | 8,227.61  |
|   |            |          |          |          |          | FY 2015-16 |          |          |          |          |          |          |           |
| PuVVNL  | Apr        | May      | June     | July     | Aug      | Sept       | Oct      | Nov      | Dec      | Jan      | Feb      | Mar      | Total     |
| Allocation of<br>Approved Power<br>Purchase (MU)          | 2,005.40   | 2,204.38 | 2,197.83 | 2,200.29 | 2,219.94 | 1,860.46   | 1,849.81 | 1,651.65 | 1,717.98 | 1,754.01 | 1,541.92 | 1,796.59 | 23,000.26 |
| Approved average<br>power power per<br>unit (Rs/Unit)     |            |          |          |          |          |            |          |          |          |          |          |          | 4.27      |
| Allocated<br>Approved Power<br>Purchase Cost (Rs.<br>Crs) | 855.88     | 940.81   | 938.01   | 939.06   | 947.45   | 794.02     | 789.48   | 704.91   | 733.21   | 748.59   | 658.07   | 766.76   | 9,816.26  |



Determination of ARR and Tariff of MVVNL for FY 2015-16 and True-up of FY 2012-13

|   | FY 2015-16 |           |           |           |           |            |          |          |          |          |          |          |            |
|---|------------|-----------|-----------|-----------|-----------|------------|----------|----------|----------|----------|----------|----------|------------|
| KeSCO   | Apr        | May       | June      | July      | Aug       | Sept       | Oct      | Nov      | Dec      | Jan      | Feb      | Mar      | Total      |
| Allocation of<br>Approved Power<br>Purchase (MU)          | 349.44     | 384.11    | 382.97    | 383.39    | 386.82    | 324.18     | 322.33   | 287.80   | 299.35   | 305.63   | 268.68   | 313.05   | 4,007.73   |
| Approved average<br>power power per<br>unit (Rs/Unit)     |            |           |           |           |           |            |          |          |          |          |          |          | 4.27       |
| Allocated<br>Approved Power<br>Purchase Cost (Rs.<br>Crs) | 149.14     | 163.93    | 163.45    | 163.63    | 165.09    | 138.36     | 137.56   | 122.83   | 127.76   | 130.44   | 114.67   | 133.61   | 1,710.46   |
|   |            |           |           |           |           | FY 2015-16 |          |          |          |          |          |          |            |
| UPPCL   | Apr        | May       | June      | July      | Aug       | Sept       | Oct      | Nov      | Dec      | Jan      | Feb      | Mar      | Total      |
| Allocation of<br>Approved Power<br>Purchase (MU)          | 9,145.54   | 10,053.00 | 10,023.13 | 10,034.33 | 10,123.96 | 8,484.55   | 8,436.01 | 7,532.28 | 7,834.77 | 7,999.08 | 7,031.87 | 8,193.27 | 104,891.80 |
| Approved average<br>power power per<br>unit (Rs/Unit)     |            |           |           |           |           |            |          |          |          |          |          |          | 4.27       |
| Allocated<br>Approved Power<br>Purchase Cost (Rs.<br>Crs) | 3,903.22   | 4,290.51  | 4,277.76  | 4,282.54  | 4,320.79  | 3,621.11   | 3,600.39 | 3,214.69 | 3,343.79 | 3,413.92 | 3,001.13 | 3,496.80 | 44,766.65  |

## 11.7 ACTION TAKEN REPORT ON THE DIRECTIONS ISSUED BY THE COMMISSION IN THE ARR / TARIFF ORDER FOR FY 2015-16

| SI.<br>No. | Description of Directive   | Time Period for<br>compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of<br>Complia<br>nce |
|------------|--|---|-----------------------------|
| 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<br>months  |                             |
| 2          | The Commission reiterates its direction to the Licensee to<br>ensure proper maintenance of detailed fixed assets registers as<br>specified in the Distribution Tariff Regulations.   | Immediate   |                             |
|            | 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.   |   |                             |
| 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<br>petition for FY<br>2016-17                                      |                             |
| 4          | The Commission directs the Licensee to submit Fresh Actuarial Valuation Study Report in respect to employee expenses.  | Along with the<br>petition for FY<br>2016-17                                      |                             |
| 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. | Within 1 month  |                             |
| 6          | The Commission directs the Licensee to submit data related to<br>its peak demand and off peak demand in MW along with its<br>sales projections in accordance with Clause 3.1.4 of the<br>Distribution Tariff Regulations.  | Along with the<br>petition for FY<br>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<br>petition for FY<br>2016-17                                      |                             |
| 8          | The Commission directs the Licensee to pay the applicable<br>interest on consumer's security deposit as per the Orders of the<br>Commission and submit the compliance report with the next<br>ARR filing. Licensees are directed to ensure the timely payment<br>of the interest on security deposit to the consumers.   | Immediate   |                             |



| SI.<br>No. | Description of Directive  | Time Period for<br>compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of<br>Complia<br>nce |
|------------|---|---|-----------------------------|
| 9          | As regards the Commission's directives to submit a road map<br>for 100% metering in its licensed area given in the Tariff Order<br>dated 31 <sup>st</sup> May, 2013, the Licensees has not complied with the<br>directions of the Commission. The Commission once again<br>directs the Licensee to comply with the direction given by the<br>Commission in this Order and accordingly put it sincere efforts<br>to achieve 100% metering.   | 3 months from<br>issue of this<br>Order   |                             |
| 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<br>months from<br>the date of<br>issuance of this<br>Order           |                             |
| 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   |                             |
| 12         | As regards timely filing of FPPCA the Commission once again<br>directs the Licensees that they should file FPPCA in a timely and<br>regular manner in accordance with the Distribution Tariff<br>Regulations, 2006 failing which the Commission may have to<br>resort to take strict action against the Licensees like<br>disallowance of additional power purchase expenses and the<br>associated carrying cost on account of additional Power<br>Purchase expenses or any other action that the Commission<br>may deem fit while doing the Truing up. | Immediate   |                             |
| 13         | As regards the RPO Obligation the Licensees are directed to<br>ensure that they procure renewable energy in accordance with<br>Regulation 4 of the UPERC (Promotion of Green Energy through<br>Renewable Purchase Obligation) Regulations, 2010 during FY<br>2014-15 to meet their obligation.  | Next ARR filing   |                             |
| 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   | Next ARR filing   |                             |



| SI.<br>No. | Description of Directive  | Time Period for<br>compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of<br>Complia<br>nce |
|------------|---|---|-----------------------------|
|            | submit the status report on the same along with next ARR filing   |   |                             |
| 15         | The Licensee is directed to file a separate Petition for approval<br>of prior period expenses / incomes. The Petition should clearly<br>indicate the head-wise year-wise bifurcation of prior period<br>expenses / incomes clearly indicating the impact of such<br>expenses / incomes on various ARR components, and such<br>impact should not exceed the normative expenses for any<br>particular year. | 1 month from<br>the date of<br>issuance of this<br>Order                          |                             |
| 16         | The Licensee is directed to submit a note detailing the area-<br>wise actual number of supply hours provided to rural areas by<br>the end of FY 2015-16.  | By end of FY<br>2015-16   |                             |
| 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 15 <sup>th</sup> April, 2016.   | By 15 <sup>th</sup> April,<br>2016  |                             |
| 18         | The Commission directs the Licensee to evolve principles for<br>prudent segregation of ARR towards wheeling function and<br>retail supply function embedded in the distribution function in<br>accordance with Clause 2.1.2 of the Distribution Tariff<br>Regulations.  | As per the Time<br>frame stipulated<br>in MYT<br>Regulations,<br>2014             |                             |
| 19         | The Commission directs the Licensee to submit a long term<br>business plan in accordance with Clause 2.1.7 of the<br>Distribution Tariff Regulations.   | As per the Time<br>frame stipulated<br>in MYT<br>Regulations,<br>2014             |                             |
|            | The Licensee in such business plan shall identify capex projects<br>for the ensuing year and subsequent four years and submit<br>detailed capital investment plan along with a financing plan for<br>undertaking the identified projects in order to meet the<br>requirement of load growth, refurbishment and replacement of<br>equipment, reduction in distribution losses, improvement of              | 2014  |                             |



| SI.<br>No. | Description of Directive  | Time Period for<br>compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of<br>Complia<br>nce |
|------------|---|---|-----------------------------|
|            | voltage profile, improvement in quality of supply, system reliability, metering, communication and computerization, etc.  |   |                             |
| 20         | The Commission directs the Licensee to conduct benchmarking<br>studies to determine the desired performance standards in<br>accordance with Clause 2.1.8 of the Distribution Tariff<br>Regulations.   | As per the Time<br>frame stipulated<br>in MYT<br>Regulations,<br>2014             |                             |
| 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<br>frame stipulated<br>in MYT<br>Regulations,<br>2014             |                             |
| 22         | The Petitioner should complete the Assessment Study of metered consumers as per the Regulations16.2 notified vide MYT Regulations, 2014 and subsequently submit the report to the Commission  | As per the Time<br>frame stipulated<br>in MYT<br>Regulations,<br>2014             |                             |
| 23         | The Petitioner should complete the Assessment Study of un-<br>metered consumers to establish base line norms as per the<br>Regulations 17.1 notified vide MYT Regulations, 2014 and<br>subsequently submit the report to the Commission                                     | As per the Time<br>frame stipulated<br>in MYT<br>Regulations,<br>2014             |                             |
| 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<br>frame stipulated<br>in MYT<br>Regulations,<br>2014             |                             |



| SI.<br>No. | Description of Directive   | Time Period for<br>compliance<br>from the date<br>of issue of the<br>Tariff Order                      | Status of<br>Complia<br>nce |
|------------|--|--|-----------------------------|
| 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<br>frame stipulated<br>in MYT<br>Regulations,<br>2014                                  |                             |
| 26         | The Petitioner should submit Incremental Power Purchase Cost<br>as per the Regulations 20.1 notified vide MYT Regulations, 2014<br>and subsequently submit the report to the Commission  | Within 28 days<br>of quarter end ,<br>for each quarter<br>of Tariff Period<br>1.4.2015 to<br>31.3.2020 |                             |
| 27         | The Petitioner should submit Roadmap for Reduction of Cross<br>Subsidy as per the Regulation 39 notified vide MYT Regulations,<br>2014   | Immediately  |                             |
| 28         | The Petitioner should record and maintain Division wise,<br>Circlewise AT&C Losses and submit the quarterly report to the<br>Commission.   | Quarterly for FY<br>2015-16  |                             |
| 29         | The Petitioner should submit month wise details of number of supply hours for rural and urban area for FY 2014-15.   | Within one<br>month from<br>issue of this<br>Order   |                             |
| 30         | Licensee should provide online facility for submission of application for new connection, name change, load enhancement and load reduction   | Within 3<br>months   |                             |
| 31         | Licensee should develop the mobile application for online<br>payments of bills including other services for facilitation to<br>consumers   | Within 3<br>months   |                             |
| 32         | The Petitioner should submit Standards of Performance parameters as per the tariff formats of Distribution Tariff Regulations, 2006.   | Within one<br>month from<br>issue of this<br>Order   |                             |



| SI.<br>No. | Description of Directive   | Time Period for<br>compliance<br>from the date<br>of issue of the<br>Tariff Order | Status of<br>Complia<br>nce |
|------------|--|---|-----------------------------|
| 33         | The Petitioner should submit additional consumers added in FY 2014-15 apart from the normal consumer addition.   | Within three<br>month of issue<br>of this Order                                   |                             |
| 34         | The Commission directs the Petitioner to frame guidelines and<br>procedures for identifying, physically verifying and writing off<br>the bad debts and also to fix responsibility of its employees in<br>this regard and submit the same to the Commission for its<br>approval         | Within three<br>months of issue<br>of this Order                                  |                             |
| 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 and power cost payable to UPPCL in its true-up petitions for future years. | Next ARR filing   |                             |
| 36         | The Commission directs the Licensee that Open Access shall be<br>allowed as per the provisions outlined by the Commission in its<br>Regulations and amendments from time to time.  | Immediate   |                             |



# 11.8 ANNEXURE: ORDER DATED MAY 11, 2015 ON FIXATION OF TARIFF FOR PRE-PAID METERING

## BEFORE

## THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION,

## LUCKNOW

## Petition No.: 1015 / 2015

## IN THE MATTER OF: Fixation of Tariff for Pre-paid Metering

#### And

#### IN THE MATTER OF:

- 1. Uttar Pradesh Power Corporation Limited (UPPCL), Shakti Bhawan, 14 Ashok Marg, Lucknow.
- 2. Madhyanchal Vidyut Vitaran Nigam Ltd. (MVVNL), Prag Narain Road, Lucknow.
- 3. Purvanchal Vidyut Vitaran Nigam Ltd. (PuVVNL), 132 KV S/s, Bhikaripur Vidyut Nagar, Varanasi.
- 4. Paschimanchal Vidyut Vitaran Nigam Ltd. (PVVNL), Victoria Park, Meerut.
- 5. Dakshanchal Vidyut Vitaran Nigam Ltd. (DVVNL), Vidyut Bhawan, Gailana Road, Agra.
- 6. Kanpur Electricity Supply Company Ltd. (KESCo), KESA House, 14/71, Civil Lines, Kanpur.
- 7. Noida Power Company Ltd. (NPCL), Commercial Complex, H-Block, Alpha II Sector, Greater Noida City.

## ..... Petitioners or affected Distribution Licensees

#### <u>Present</u>

- 1. Shri Desh Deepak Verma, Chairman
- 2. Smt. Meenakshi Singh, Member
- 3. Shri I. B. Pandey, Member

## <u>ORDER</u>



With regard to the Pre-paid Metering, the Commission has passed an Order in the matter of Tariff applicable for the connections given to Jhuggi / Hutments and Patri Shopkeepers on August 25, 2014. Further, the Commission in its Tariff Order for FY 2014-15 dated October 1, 2014 has also provided direction to the Distribution Licensees regarding expedition of process of introduction of Pre-paid meters.

Moreover, in this regard, various meetings were held between officers of the Commission, representatives of State Distribution Licensees and various stakeholders to discuss the issues regarding the implementation of Pre-paid meters in the State. With regard to the same, a Petition was filed by the all the five State Distribution Licensees on April 24, 2015 (Petition No. 1015 / 2015) in the matter of fixation of Tariff for Pre-paid Metering and the petitioners requested the Commission to consider their suggestions / proposals to implement Pre-paid metering in the State. Further, a meeting was also held at UPERC Office on April 28, 2015 which was attended by various officials of the Commission and Distribution Licensees to discuss various matters related to Pre-paid Metering. Consequently, based on the points raised during the meeting, the Distribution Licensees vide letter No. 2453 / RAU / Petition submitted its replies to the Commission on April 30, 2015.

In this regard, taking into consideration the submissions made by the licensees, the Commission hereby approves the following:

- Any consumer having prepaid meter shall be entitled to a discount as specified (as per TO for FY 2014-15 it is 1.25% on Rate of Charge) in the applicable Tariff Order.
- 2. Initially the installation of pre-paid meters may be done for LMV category of consumers with load up to 45 kW only.



- Fixed charges for the Pre-paid consumers should be computed on the contracted / sanctioned load of the consumer instead of demand recorded by the meter or 75% of contracted load, whichever is higher, basis.
- 4. For Pre-paid consumers there should not be any penalty for exceeding the contracted demand, instead if the consumer exceeds its contracted demand his supply will be automatically cut off, which can be immediately resumed after removing the excess load by the consumer and resetting the meter by a simple push button. However, in case a consumer is desirous of enhancing his load, the existing applicable procedures shall apply.
- 5. In case of change of category of consumer on grounds that his consumption exceeds a pre-defined level, the difference amount may be spread on 3 successive units as illustrated below.

# Illustration for Life-Line Consumers tariff as per Tariff Order for FY 2014-15:

A "Lifeline" category consumer has to pay Rs. 435.00/- for consumption of 150 kWh and Rs. 679.50/- for consumption of 151 kWh. So, just by exceeding one unit after 150 units, the consumer would get shifted to "Other Metered" category and all its units already consumed would have to be charged as per the tariff of "Other Metered" category. For this consumption of this extra 1 kWh, he now has to pay Rs. 244.50/- (Rs. 679.50 - Rs. 435.00). Thus, the above amount of Rs. 244.50 would be recovered by dividing / spreading it into 3 successive units i.e. Rs. 81.5/unit.

6. For Lifeline consumers, if the consumption exceeds a certain limit (say 150 units) and the supply is interrupted for non availability of balance, then the excess amount to be paid by the consumer shall be adjusted in the next recharge.



- 7. The Minimum Charges specified for a particular category of consumer would be inclusive of Electricity Duty and the Regulatory Surcharges. However, the Electricity Duty and Regulatory Surcharges should be computed on the actual energy consumption.
- 8. For issue of recharge vouchers, initially the existing billing centres shall be authorized to issue these vouchers on working days. Later on depending upon the acceptability of prepaid meters, online recharge facility, recharge through ATM etc. should be introduced.
- 9. The prepaid meters should be installed outside the premises of the consumer, with display unit within. In case a consumer opts for prepaid meter, the charges in respect of meter and cable may be charged in 12 equal monthly instalments.
- 10. At least one prepaid meter recharge shall have to be done within a maximum period of four months. The minimum recharge voucher shall be of Rs. 500/-. However the licensee may reduce the value, based on the response and need of the consumer.
- 11. In case of zero balance, the prepaid meter shall allow continuity of supply from 4.00 P.M of the current day till 11.00 A.M of the next day. The meter shall also not interrupt the supply on Sundays and National Holidays. The consumer shall be prompted whenever his balance goes below Rs 100/-. The consumer will also be given the facility to set a prompt as per his requirement. Accordingly, the supply will automatically stop after the exhaustion of complete balance except for the conditions stated above.
- 12. If the balance of the consumer exhausts during the period specified above and the supply is not interrupted then, the amount billed due to consumption during this period will be recovered in the subsequent recharge of the Prepaid Meter.



After deduction of the due amount from the total recharge amount, the balance amount would be available to the consumer for use. If the recharge amount is not sufficient to recover the due amount, the consumer will not be allowed for further consumption till the entire outstanding due is recovered.

- 13. In case a revised tariff is required to be implemented, a zero value recharge coupon shall be applied to the prepaid meter by staff of the licensee.
- 14. In case a post-paid consumer is allowed to pay his existing dues on instalments, and that consumer wishes to apply for a prepaid meter, his existing instalments shall be transferred to the prepaid meter. New prepaid connection shall not be issued in premises where arrears exist.

The Petition is disposed off as above.

(I. B. Pandey)

(Meenakshi Singh)

(Desh Deepak Verma)

Member

Member

Chairman

Place: Lucknow

Date: 11<sup>th</sup> May, 2015



# 11.9 ANNEXURE: ORDER DATED MAY 29, 2015 ON PROVISIONAL BILLING AND FACILITATION CHARGES

## BEFORE

## THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION,

## LUCKNOW

IN THE MATTER OF: Suo - Motu Proceedings on matters of

- 1. Provisional Billing in case of defective meters / Normative Consumption for Unmetered consumers and,
- 2. Facilitation Charges are being levied when payment is done through internet.

## And

## IN THE MATTER OF:

- 1. Uttar Pradesh Power Corporation Limited (UPPCL), Shakti Bhawan, 14 Ashok Marg, Lucknow.
- 2. Madhyanchal Vidyut Vitaran Nigam Ltd. (MVVNL), Prag Narain Road, Lucknow.
- 3. Purvanchal Vidyut Vitaran Nigam Ltd. (PuVVNL), 132 KV S/s, Bhikaripur Vidyut Nagar, Varanasi.
- 4. Paschimanchal Vidyut Vitaran Nigam Ltd. (PVVNL), Victoria Park, Meerut.
- 5. Dakshanchal Vidyut Vitaran Nigam Ltd. (DVVNL), Vidyut Bhawan, Gailana Road, Agra.
- 6. Kanpur Electricity Supply Company Ltd. (KESCo), KESA House, 14/71, Civil Lines, Kanpur.

## <u>Present</u>

- 1. Shri Desh Deepak Verma, Chairman
- 2. Smt. Meenakshi Singh, Member
- 3. Shri I. B. Pandey, Member

# <u>ORDER</u>

## (Hearing – May 27, 2015)



The Commission has initiated Suo - Moto proceedings in the matter of (1) Provisional Billing in case of Defective Meters / Normative Consumption for Un- metered consumers and (2) the facilitation charges being levied by the Distribution Licensees to the consumers on payment being done through internet. Accordingly, a hearing was conducted on May 7, 2015 in the above matter wherein the various officials from UPPCL and officers of UPERC were present. Subsequently, a Suo - Moto Order was passed by the Commission on May 11, 2015 directing the Licensees to explain as to why revised consumption norms have been issued by the Licensees in spite of specific instructions in the Tariff Order for FY 2014-15 & as to why prior approval / exemption of the commission was not taken for the same. The Commission in the aforesaid Order also directed the Licensees to deliberate on the issue of facilitation charge with a proposal and action taken report. In compliance to the above direction, the Licensees submitted their replies to the Commission on May 26, 2015.

On the above matter, second hearing was held on May 27, 2015 at 11:30 Hrs. in the office of the Commission wherein Officers of the Commission, Mr. Sanjay Singh, Director (Commercial), UPPCL, Mr. Amarjeet Singh Rakhra, Advocate of Distribution Licensees, along with other officials of UPPCL were present. Mr. Avadhesh Kumar Verma, Chairman U.P. Rajya Vidyut Upbhokta Parishad was also present in the hearing.

In reply to the direction given by the Commission in its Suo - Moto Order dated May 11, 2015, the Distribution Licensees submitted that in Electricity Supply Code (ESC) 2005, there are specific provisions regarding how billing is to be done for defective meters but there are no such specific provisions regarding the consumption norms, hence they have passed an executive order regarding the same. In this regard, the Licensees also submitted that, they have been historically specifying the norms and has only revised the existing norms based on the supply hours and Diversity Factor as specified in the Electricity Supply Code, 2005.



The Licensees submitted that the provisional billing have been revised in view of the actual average hours of supply to urban areas wherein they have considered the load factor of 30% for domestic consumers and load factor of 50% for commercial and small scale industries which is in line with the provisions of Supply Code. It further submitted that the revision was necessary from the point of view of better energy accounting and to encourage the consumers to maintain their meters in healthy condition. The Licensees submitted that the Order issued by the UPPCL on dated January 23, 2015 is restricted to provisional billing of the urban consumers with defective meter or no meter only and is no way connected to normative consumption of the unmetered consumers.

The Distribution Licensees further submitted that the Commission has directed the Licensees to fix the consumption norms with respect to rural unmetered consumers but the same could not be undertaken due to lack of clarity on who shall be conducting the study i.e. the Commission or the Licensees. The Licensees further submitted that any study, implementation report for executive Order issued by the Licensee is being viewed circumspectly by the Commission and at times it shows traces of mistrust towards their intention and requested the Commission to conduct the study for specifying the norms of unmetered consumers.

In this regard, it must be noted that, in a meeting held on April 28, 2014 on the issue of revising of consumption norms held with the Commission, the Distribution Licensees have agreed to conduct a study to assess the actual consumption norms in accordance with the Regulations. The relevant extract of the Tariff Order for FY 2014-15 has been specified below for reference:

"9.2.14 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. (Emphasis Added)

9.2.15 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."

Further, with regard to the above direction, the Distribution Licensees in its Tariff Petition for FY 2015-16 has submitted to complete the study for assessment of metered and unmetered consumers by September 30, 2015 and December 31, 2015 respectively as specified below:

"The Petitioner submits 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 by 30.09.2015 and 31.12.2015 respectively.

Accordingly, the same would be completed in the stipulated timeframe."

From the above, it can be seen that clear directions were given to the Licensees in the Tariff Order for FY 2014-15 to conduct the required study to which the Distribution



Licensees have also agreed to submit the same. The Commission feels that the directions were very clear and requires no further clarification. The Licensee should adhere to the stipulated timeframe as specified by the Commission in its UPERC (Multi Year Distribution Tariff) Regulations, 2014 as complete the study as specified by the Commission.

The Licensees also submitted that there is a tendency amongst the dishonest consumers to make their meters defective to take advantage of provision of average billing contributing to high distribution losses, so bills are prepared on reasonable provisional units fixed on the basis of average hours of supply and load diversity of the consumers to deterrent artificial suppression of the actual consumption. The Licensees also submitted that the connections without meters were also released during Vidyut Chori Roko Abhiyan adding 24 Lakhs of new consumers during July and August 2014 due to lack of availability of meters. But such connections were released to at least ledgerize illegal connections and most of such unmetered connections have been metered. The Licensee also submitted that although it tried to start the process of direct sale of meters by the meter vendors to the consumers but the response was not encouraging.

Further, the Licensees clarified that provisional billing is done by the Licensees for consumers with defective meters or no meters (i.e. in the case where the consumers were given metered connection but meters are not yet installed) and such arrangement is only for the 'interim' period and once the meters on such consumers would be installed then the final adjustment will be done based on the provisions of Supply Code. In this regard, the Commission enquired the duration of 'interim' period, to which the Licensee failed to give a satisfactory reply. Further, the Licensees must also note that the Electricity Supply Code also provides that such provisional billing should not extend more than two billing cycles.



In light of the above submission the Licensee has requested the Commission to allow preparation of provisional bills based on assessed units as per Order No. 12 / CE (Comm.) CU - 1 dated January 23, 2015.

Further, during the hearing Mr. Avadhesh Kumar Verma brought the following points to the notice of the Commission:

- Uttarakhand Electricity Regulatory Commission has undertaken a study after which it has notified the normative billing for the unmetered consumers and he stated that it proves that without the permission of the Commission, the Licensee should not issue any order on normative billing.
- He also added that, UPPCL had issued an Order on the similar matter during 2008, which was later rejected by the Commission. The relevant extract of the Commission Order dated March 04, 2008 has been extracted below:

"17. The Commission is not satisfied by the concern shown by the licensee to make their officers / employees accountable for delaying replacement of defective meters, and that by this order the affected consumer will also press the authority for immediate replacement of defective meters to avoid high provisional bills, and it appears as if the licensee's interest is only for collection of higher revenue and not for fast replacement of defective meters and this may well lead to sheer exploitation of consumers. Therefore this practice absolutely does not ensure a fair treatment to consumers, but speaks of inefficiency of the licensee.

18. The Commission is however conscious of the fact that distribution companies have to incur expenses for distribution of power, and therefore cannot also allow the consumers to be benefited by improper functioning of the meter to the disadvantage of the distribution company.



19. In view of the above, the Order dated 4.2.2008, No 175/HC/billing is quashed. The Commission further directs the licensees to submit fresh and concrete proposal to tackle the menace of large number of defective meters taking care of, availability of meters and requisite organization and plan for replacement of defective meters within stipulated time. With this, the complaint stands disposed." (Emphasis added)

He also submitted that, in reply to the objection of the U.P Rajya Vidyut Upbhokta Parishad regarding normative billing, UPPCL had submitted that the unmetered consumers are billed on flat rate and the provisional units fixed for booking against such consumers is totally for academic reasons and for proper accounting of distribution as well as AT&C losses of a particular area, then why the unmetered urban domestic consumers are billed on the basis of 155 per unit per kW per month without the approval of the Commission.

The Commission is of the view that, the Licensees in it submission has repeatedly submitted that they have been historically specifying the norms and has only revised the existing norms based on the supply hours and Diversity Factor as provided in the Electricity Supply Code to which the Commission never had any objection. In this regard it is clarified that the Commission has issued an Order in the matter of provisional billing of defective meters on March 04, 2008 in which speaking of the inefficiency in the part of the Licensees has quashed the Order of the Licensees dated February 04, 2008.

Thus, the Commission after taking into consideration the above facts and considering the constraints being faced by the Licensees on the procedural, procurement, financial and other matters directs the Licensees to use the normative consumption billing method for defective meters as per the provisions specified in the Electricity Supply Code, 2005. However, 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. It is further clarified that the revenue loss on this account must be borne by the Licensees and the revenue loss would be considered as deemed revenue. Thus, appropriate accounting in this regard must be done by the Licensees.

Further, the Commission also directs the Licensees that before changing / revising any consumption norms, prior approval of the Commission must be taken by the Licensees in future.

With regard to the issue regarding the facilitation charges being levied by the Distribution Licensees to the consumers on payment being done through internet, the Commission during the Hearing held on May 7, 2015 has directed the Licensee to deliberate on the same and submit its proposal.

In reply to the above, the Licensees vide its letter dated May 26, 2015 submitted that online payment facility allows the consumer to make payment online using two modes of payment (i) Internet banking (ii) Payment through Credit card or Debit Card. The Licensees submitted that, in case the payment of bill is made by Internet banking the bank which is involved, charges on per transaction basis (i.e. on flat rate) for providing payment services of its bank. The Licensees submitted that these charges directly go to the payment gateway service provider and in order to encourage payment through internet, UPPCL is bearing such charge which is Rs. 3.65 per transaction. Further, in case a payment of bill is made by Credit Card or Debit Card, the Card provider charges fees for providing card payment services which is certain percentage of the transaction amount. M/S Tech Process which is the payment gateway aggregator charges 1% of the transaction amount as transaction fee. The Licensee submitted that to promote payment through internet, it has taken an initiative to bear a transaction charges for transaction up to Rs. 1,000.



During the discussion in the matter the Licensee submitted that category wise waiver of transaction charges is not possible due to implementation issues. In this regard, the Commission directs the Licensees to bear the transaction charges for transactions up to Rs. 4,000 for payment of bill through internet using Credit Card / Debit Card gateway. Further, the Commission also directs the Licensees that, in order to provide greater accessibility & convenience to the consumers, larger number of banks must be included for providing the above facilities.

| (I. B. Pandey)     | (Meenakshi Singh) | (Desh Deepak Verma) |  |  |
|--------------------|-------------------|---------------------|--|--|
| Member             | Member            | Chairman            |  |  |
| Place: Lucknow     |                   |                     |  |  |
| Date: 29 May, 2015 |                   |                     |  |  |