



**ARUNACHAL PRADESH STATE ELECTRICITY REGULATORY  
COMMISSION (APSERC)**

**Determination of Aggregate Revenue Requirement for FY 2015-16  
&**

**Order for Retail Tariff for FY 2015-16  
And**

**True-up of ARR of FY 2012-13,**

**Review of ARR of FY 2013-14**

**For  
Department of Power  
Government of Arunachal Pradesh**

**Issued on 21.4.2015**

**Arunachal Pradesh State Electricity Regulatory Commission**

**अरुणाचल प्रदेश राज्य विद्युत नियामक आयोग**

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List of Abbreviations

| Abbreviation | Description   |
|--------------|---|
| A&G          | Administration & General                                  |
| AC           | Alternating Current                                       |
| ACT          | Electricity Act, 2003                                     |
| APSERC       | Arunachal Pradesh State Electricity Regulatory Commission |
| ARR          | Aggregate Revenue Requirement                             |
| ATE          | Appellate Tribunal For Electricity                        |
| CAGR         | Compound Annual Growth Rate                               |
| CD           | Contract Demand   |
| CEA          | Central Electricity Authority                             |
| CERC         | Central Electricity Regulatory Commission                 |
| CGS          | Central Generating Stations                               |
| CoS          | Cost of Supply  |
| CPSU         | Central Power Sector Undertakings                         |
| Crs          | Crore   |
| D/E          | Debt Equity   |
| DOP, AP      | Department of Power, Govt. of Arunachal Pradesh           |
| EHT          | Extra High Tension  |
| ER           | Eastern Region  |
| FAC          | Fuel Adjustment Costs                                     |
| FDR          | Fixed Deposits Receipts                                   |
| FSTPS        | Farakka Super Thermal Power Station                       |
| FY           | Financial Year  |
| GFA          | Gross Fixed Assets  |
| HP           | Horse Power   |
| HT           | High Tension  |
| KhSTPS       | Kahalgaon Thermal Power Station                           |
| KV           | Kilovolt  |
| KVA          | Kilo Volt Amps  |
| kWh          | Kilo Watt hour  |
| L.T.M.D      | Low Tension Maximum Demand                                |
| LNG          | Liquefied Natural Gas                                     |
| LT           | Low Tension   |
| LTC          | Leave Travel Concession                                   |
| MU           | Million Units   |
| MVA          | Million Volt Amps   |
| MW           | Mega Watt   |
| NHPC         | National Hydroelectric Power Corporation                  |
| NTPC         | National Thermal Power Station                            |
| O&M          | Operation & Maintenance                                   |
| ROE          | Return On Equity  |
| RoR          | Rate of Return  |
| Rs.          | Rupees  |
| S/s          | Sub Station   |
| SBI          | State Bank of India                                       |
| SERC         | State Electricity Regulatory Commission                   |
| SPV          | Special Purpose Vehicle                                   |
| T&D          | Transmission & Distribution                               |
| TSTPS        | Talcher Super Thermal Power Station                       |
| UI           | Unscheduled Interchange                                   |
| UMPP         | Ultra Mega Power Projects                                 |
| NEEPCO       | North Eastern Electric Power Corporation                  |
| NTI          | Non-Tariff Income   |
| RLDC         | Regional Load Despatch                                    |
| SLDC         | State Load Despatch Centre                                |
| R&M          | Repairs and Maintenance                                   |
|              | Power Grid Corporation of India Limited                   |

|       |  |
|-------|--|
| PGCIL |  |
|-------|--|

**Before**  
**The Arunachal Pradesh State Electricity Regulatory Commission (APSERC)**

**Naharlagun, Arunachal Pradesh**  
**Petition No. TP 1 of 2015**

**In the matter of:**

***Determination of Aggregate Revenue Requirement (ARR) and Retail Tariff for sale of electricity by Arunachal Pradesh Department of Power to the consumer in the State of Arunachal Pradesh for the FY 2015-16***

**AND**

***Department of Power, Govt. of Arunachal Pradesh -----Petitioner***

**And in the matter of Suo Moto :**

***True-up of ARR of FY 2012-13,***

***Review of ARR of FY 2013-14***

**in respect of Department of Power, Govt. of Arunachal Pradesh**  
***Present:***

**Digvijai Nath, Chairperson**

**ORDER**

(Passed on 21-4-2015)

The Commission in exercise of the powers vested in it under section 62(1)(d) read with Section 62(3) and Section 64 (3)(a) of the Electricity Act, 2003 and Terms and Conditions for Determination of Tariff Regulations, 2011 issued by Arunachal Pradesh State Electricity Regulatory Commission (APSERC) and other enabling provisions in this behalf, issues this order, determining the Aggregate Revenue Requirement (ARR) and the Retail Tariff for the Financial Year 2015-16 for supply of electricity by the Department of Power, Arunachal Pradesh (DOP, AP) to the Consumers of Electricity in the state of Arunachal Pradesh. The Regulations state that the Distribution Licensee shall file the tariff Petition for Aggregate Revenue Requirement (ARR), complete in all respects, along with requisite fee as prescribed in the Commission's Fee, Regulations, 2011 on or before 30th November of the preceding year. Hence the tariff petition for the financial year 2015-16 should have been filed by the Licensee on or before 30th November 2014.

The DOP, AP filed the petition for 2015-16 before the Commission on 9-1-2015. On scrutiny it was observed that there is some missing information. The Commission communicated its observations regarding deficiencies in the tariff petition to DOP, AP vide its letter dated 5<sup>th</sup> & 20<sup>th</sup> March'2015. However pending receipt of additional data/ information, the Commission admitted the petition on 11-3-2015 though certain information/data was still lacking in the tariff petition, to avoid delay. The DOP, AP submitted some additional data/modified information vide letter no. CE(P)/WEZ/COM/10/14-15/106, Dtd.16-4-2015, the details of which are mentioned in Para 3.4 of Chapter-3.

The Commission took into consideration the facts presented by the DOP, AP in its tariff petition and subsequent filings, the objections / suggestions received from consumer organizations and State Advisory Committee and response of the DOP, AP to those objections. To ensure transparency in the process of tariff determination the Commission, conducted necessary hearings providing a platform to the stakeholders to hear the issues raised by them and response of the DOP, AP thereon.

This order is in 7 (Seven) chapters which include detailed analysis of the Aggregate Revenue Requirement (ARR) and approved Retail Tariff Rates for the financial year 2015-16. The Commission directs the DOP, AP to take all necessary steps for implementation of this order from the effective date after issuance of a public notice, so that order is made applicable to all classes of consumers and energy bills are prepared accordingly, strictly in terms of the approved tariff.

The directives contained in the Chapter-6 should be strictly adhered to and compliance thereof, as desired by the Commission must be placed before it within the stipulated time, by the DOP.

**This order shall be effective from 01.04.2015 and shall remain in force till the next tariff order issued by the Commission.**

Sd/-  
(DIGVIJAI NATH)  
Chairperson

Dated 21<sup>st</sup> April'2015

## **1 Introduction**

---

### **1.1 Arunachal Pradesh State Electricity Regulatory Commission.**

In exercise of the powers conferred by the Electricity Act, 2003, (hereinafter referred to as Act) the Government of Arunachal Pradesh constituted the Electricity Regulatory Commission for the State of Arunachal Pradesh to be known as **“Arunachal Pradesh State Electricity Regulatory Commission” (APSERC)** as notified on 07.05.2010 (hereinafter referred to as Commission). The Commission constituted is a one-member body designated to function as an autonomous authority responsible for regulation of the power sector in the State of Arunachal Pradesh. The powers and functions of the Commission are as prescribed in the Act. The head office of the Commission is presently located at Naharlagun Arunachal Pradesh. The Commission started to function with effect from 02.03.2011 with the objective and purpose for which the commission has been established.

1.1.1 In accordance with the provisions of the Act, the Commission discharges the following functions:

- (a) Determines the Tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State: Provided that where open access has been permitted to a category of consumers under Section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;
- (b) Regulates Electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;
- (c) Facilitates Intra-State transmission and wheeling of electricity;
- (d) Issues licenses to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the

State;

- (e) Promotes co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee;
- (f) Adjudicates upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;
- (g) Levies fee for the purpose of this Act;
- (h) Specifies State Grid Code consistent with the Grid Code specified under Clause of sub- section (1) of Section 79;
- (i) Specifies or enforce standards with respect to quality, continuity and reliability of services by licensees;
- (j) Fixes the trading margin in the Intra-State trading of electricity, if considered, necessary;
- (k) Discharges such other function as may be assigned to it under the Act.

1.1.2 Further, the Commission also advises the State Government on all or any of the following matters namely;

- (a) Promotion of competition, efficiency and economy in activities of the electricity industry;
- (b) Promotion of investment in electricity industry;
- (c) Reorganization and restructuring of electricity industry in the State;
- (d) Matters concerning generation, transmission, distribution and trading of electricity or any other matter referred to the State Commission by that Government.

1.1.3 The Arunachal Pradesh State Commission ensures transparency while exercising its powers and discharging its functions.

1.1.4 In discharge of its functions, the State Commission is guided by the National Tariff Policy (NTP) brought out by GOI in compliance to Section 3 of the Act. The objectives of the NTP are to:

- (a) Ensure availability of electricity to consumers at reasonable and competitive rates;
- (b) Ensure financial viability of the sector and attract investments;
- (c) Promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks;
- (d) Promote competition, efficiency in operation and improvement in quality of supply.

1.1.5 The Commission has so far notified the following Regulations to facilitate its functioning.

- i. State Advisory Committee (SAC) Notification – 2011& 2013
- ii. Conduct of Business Regulations- 2011
- iii. Redressal of Grievances and Ombudsmen Regulations-2011
- iv. Fee Regulations-2011
- v. Grant of Intra State trading License Regulations-2011
- vi. Determination of ARR and retail tariffs Regulations-2011
- vii. Terms and Conditions for Tariff Determination from Renewable Energy Sources Regulations-2012
- viii. Renewable Power Purchase Obligations and Its Compliance Regulations-2012
- ix. Redressal of Grievances and Ombudsman Regulation (1<sup>st</sup> Amendment)-2012
- x. State Grid Code Regulations-2012
- xi. Terms and Conditions of Intra-state Open Access Regulations-2012
- xii. Electricity Supply Code Regulation-2013
- xiii. Multi Year Tariff Regulation - 2013 superseding the Regulation of 2011 on Determination of ARR and Retail Tariff Regulation.

## **1.2 Arunachal Pradesh - Geographical Reality**

The total area of the State of Arunachal Pradesh is 83573 sq. kms. The State is having a population of around 13.82 lakhs (2011 census). The State of Arunachal Pradesh is bounded by Assam in South, Bhutan in West, China in North, and Nagaland and Mayanmar in East. It's Capital Itanagar is about 380 kms. from Guwahati.

### **1.2.1 Arunachal Pradesh Department of Power (DOP, AP)**

The Arunachal Pradesh Department of Power (DOP, AP) is a deemed licensee in terms of Section 14 of the Electricity Act, 2003. DOP, AP being an integrated utility, is responsible for transmission and distribution of electricity in the State of Arunachal Pradesh and also trading functions of Electricity. The Department of Power of the State of Arunachal Pradesh (DOP, AP) is responsible for power supply in the State of Arunachal Pradesh. DOP, AP receives around 147 MUs of free power from Ranganadi HEP. Apart from this, the entire power requirement for DOP, AP is met through its share from Central Sector Power generation, which is wheeled through the PGCIL network of North Eastern Region and power purchase from Deptt. of Hydro Power Development(DHPD), electricity traders/other sources. It also has small diesel generating units with annual generation capacity of approx. 0.78 MUs / annum to be operated in exigencies as and when required.

DOP, AP serves about 2,03,623 consumers with an annual energy consumption of about 331.07 MUs as projected for FY 2015-16. The consumers are broadly classified into following four categories:

- Domestic
- Commercial
- Industrial both HT & LT
- Others-Public Lighting, water works etc.

### **1.3 ARR and Tariff Petition for FY 2015-16 : Filing**

As per the APSERC Tariff Regulations, the utility was required to submit the petition for ARR and Tariff in the month of November 2014 for fixing the Tariff for the next financial year. However, the Department filed the tariff Petition for the FY 2015-16 on 9-1-2015.

In the petition, DOP, AP has estimated an ARR of Rs. 949.93 crores and worked out a net revenue gap of Rs. 798.69.crores.

### **1.4 Admission of Petition and public Hearing Process**

The Commission observed that the ARR filed by the petitioner was incomplete and

lacking critical and vital information as specified in Commission's Regulations on Terms and Conditions for Determination of Tariff- 2011 and Multi Year Tariff Regulation- 2013.

DOP, AP was asked to submit the required information vide Commission's letter No. APSERC/RA-9/TP-DOP/2014-15/825, Dtd. 5/3/15 and 892, Dtd. 20/3/2015.

Pending receipt of additional information the ARR and Tariff Petition was admitted on 11-3-2015 and marked as case No. TP 1 of 2015 to avoid delay in processing of ARR. Subsequently DOP, AP submitted some additional data/modified information vide its letter dated 16-4-2015 as detailed in Para 3.4 of Chapter-3 which also have been considered while analyzing the petition.

The Commission directed the DOP, AP to publish the summary of the ARR and tariff proposal in abridged form and manner as approved in accordance with section 64(2) of the Electricity Act, 2003 to ensure public participation.

The notification for Public Notice of proposed ARR & Tariff proposal for FY 2015-16 was published by AP DoP in the following newspapers.

| Sl. | Name of the newspaper | Language | Date of publication |
|-----|-----------------------|----------|---------------------|
| 1   | Arunachal Front       | English  | 11-3-2015           |
| 2   | Eastern Sentinel      | English  | 11-3-2015           |

Through the public notice, the stakeholders/public were invited to furnish their objections and suggestions on the petition on or before 20.3.2015.

The Commission received only one objection/suggestion filed by the Group of Industries. Since the DOP has not proposed any increase in the existing tariff for FY 2015-16, receipt of no suggestion / comment, other than the above, might be the reason for it. The Commission considered the objections received and sent them to DOP, AP for communicating their response to the objections raised.

### **1.5 Notice for Public hearing**

Notices were issued by the Commission to the lone consumer group viz. Group of Industries who had filed the objection and the Deptt. of Power giving due intimation to them that the hearing will be held in the Commission's office at Naharlagun on 14-4-2015 from 1130 Hrs. to 1300 Hrs. The details of the hearing

are mentioned at Sl. No. 4.2 of Chapter-4.

### **1.6 Meeting of State Advisory Committee**

The State Advisory Committee met on 18.3.2015 and discussed the ARR & Tariff proposal for FY 2015-16 of DOP, AP. All the Members were requested to participate in the discussion and express their views and suggestions on the proposal. The outcome of the Advisory Committee meeting is also reproduced in Chapter-4.

The list of participants in the SAC Meeting is given in Annexure-II.

\*\*\*\*\*

## 2 Petition Summary for Determination of ARR & Tariff

### 2.1. Aggregate Revenue Requirements (ARR)

The DOP, AP in its Table 3.19 of the petition has submitted the Aggregate Revenue requirement for the year 2015-16 for meeting its expenses and the estimated revenue with the existing tariff. The ARR and revenue gap are shown in Table 2.1 below:

**Table 2.1: Aggregate Revenue Requirement-FY 2015-16 -Petitioner's Submission**

| Sl | Item of expense in Rs. Crs.                              | FY 2013-14 Actual | Current Year 2014-15 Estimated | Ensuing Year 2015-16 Projected |
|----|--|-------------------|--------------------------------|--------------------------------|
| a  | b  | c                 | d                              | e                              |
| 1  | Cost of power Purchase                                   | 169.98            | 172.45                         | 221.40                         |
| 2  | Fuel Cost  | 4.75              | 5.39                           | 5.39                           |
| 3  | Employee costs   | 164.48            | 195.09                         | 201.13                         |
| 4  | R&M expenses   | 25.70             | 30.15                          | 30.80                          |
| 5  | Administration and general expenses                      | 1.75              | 1.91                           | 2.00                           |
| 6  | Depreciation   | 149.71            | 149.71                         | 149.71                         |
| 7  | Interest charges (including interest on working capital) | 273.15            | 249.47                         | 220.12                         |
| 8  | Return on NFA /Equity                                    | 119.39            | 119.39                         | 119.39                         |
| 9  | Provision for Bad Debit                                  | 0.00              | 0.00                           | 0.00                           |
| 10 | Total revenue Requirement                                | 908.90            | 923.55                         | 949.93                         |
| 11 | Less: non-tariff income                                  | 0.40              | 0.45                           | 0.50                           |
| 12 | Net revenue requirement (10-11)                          | 908.50            | 923.10                         | 949.43                         |
| 13 | Revenue Billed   | 87.04             | 115.29                         | 131.03                         |
| 14 | Revenue from surplus sale of Power                       | 7.32              | 16.96                          | 19.71                          |
| 15 | Gap (12-13-14)   | 814.14            | 790.85                         | 798.69                         |
| 16 | Any other / Previous Revenue Gap                         | 0.00              | 0.00                           | 0.00                           |
| 17 | Total gap (15+16)  | 814.14            | 790.85                         | 798.69                         |
| 18 | Revenue surplus carried over                             | 0.00              | 0.00                           | 0.00                           |

| Sl | Item of expense in Rs. Crs.             | FY 2013-14 Actual | Current Year 2014-15 Estimated | Ensuing Year 2015-16 Projected |
|----|---|-------------------|--------------------------------|--------------------------------|
| a  | b                                       | c                 | d                              | e                              |
| 19 | Additional revenue from proposed tariff | 0.00              | 0.00                           | 0.00                           |
| 20 | Regulatory asset                        | 0.00              | 0.00                           | 0.00                           |
| 21 | Energy sales (MU)                       | 286.02            | 364.96                         | 401.47                         |

**2.2. DOP, AP in its petition for FY 2015-16 has requested the Commission:**

- (a) To accept the Annual Revenue Requirement and Tariff Petition for FY 2015-16.
- (b) To approve partial recovery of Aggregate Revenue Requirement (ARR) for FY 2015-16.
- (c) To approve category-wise tariff including fixed/demand/ energy charges to meet the revenue requirement for FY 2015-16.
- (d) To approve the tariff philosophy suggestions.
- (e) To Condone any inadvertent delay / omissions/ errors/ rounding off differences/ short comings and to permit to add/ change/ modify/ alter the petition
- (f) To permit to file additional data/information as may be necessary.
- (g) To pass such further order and as the Commission may deem fit and proper, keeping in view the facts and circumstances of the case.

\*\*\*\*\*

### 3 Power Sector in Arunachal Pradesh

#### 3.1. Power Supply Position

The DOP, AP meets the energy demand of its Consumers by drawal of power from AP Hydro power department and purchase from Central Generating stations, including free power from NEEPCO, Ranganadi HEP.

DOP, AP has been getting about 147 MUs free energy from NEEPCO, Ranganadi HEP as per the Petition for FY 2014-15. For the FY 2015-16 DoP has indicated free Power quantum as 175 MUs.

DOP, AP has firm Power allocation from NHPC, NEEPCO, and NTPC as stated in the Table 3.1 below. DOP, AP also purchases power in open market / UI to meet its requirement in the State particularly, during peak hours and lean hydro season. DOP, AP also sells surplus from allocated energy to outside State licensees during the peak hydro season. DOP, AP receives power from CGS and other sources as per allocation from time to time as given below.

**Table 3.1: Firm Power Allocation (MW) to DOP, AP- Petitioner's input**

| Sl.           | Project Source  | Installed Capacity (MW) | State Share/Allocation in FY 2012-13 |       | State Share/Allocation FY 2013-14 |       | Estimated State Share/Allocation in FY 2014-15 |       | Projected State Share / Allocation FY 2015-16 |       |
|---------------|-----------------|-------------------------|--------------------------------------|-------|-----------------------------------|-------|--|-------|---|-------|
| a             | b               | c                       | d                                    | e     | f                                 | g     | h  | i     | j   | k     |
| <b>NHPC</b>   |                 |                         | % of c                               | MW    | % of c                            | MW    | % of c   | MW    | % of c  | MW    |
| 1             | Loktak          | 105                     | 4.94                                 | 5.19  | 4.94                              | 5.19  | 4.94   | 5.19  | 4.94  | 5.19  |
| <b>NEEPCO</b> |                 |                         |                                      |       |                                   |       |  |       |   |       |
| 2             | Khandong        | 50                      | 4.19                                 | 2.1   | 4.19                              | 2.1   | 4.19   | 2.1   | 4.19  | 2.1   |
| 3             | Doyang          | 75                      | 6.85                                 | 5.14  | 6.85                              | 5.14  | 6.85   | 5.14  | 6.85  | 5.14  |
| 4             | Kopili-I        | 200                     | 5.19                                 | 10.38 | 5.19                              | 10.38 | 5.19   | 10.38 | 5.19  | 10.38 |
| 5             | Kopili-II       | 25                      | 5.99                                 | 1.5   | 5.99                              | 1.5   | 5.99   | 1.5   | 5.99  | 1.5   |
| 6             | Ranganadi       | 405                     | 18.27                                | 73.99 | 18.27                             | 73.99 | 18.27  | 73.99 | 18.27   | 73.99 |
| 7             | AGTPP (Tripura) | 84                      | 5.69                                 | 5.15  | 5.69                              | 5.15  | 5.69   | 5.15  | 5.69  | 5.15  |
| 8             | AGBPP (Assam)   | 291                     | 6.13                                 | 16.57 | 6.13                              | 16.57 | 6.13   | 16.57 | 6.13  | 16.57 |
| <b>NTPC</b>   |                 |                         |                                      |       |                                   |       |  |       |   |       |
| 9             | Farakka         | 1600                    | 0.21                                 | 3.36  | 0.21                              | 3.36  | 0.21   | 3.36  | 0.21  | 3.36  |

| Sl. | Project Source | Installed Capacity (MW) | State Share/Allocation FY 2012-13 |               | State Share/Allocation FY 2013-14 |               | Estimated State Share/Allocation FY 2014-15 |               | Projected State Share / Allocation FY 2015-16 |               |
|-----|----------------|-------------------------|-----------------------------------|---------------|-----------------------------------|---------------|---|---------------|---|---------------|
| 10  | Kahalgaoon     | 840                     | 0.21                              | 1.76          | 0.21                              | 1.76          | 0.21  | 1.76          | 0.21  | 1.76          |
| 11  | Talcher        | 1000                    | 0.21                              | 2.1           | 0.21                              | 2.1           | 0.21  | 2.1           | 0.21  | 2.1           |
| 12  | ONGC Palatana  | 726.6                   | 0                                 | 0             |                                   | 22            |   | 22            |   | 22            |
|     | <b>TOTAL</b>   |                         |                                   | <b>127.24</b> |                                   | <b>149.24</b> |   | <b>149.24</b> |   | <b>149.24</b> |

Power Purchased by DOP, AP from Central Generating Stations and other sources outside the state for the FY 2013-14(actual basis) & FY 2014-15 (estimated) and projected power purchase for FY 2015-16 are as depicted in the table below.

**Table 3.2: Power Purchase including free Power- Petitioner's Submission (Petition Table 3.6 & 3.7)**

| Sl.           | Source          | Actual Power Purchased FY 2013-14 (Mus) | Estimated Power to be Purchased FY 2014-15 (MUs) | Projected / Power to be Purchased FY 2015-16 (MUs) | Rate Rs/ kWh | Projected Total Power Purchase Cost Rs. Crs |
|---------------|-----------------|---|--|--|--------------|---|
| <b>NHPC</b>   |                 |   |  |  |              |   |
| 1             | Loktak          | 30.39                                   | 30.39  | 30.39  | 4.23         | 12.85                                       |
| <b>NEEPCO</b> |                 |   |  |  |              |   |
| 2             | Khandong        | 7.48                                    | 7.48   | 7.48   | 3.10         | 2.32  |
| 3             | Doyang          | 16.04                                   | 16.04  | 16.04  | 3.16         | 5.07  |
| 4             | Kopili-I        | 36.66                                   | 36.66  | 36.66  | 1.19         | 4.36  |
| 5             | Kopili-II       | 4.64                                    | 4.64   | 4.64   | 2.22         | 1.03  |
| 6             | Ranganadi       | 63.60                                   | 63.60  | 63.60  | 2.39         | 15.20                                       |
| 7             | AGTPP (Tripura) | 38.53                                   | 38.53  | 38.53  | 4.16         | 16.01                                       |
| 8             | AGBPP (Assam)   | 96.41                                   | 96.41  | 96.41  | 4.20         | 40.50                                       |
| <b>NTPC</b>   |                 |   |  |  |              |   |
| 9             | Farakka         | 23.78                                   | 23.78  | 23.78  | 4.64         | 11.04                                       |
| 10            | Kahalgaoon      | 12.48                                   | 12.48  | 12.48  | 4.41         | 5.50  |
| 11            | Talcher         | 14.16                                   | 14.16  | 14.16  | 2.75         | 3.89  |
| 12            | ONGC (Palatana) | 18.58                                   | 20.44  | 154.00   | 2.67         | 41.12                                       |
|               | Sub Total       | 362.76                                  | 364.62   | 498.18   |              |   |
| 13            | UI              |   |  | 116.02   | 1.94         | 22.51                                       |
| 14            | Free Power      |   |  |  |              |   |
|               | <b>TOTAL</b>    |   |  |  |              | <b>328.64</b>                               |

Besides this AP, DOP is also drawing entire power generated by APDHPD. DOP, AP has Diesel Generation also which can generate about 1.6 MUs power per Annum.

### 3.2. Consumers' Base and Energy Sales Profile.

The category wise consumers and electricity sales during FY 2015-16 are as depicted in the table 3.3 below. To analyze the trajectories of Consumer base and energy sales, the sales are compared with actual sales of FY 2013-14 and estimated sales FY 2014-15.

**Table 3.3: Profile of Energy Sales in MU for FY 2015-16- Petitioner's Submission**  
under Petition Table 3.1.

| Category Wise Sales in Million Units (MUs) | FY 2013-14 Actual | FY 2014-15 Estimated | FY 2015-16 Projected |
|--|-------------------|----------------------|----------------------|
| Domestic                                   | 85.37             | 98.61                | 108.47               |
| BPL(Kutir Jyoti)                           | 5.87              | 6.77                 | 7.45                 |
| Commercial                                 | 25.39             | 33.51                | 36.87                |
| Industrial Consumers                       | 48.40             | 79.86                | 87.85                |
| Public Lighting                            | 5.78              | 7.63                 | 8.39                 |
| Public Water works & Sewage                | 4.03              | 4.91                 | 5.40                 |
| Irrigation and Agriculture                 | 0.00              | 0.00                 | 0.00                 |
| Bulk                                       | 14.91             | 17.22                | 18.94                |
| General Purpose                            | 43.38             | 52.45                | 57.70                |
| Outside state                              | 52.89             | 64.00                | 70.40                |
| Total                                      | 286.02            | 364.96               | 401.47               |

**Table 3.4: Consumer Base for FY 2015-16 Petitioner's Submission**  
(Ref. Petition Table 3.2)

| Category                    | FY 2013-14 Actual | FY 2014-15 Estimated | FY 2015-16 Projected |
|-----------------------------|-------------------|----------------------|----------------------|
| Domestic                    | 140303            | 142681               | 133405               |
| BPL(Kutir Jyoti)            | 23354             | 23749                | 22205                |
| Commercial                  | 17579             | 17940                | 19900                |
| Industrial Consumers        | 315               | 331                  | 285                  |
| Public Lighting             | 1138              | 1152                 | 2400                 |
| Public Water works & Sewage | 83                | 138                  | 151                  |
| Irrigation and Agriculture  | 0                 | 0                    | 0                    |

| Category        | FY 2013-14 Actual | FY 2014-15 Estimated | FY 2015-16 Projected |
|-----------------|-------------------|----------------------|----------------------|
| Bulk            | 4617              | 4695                 | 4390                 |
| General Purpose | 6120              | 6692                 | 7361                 |
| Outside state   | 1                 | 1                    | 1                    |
| Total           | 193510            | 197379               | 190098               |

### 3.3. Losses : Distribution , T&D and AT&C

The distribution losses for FY 2015-16 have been shown in comparison to previous years as under.

**Table 3.5: Distribution and AT&C losses- FY 2015-16: Petitioner's Projections**

| Sl. | Particulars  | Calculations | Unit - UoM | 2013-14 Actuals | 2014-15 Estimated | 2015-16 Projections |
|-----|--|--------------|------------|-----------------|-------------------|---------------------|
| 1   | Generation (own as well as any other connected generation net after deducting auxiliary consumption) with in area of supply of DISCOM. | A            | MU         | 169.64          | 169.64            | 267.20              |
| 2   | Input energy (metered Import) received at interface points of DISCOM network.  | B            | MU         | 478.79          | 480.65            | 614.22              |
| 3   | Input energy (metered Export) by the DISCOM at interface point of DISCOM network.  | C            | MU         | 52.89           | 64.00             | 70.40               |
| 4   | Total energy available for sale within the licensed area to the Consumers of the DISCOM  | D=A+B-C      | MU         | 595.53          | 586.29            | 811.02              |
| 5   | Energy billed to metered consumers within the licensed DISCOM area   | E            | MU         | 233.12          | 300.96            | 331.07              |
| 6   | Energy billed to unmetered Consumers within the licensed area of the DISCOM  | F            | MU         | 0.00            | 0.00              | 0.00                |
| 7   | <b>Total Energy billed</b>   | G=E+F        | MU         | 233.12          | 300.96            | 331.07              |

| Sl. | Particulars   | Calculations               | Unit - UoM | 2013-14 Actuals | 2014-15 Estimated | 2015-16 Projections |
|-----|---|----------------------------|------------|-----------------|-------------------|---------------------|
| 8   | Amount billed to Consumers within the licensed area of DISCOM | H                          | Rs. Crores | 111.85          | 120.87            | 136.62              |
| 9   | Amount realized by the DISCOM out of the amount Billed at H#  | I                          | Rs. Crores | 87.05           | 94.06             | 106.32              |
| 10  | Collection efficiency (%) (= Revenue realized/ Amount billed) | $J=(I/H) \times 100$       | %          | 77.82           | 77.82             | 77.82               |
| 11  | Energy realized by the DISCOM                                 | K=JXG                      | MU         | 181.42          | 234.21            | 257.64              |
| 12  | Distribution Loss (%)   | $L=\{(D-G)/D\} \times 100$ | %          | 60.85           | 48.67             | 59.18               |
| 13  | AT & C Loss (%)   | $M=\{(D-K)/D\} \times 100$ |            | 69.54           | 60.05             | 68.23               |

**3.4. Additional Data provided by AP DoP**

vide letter no. CE(P)/WEZ/COM/10/14-15/106, Dtd.16-4-2015

1. The number of consumers is shown to have reduced to 1,90,098 from previous year's number of 1,97,379. Reduction in the number of consumers is seen in the category of domestic, BPL and industrial consumers. Reason for reduction / surrendering of electricity connection may kindly be clarified as the normal trend should be increase in the nos. of consumers.

**Reply:**

**Quote** "It is submitted that in many residential & market complexes in Itanagar capital region, the department has initiated the scheme of single point metering whereby single bill is to be raised in respect of all the consumers in the complex/apartments as such same has been treated as single consumer. However, the number of connections is expected to go up due to new connection under RGGVY & Kutir Jyoti. There was an inadvertent error in projecting the number of consumers. The table 3.2 (details of consumers) of the petition has been revised accordingly and provided below. The same may kindly be considered." **Unquote**

**Table 3.2: No. of Consumers – FY 2015-16**

| Category                    | FY 2013-14<br>Actual | FY 2014-15<br>Estimated | FY 2015-16<br>Projected |
|-----------------------------|----------------------|-------------------------|-------------------------|
| Domestic                    | 140303               | 142681                  | 145231                  |
| BPL(Kutir Jyoti)            | 23354                | 23749                   | 23905                   |
| Commercial                  | 17579                | 17940                   | 19900                   |
| Industrial Consumers        | 315                  | 331                     | 285                     |
| Public Lighting             | 1138                 | 1152                    | 2400                    |
| Public Water works & Sewage | 83                   | 138                     | 151                     |
| Irrigation and Agriculture  | 0                    | 0                       | 0                       |
| Bulk                        | 10737                | 11387                   | 11751                   |
| Outside state               | 1                    | 1                       | 1                       |
| Total                       | 193510               | 197379                  | 203624                  |

2. Out of the total nos. of connections Commission may be informed that how many of them are unmetered (Without meters and/ or with stopped metered).

**Reply:**

**Quote** “It is submitted that details of No. of Meters existing, defective meters is not readily available. Hon’ble Commission may kindly prescribe a format for tabulating the details in this regard. The Department shall compile the details and submit the same along with future filings.” **Unquote**

3. The category named General Purpose has been shown in Table 3.1 and 3.2 and in some other Table also. There is no such category approved in the Commission’s Tariff Order. Please clarify what types of consumers are there in General Purpose categories.

**Reply:**

**Quote** “It is submitted that the category ‘General Purpose’ includes the consumers like Public Centre works & others. This categorisation was being followed in the previous years, however, the department has started maintaining the details of consumers as per the categories approved in the Hon’ble Commission’s order and same shall be provided in subsequent filings. The consumption/revenue as reflected in ‘General Purpose’ category in the

petition has now been regrouped/included in bulk category and the relevant tables 3.3,3.4, 3.19 & 3.20 are resubmitted below:

**Table 3.3: Projected Energy Sales – FY 2015-2016**

| Category                    | In MUs               |                         |                         |
|-----------------------------|----------------------|-------------------------|-------------------------|
|                             | FY 2013-14<br>Actual | FY 2014-15<br>Estimated | FY 2015-16<br>Projected |
| Domestic                    | 85.37                | 98.61                   | 108.47                  |
| BPL(Kutir Jyoti)            | 5.87                 | 6.77                    | 7.45                    |
| Commercial                  | 25.39                | 33.51                   | 36.87                   |
| Industrial Consumers        | 48.40                | 79.86                   | 87.85                   |
| Public Lighting             | 5.78                 | 7.63                    | 8.39                    |
| Public Water works & Sewage | 4.03                 | 4.91                    | 5.40                    |
| Irrigation and Agriculture  | 0.00                 | 0.00                    | 0.00                    |
| Bulk                        | 58.29                | 69.67                   | 76.64                   |
| Outside state               | 52.89                | 64.00                   | 70.40                   |
| Total                       | 286.02               | 364.96                  | 401.47                  |

**Table 3.4: No. of Consumers – FY 2015-16**

| Category                    | FY 2013-14<br>Actual | FY 2014-15<br>Estimated | FY 2015-16<br>Projected |
|-----------------------------|----------------------|-------------------------|-------------------------|
| Domestic                    | 140303               | 142681                  | 145231                  |
| BPL(Kutir Jyoti)            | 23354                | 23749                   | 23905                   |
| Commercial                  | 17579                | 17940                   | 19900                   |
| Industrial Consumers        | 315                  | 331                     | 285                     |
| Public Lighting             | 1138                 | 1152                    | 2400                    |
| Public Water works & Sewage | 83                   | 138                     | 151                     |
| Irrigation and Agriculture  | 0                    | 0                       | 0                       |
| Bulk                        | 10737                | 11387                   | 11751                   |
| Outside state               | 1                    | 1                       | 1                       |
| Total                       | 193510               | 197379                  | 203624                  |

**Table 3.19: ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2015-16**

| (Rs. in Crores) |   |                             |                                |                                |
|-----------------|---|-----------------------------|--------------------------------|--------------------------------|
| Sl. No.         | Item of expense   | Current Year 2013-14 Actual | Current Year 2014-15 Estimated | Ensuing Year 2015-16 Projected |
| a               | b   | c                           | d                              | e                              |
| 1               | Cost of power Purchase                                    | 169.98                      | 172.45                         | 221.40                         |
| 2               | Fuel Cost   | 4.75                        | 5.39                           | 5.39                           |
| 3               | Employee costs  | 164.48                      | 195.09                         | 201.13                         |
| 4               | R&M expenses  | 25.70                       | 30.15                          | 30.80                          |
| 5               | Administration and general expenses                       | 1.75                        | 1.91                           | 2.00                           |
| 6               | Depreciation  | 149.71                      | 149.71                         | 149.71                         |
| 7               | Interest charges ( including interest on working capital) | 273.15                      | 249.47                         | 220.12                         |
| 8               | Return on NFA /Equity                                     | 119.39                      | 119.39                         | 119.39                         |
| 9               | Provision for Bad Debit                                   | 0.00                        | 0.00                           | 0.00                           |
| 10              | Total revenue Requirement                                 | 908.90                      | 923.55                         | 949.93                         |
| 11              | Less: non-tariff income                                   | 0.40                        | 0.45                           | 0.50                           |
| 12              | <b>Net revenue requirement (10-11)</b>                    | <b>908.50</b>               | <b>923.10</b>                  | <b>949.43</b>                  |
| 13              | Revenue   | 87.04                       | 115.29                         | 131.03                         |
| 14              | Revenue from surplus sale of Power                        | 7.32                        | 16.96                          | 19.71                          |
| 15              | Gap (12-13-14)  | 814.14                      | 790.85                         | 798.69                         |
| 16              | Gap for   | 0.00                        | 0.00                           | 0.00                           |
| 17              | Total gap (15+16)   | 814.14                      | 790.85                         | 798.69                         |
| 18              | Revenue surplus carried over                              | 0.00                        | 0.00                           | 0.00                           |
| 19              | Additional revenue from proposed tariff                   | 0.00                        | 0.00                           | 0.00                           |
| 20              | Regulatory asset  | 0.00                        | 0.00                           | 0.00                           |
| 21              | <b>Energy sales (MU)</b>                                  | <b>286.02</b>               | <b>364.96</b>                  | <b>401.47</b>                  |

**Table 3.20 Revenue at Existing Tariff – FY 2015-16 Rs. Crores**

| Sr. No. | Particulars                 | Ensuing year Projected FY 2015-16 |
|---------|-----------------------------|-----------------------------------|
| a       | b                           | c                                 |
| 1       | Domestic                    | 45.62                             |
| 2       | Kutir Jyoti (BPL)           | 2.93                              |
| 3       | Commercial                  | 16.59                             |
| 4       | Industrial Consumers        | 38.65                             |
| 5       | Public Lighting             | 3.82                              |
| 6       | Public Water works & Sewage | 2.46                              |

| Sr. No. | Particulars                | Ensuing year Projected FY 2015-16 |
|---------|----------------------------|-----------------------------------|
| a       | b                          | c                                 |
| 7       | Irrigation and Agriculture | 0.00                              |
| 8       | Bulk Supply                | 20.96                             |
| 9       | Outside state              | 19.71                             |
|         | TOTAL                      | 150.74                            |

**“ Unquote**

4. The Revenue Billed as shown in Table 3.19 at Sl. No. 13 for the year 2015-16 has been shown to be Rs. 150.74 crores, which does not tally with the figure shown in Table 3.20, where the revenue billed within the State (comprising from Sl. No. 1 to 9) totals to Rs. 136.62 crore. Please clarify which figure is correct.

**Reply:**

**Quote** “It is submitted that there is a typographical error in the format. Revenue billed for the FY 2015-16 may be considered as Rs.150.74 Crs. for the proposed determination of tariff/gap.” **Unquote**

5. The cost of Power Purchased from DHPD has not been projected in the total cost of power purchased mentioned in Table 3.19. Reasons for not doing so may kindly be clarified because the Commission in its last two tariff orders have said that power drawn from DHPD has to be accounted for in monetary terms i.e. the DoP has to purchase the power from DHPD.

**Reply:**

**Quote** “It is submitted that DHPD & DOPAP are Government Departments funded by budgetary support from the Government of Arunachal Pradesh. Therefore, the procurement of power from DHPD being inter- departmental transaction no monetary transfers are done. However, units of power procured from DHPD are reflected in the calculations of energy availability.”

**Unquote**

6. Out of the total projected energy sales of 331.07 MU within the state during 2015-16, please show the bifurcation between the metered and unmetered energy.

**Reply:**

**Quote**” It is submitted that bifurcation between metered and unmetered energy sales is not readily available. The Department shall compile the details submit the same along with future filings.” **Unquote**

7. It is further to state that the DoP has projected a revenue gap of Rs. 778.98 Crore in the petition for 2015-16 but have not proposed any tariff hike. It is not indicated how the gap is going to be met which may kindly be clarified.

**Reply:**

**Quote**”It is submitted that DOP, AP is a government department funded through budgetary support from the government. Therefore, the revenue gap for the period shall be funded by the government of Arunachal Pradesh.”

**Unquote**

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## **4 Proceedings: Public-Hearing and SAC Meeting**

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### **4.1. Public Response to the Petition**

On admitting the ARR and Tariff Petition of DoP, AP for FY 2015-16, the Commission directed the DoP, AP to make available, the copies of Petition to general public, post the Petition on their website and also invite comments/objections from various stakeholders by publishing the petition in abridged form in local newspapers. One written objection was received from the Group of Industries, Naharlagun

### **4.2. Public Hearing**

In order to ensure transparency in the process of determination of Tariff and working out ARR as envisaged in Electricity Act 2003, hearing was fixed at Naharlagun in the Commission's office for the Group of Industries and the Deptt. of Power on 14-04-2015. However, on 9-4-2015 the Group of Industries requested by e-mail to the Commission if the date of hearing could be extended to 24<sup>th</sup> April'2015 in view of some festivals. The Commission could not accede to this due to time limitations for finalizing the tariff order. In turn they requested to hold their hearing the same day and the Commission agreed and heard them on 9-4-2015. During the hearing the Representative of the Group of Industries once again reiterated the points which they had already mentioned in their earlier representation Dtd. 19-3-2015. The points raised by the Group of Industries are enumerated below. Hearing of the Deptt. of Power was held on the next working day i.e. 16-4-2015 instead of 14-4-2015 after being rescheduled in view of the declaring of 14-4-2015 a holiday by the Govt. of A.P. on account of Dr.B.R.Ambedkar's birth anniversary through newspaper of 14-4-2015. During the hearing, the participants were given an opportunity to present/ explain their views in respect of the ARR and Tariff proposal of DoP, AP. The list of stake holders who attended the hearing is given in Annexure-I placed at the end of this chapter. The officers of the DoP, AP who were present during public hearing responded to the issues raised by the objectors and also submitted a written reply vide their letter

Dtd.16-4-2015 in this regard. The response of the DoP to the points raised by the Group of Industries is also enumerated below.

**4.3. Proceeding of Public Hearing:**

The Group of Industries during hearing on 9-4-2015 mentioned that they have nothing more to submit before the Commission except the contents of their letter Dtd. 19-3-2015, which is reproduced below:

**Quote “1. TARIFF FOR THE YEARS 2013-14 :-**

*We have the combined sanctioned load of 37 M.W. The Commission being the apex body on the tariff matters of and for the consumers of this State, we have high expectations from your esteemed organization. Our grievances views and objections was taken up by the Arunachal Chamber of Commerce and Industries (ACCI), Naharlagun with your esteemed organization during 2014 and none of the issues is still to be resolved so far. As a result our genuine grievances, objections and views still left unattended in contrast to the practice tactics followed by other Commissions and the utilities. The directives of the Commission to file the ARR and Tariff petition for 2015-16 was by November 2014, but it is only notified recently and the time given is so short to study and analysis the same in depth. Nonetheless, we are presenting our plea again directly your good self to deal with and solve the matters which continuously and adversely affecting the industries.*

**2.BETTER MANAGEMENT & IMPROVEMENT OF RELIABILITY OF POWER SUPPLY :-**

*The NERLDC restricts the power drawl during the lean session to the NE constituent states against their sanctioned allocation due to lean hydro in the NE. The Commission should issue direction to the Department of Power to go for banking arrangements for the surplus power available during high hydro session with the other power starved states during such period and the power so banked can be barter during lean session which will reduce the power purchase cost on the one hand and will improve the regular power supply and will shed away the practice of temporary with Drawl of power allocation to the Major Industries and restriction to drawl of power from DoP and thereby*

*increase the revenue substantially on the other hand. The ACCI brought to the notice of this issues to the Commission. As per the Tariff Order it is seen the DoP has taken note of this suggestion to consider it including other options to the extent of technical and financial feasibility at appropriate level of the Govt. to give relief to the consumers from power crisis during lean hydro season. But it is not to be. The petition for this year is very silent about and it is seen from the petition that the DoP has so far not pursued the matter. Therefore, our industries face restriction of power supply from DoP share and have to depend on Open Access. We hope the Commission will address this issue very seriously.*

**3. EXORBITANT HIGH SURCHARGE :-**

*The surcharge imposed on the consumers @ 2% monthly (Compounding Interest comes to 24.90% per annum) on the bill amount is exorbitantly high and we strongly oppose this quantum of charge levied against the consumers. No State/Commission has imposed such heavy surcharge on this account. There should be a reduction which must be equaling to Scheduled Commercial Bank's Saving Bank's simple interest rate. Since the security deposit bears simple interest we suggest that the surcharge should also be the same.*

**4. UNREASONABLE MINIMUM CHARGES:-**

*As per the tariff order of 2013, the consumer shall have to pay the Minimum Charges calculated on the sanctioned connected load if the energy charge is below the minimum charge in a month. It is pertinent to mention here that the Department of Power has withdrawn the power allocation to our industries temporarily till the onset of rainy season and restricted the drawl of power. On account of this our industries has to depend on their own arrangement of power during entire period. At one hand the DoP is restricting and withdrawing allocation of power and on the other hand they are raising the revised bill for the minimum charges for that period which is unjustified. We seek intervention of the Commission to forgo this unjustified, unwarranted and irrational charges and request the Commission to issue order with retrospective effect.*

**5. HIGH COST OF SECURITY DEPOSIT:-**

*The industrial scenario of this State is still at nascent Stage. With the commissioning of RHEP and other Central Sector Power Projects in NE region there was a hope for an uninterrupted cheap, reliable and quality power supply. But it is experienced that during the hydro lean season the power supply to our Industries almost NIL from the State share. As such the Security deposit is locked up with the department. Though simple interest is being adjusted in the bills. However, as the result of an unreliable power supply for almost 9 months we have to depend on Open Market adding burden to our financial resources. Therefore, it is suggested to reduce the Security Deposit to the barest minimum to give relief to the Industries.*

**6. PUBLIC HEARING:-**

*It is observed that the Public Hearing is being conducted only in the Commission office at Naharlagun by the Commission. It is suggested the Public Hearing should also be conducted in the other towns of Arunachal Pradesh as being done in other States so that a Comprehensive views, suggestions, grievances objections to the petition from the Public and the stock holders can be received and analysed for the betterment and functioning of the Commission the DoP and the Consumers. Last, but not the least as the conduct of the Commission business is in English and in Hindi, a Hindi version of the petition can also be circulated for a comprehensive views, suggestions, grievances objections. Finally it is requested to extend the last date for submission of views, suggestions, grievances objections to the petition for the public.*

*It is pertinent to mention here that the duty of the State Commission to advise the State Government to promote of competition efficiency and economic activities of the electrical department and protection of consumer interest. Therefore, we appeal to the Commission to reduce the Tariff immediately in the interest of its all types of consumers. The revenue to the Department will be increased by way of utilizing fully the power from State own generation there by reducing the cost of power purchase. The innovative banking arrangement*

*will avoid the practice of Load Shedding and will ensure regular quality power supply. The mid term appraisal of the revenue requirement by the Commission will certainly ensure the department to strictly adhere the orders of the Commission."*

**DoP AP during their hearing on 16-4-2015, responded to the points of the Group of Industries in writing vide their letter no. CE(P)/WEZ/COM/10/14-15/106, Dtd. 16-4-2015 which are reproduced below:**

**Reply to Issue No. 1:**

**Quote**

*"It is submitted that the Department of Power had submitted its replies to the objections /queries with regard to the last petition. Deciding on the issues is the prerogative of the Hon'ble Commission.*

*With regard to filing of the petition within November, 2014, it is submitted that the data required for compilation of the petition is to be collected from all the divisions spread across the state. There was delay in submission of details/data by the divisions. Hence, the petition could not be filed within due date. Department has prayed for condoning the inadvertent delay in filing of the petition.*

*It is further submitted that the Department has taken steps for timely and periodical submission of details by all concerned offices of the department. It shall be ensured that the regulatory data is compiled and subsequent petitions are filed within November every year. " **Unquote***

**Reply to Issue No. 2:**

**Quote** *"It is submitted that the Department of Power shall consider all the available options for optimum utilisation of the allocated power so as to ensure reduction in power purchase cost and improvement in power supply."* **Unquote**

**Reply to Issue No. 3:**

**Quote** *"We have not proposed any surcharge in the petition."* **Unquote**

**Reply to Issue No. 4:**

**Quote**” It is submitted that deciding on the minimum charges is the prerogative of the Hon’ble Commission in view of the applicable regulations. However, it is requested the Hon’ble Commission may kindly keep in view the interest of the Department of Power while deciding on the issue.” **Unquote**

**Reply to Issue No. 5:**

**Quote**” It is submitted that the security deposit is being collected in accordance with the Schedule of charges as approved by the Hon’ble Commission. The intent behind the system of security deposit is to ensure that the charges towards supply of electricity are recovered timely and there is no loss of revenue of the department.

However, deciding on the security deposit is the prerogative of the Hon’ble Commission and therefore it prayed that the Hon’ble Commission may kindly keep in view the above concerns of the Department while deciding on the issue.

“ **Unquote**

Reply to Issue No. 6: **Quote**” It is submitted that deciding on the venue, conduct, language etc. of proceedings of the matters before the Commission is the prerogative of the Hon’ble Commission and the same are guided by the Conduct of Business Regulation notified. Therefore, Department has no comments on the above.” **Unquote**

**4.4 Minutes of the State Advisory Committee Meeting Held On 18-03-2015:**

The 4<sup>th</sup> SAC meeting of the APSERC was held on 18<sup>th</sup> March’2015 with the agenda to discuss the Annual Revenue Requirement (ARR) & Tariff Petition for 2015-16 filed by the Department of Power, Government of Arunachal Pradesh before the Commission. (Total seven nos. Agenda Points). The list of the SAC members who were present in the meeting is enclosed as **Annexure-II** placed at the end of this chapter. Following points emerged after detailed discussion of various agenda points in the SAC:

**Agenda point No. 1: Aggregate Revenue Requirement of DoP:** It was felt by the members that since Department of Power is purely a Government Department, there is no need to discuss on the figures projected by it in detail. However the members opined that the DoP should take effective steps to increase the revenue generation so that the revenue gap can be narrowed down.

**Agenda point No. 2: Comparison of existing tariff with tariff proposed by the Department of Power:** It was felt by a few participants that since the tariff should reflect the cost of supply, an incremental increase may have been proposed by the APDOP which could have been a very reasonable amount absorbable by all sections of the society. There was however a general opinion that the proposal of the APDOP for not increasing the existing tariff for 2015-16 can be considered in the overall interest of the consumers and alternatively some amount of revenue can be generated by virtue of reducing the existing huge AT&C losses and also by reduction in administrative costs, O&M expenses and by increasing overall efficiency of the Department.

**Agenda point No. 3: Transmission & Distribution Losses:** It was mentioned that a plan and policy of taking up 100% metering has already been taken up by the State Government and that on its completion it shall reduce the AT&C losses considerably in the state.

**Agenda point No. 4 & 5: Aggregate Revenue Requirement of DHPD & Generation from State Owned Hydropower Stations:** It was felt by the members that since Department of Hydro Power Development is purely a Government Department, there is no need to discuss on the figures projected by it in detail. As regards generation of power by it, all the members were of the unanimous view that the DHPD should make all out efforts to increase the generation from its small/mini/micro hydro stations so as to reduce the dependence of the APDOP on purchase of power from out side the state. The AP DHPD was also advised to start raising the bills to AP DoP for the energy consumed by them at the tariff fixed by the Commission w.e.f 2013-14 onwards in compliance to the directives of the Commission.

**Agenda point No. 6: Regarding non-filing of tariff petition for Transmission**

**wing of the DoP:** It was felt by the members that the DoP should invariably file the tariff petition for the Transmission Wing of the Deptt. The Chief Engineer(TP&M) DoP assured the members that in all likely hood they shall be filing the tariff petition from the ensuing year.

**Agenda point No. 7: Misc. issues:** The Chief Engineer(TP&M) DoP proposed that the Commission should consider framing of necessary regulations for net metering for roof top solar PV installations in the state of Arunachal Pradesh to which the Chairman APSERC assured the SAC that the proposal shall be considered at appropriate time.

**4.5 Commission's Observation**

The Commission has taken note of the objections, comments and suggestions made by the stake holders, members of SAC, general public and response from DoP, AP while analyzing and finalizing different components of ARR and Tariff proposal. Keeping in view the remarks/suggestions made by the objectors and also to meet norms of the requirements of the Act, National Electricity Policy and National Tariff Policy, the Commission has also given certain directions to the department as an integral part of this Order.

**ANNEXURE- I**

**LIST OF PARTICIPANTS IN THE HEARING**

| <b>Sl. No.</b> | <b>Name</b>   | <b>Date of Hearing</b> | <b>Organization</b>                       |
|----------------|---------------|------------------------|---|
| 1.             | Sh. R. Mohan  | 9-4-2015               | Rep. of Group of Industries               |
| 2.             | Er. Hage Mima | 16-4-2015              | EE(E), O/O the CE(P) WEZ, Deptt. of Power |
| 3              | Mr. A. Hazara | 16-4-2015              | Rep. of Consultant of DoP                 |

**ANNEXURE-II**

**LIST OF PARTICIPANTS IN THE SAC MEETING**

| <b>Sl. No.</b> | <b>Name</b>            | <b>Organization</b>                |
|----------------|------------------------|------------------------------------|
| 1.             | Sh. Digvijai Nath      | Chairman, APSERC                   |
| 2.             | Sh. Kaling Tayeng, IAS | Commissioner(Power), Govt. of A.P. |
| 3              | Sh. Pura Tupe          | Chief Engineer, DHPD               |
| 4              | Sh. Anong Perme        | Chief Engineer(Power), TPM, APDOP  |
| 5.             | Sh. Takar Mara         | Chief Engineer(Power), CEZ, APDOP  |
| 6.             | Sh. Marki Loya         | Director, APEDA                    |
| 7.             | Sh. O. Darung          | Labour Commissioner, Govt. of A.P. |
| 8.             | Sh. Toko Anuj          | MD, HPDCAPL                        |
| 9.             | Sh. Sang Phuntsok      | CE(Monitoring), DHPD               |
| 10.            | Sh.J. Tato             | CE(Power), WEZ, DoP                |
| 11.            | Sh. O. Moyong          | CE(Power), EEZ, DoP                |
| 12.            | Sh. J. Kamdak          | CE, DHPD                           |
| 13.            | Sh. Tamiyo Tatak       | Director, Industries, GoAP         |
| 14.            | Sh. A. Ketan           | CE(EM), DHPD- Special Invitee      |
| 15.            | Sh. Rakesh Kumar       | Secretary, APSERC – Convener SAC   |

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## **5 True Up, Review & Analysis of ARR & Tariff Petition**

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Analysis of the ARR & Tariff Petition for FY 2015-16 is undertaken by the Commission after the True up for FY 2012-13's ARR and Review of ARR of FY 2013-14 as under:

### **5.1 Approach for True-up for FY 2012-13**

While the petitioner has not specifically requested for True up of FY 2012-13, the Commission on the basis of the data submitted by petitioner in its tariff petition for the FY 2014-15, has undertaken True up exercise of various parameters Suo-Moto.

**Multi Year Tariff Regulations- 2013 notified by APSERC on 18<sup>th</sup> October 2013 indicates the following in regard to True up:**

**Quote** *"From the first year of the Control Period and onwards, the Petition shall comprise of: Truing Up for FY 2012-13, if any, to be carried out under Arunachal Pradesh State Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2011 and onwards in accordance with these Regulations;"* **Unquote**

Since, APDOP is currently operating as a department within the Govt. of Arunachal Pradesh, the system of account keeping is on cash receipt and expense basis i.e. proforma accounts. On checking up, the petitioner has indicated that the Annual Accounts for the FY 2012-13 has not been audited and the petition for True-up shall be submitted after completion of audit.

The objective of the True up or Review of ARR is to reconcile the data which might reflect differently during True up / Review either due to data inaccuracies at the time of submission of Petition or any reason outside the control of the Petitioner during the period under review. This analysis prepares the Commission & the Petitioner with an objective course correction for further years.

### **Process of Review and Truing Up:**

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- (1) The Commission shall undertake a review along with the next Tariff Order of the expenses and revenues approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised estimates/pre-actuals of sale of electricity, income and expenditure for the relevant year and permit necessary adjustments/ changes in case such variations are for adequate and justifiable reasons. Such an exercise shall be called 'Review'.*
- (2) (i) After audited accounts of a year are made available, the Commission shall undertake similar exercise as above with reference to the final actual figures as per the audited accounts. This exercise with reference to audited accounts shall be called 'Truing Up'.*

*(ii) The Truing Up for any year will ordinarily not be considered after more than one year of 'Review'.*
- (3) The revenue gap of the ensuing year shall be adjusted as a result of review and truing up exercises.*
- (4) While approving such expenses/revenues to be adjusted in the future years as arising out of the Review and / or Truing up exercises, the Commission may allow the carrying costs as determined by the Commission of such expenses/revenues. Carrying costs shall be limited to the interest rate approved for working capital borrowings.*
- (5) For any revision in approvals, the licensee would be required to satisfy the Commission that the revision is necessary due to conditions beyond its control.*

The Commission is aware about the special category status of Arunachal Pradesh which is one of the eight states with similar status (Arunachal Pradesh, Himachal Pradesh, Manipur, Meghalaya, Mizoram, Sikkim, Tripura and Uttarakhand) . All other states barring these are treated as General Category States. The rationale for special status is that these states, because of inherent features, have a low

resource base and cannot mobilize resources for development. Some of the features required for special status are:

- i. Hilly and difficult terrain;
- ii. Low population density or sizeable share of tribal population;
- iii. Strategic location along borders with neighboring countries;
- iv. Economic and infrastructural backwardness; and
- v. Non-viable nature of state finances.

This above information is as per Chapter 10 of the Fourteenth Finance Commission (FFC) report as included in the Economic Survey 2014-15.

The basic utility services such as transport, electricity etc. are provided in these areas notwithstanding the fact that the services may not be economically viable. Commission is gearing up the APDOP to improve the efficiency of its operations. A true up of the important parameters of FY 2012-13 is as under:

**Table 5.1: True Up of ARR for FY 2012-13 – Undertaken by the Commission**

| Sl. | Description                          | Unit of Measurement (UOM) | Approved by the Commission   | FY2012-13 Actuals as per Tariff Petition for FY 2014-15 | Ref. Format of Petition for FY 2014-15 |
|-----|--------------------------------------|---------------------------|--|---|--|
| 1.  | Energy Sales within the State        | MUs                       | The Tariff Petition was submitted in Dec. 2012. The data is used as a base data to build up the Business Plan for MYT. No specific approvals for each parameter were accorded. | 237.60  | D2                                     |
| 2.  | Total number of Consumers            | Nos.                      |  | 181962  | D1                                     |
| 3.  | T&D Loss                             | %                         |  | 60.40%  | D2                                     |
| 4.  | Net Power Purchase                   | MUs                       |  | 446.77  | D2                                     |
| 5.  | Total Energy Availability            | MUs                       |  | 645.55  | D2                                     |
| 6.  | Amount Realized by APDOP from Tariff | Rs. Crs                   |  | 76.09   | D2(A)                                  |
| 7.  | Cost of Power Purchase               | Rs Crs                    |  | 177.04  | D7                                     |
| 8.  | Fuel cost                            | Rs. Crs                   |  | 4.75  | D7                                     |
| 9.  | Total Revenue Requirements           | Rs. Crs                   |  | 753.45  | D7                                     |

| Sl. | Description               | Unit of Measure ment (UOM) | Approved by the Commission | FY2012-13 Actuals as per Tariff Petition for FY 2014-15 | Ref. Format of Petition for FY 2014-15 |
|-----|---------------------------|----------------------------|----------------------------|---|--|
| 10  | Total Number of Employees | Nos.                       |                            | 9985  | 2                                      |
| 11  | Deprecation on Assets     | Rs Crs                     | NIL                        | 111.61  | 6                                      |

In the above analysis, no parameter of the ARR has been noticed to have impacted the ARR for FY 2012-13 and there is no ARR gap or surplus required to be carried forward to further years. As such no impact is required to be passed on to the Consumers due to True Up by the Commission for the FY 2012-13. No amount of ARR is generated for adjustment as Regulatory Asset or surplus for FY 2012-13 or later years.

## 5.2 Approach for Review of ARR for FY 2013-14

While the petitioner has not specifically requested even for the Review of FY 2013-14, the Commission, on the basis of the data submitted by petitioner, has reviewed ARR for FY 2013-14 on Suo Moto, vis-a-vis determined earlier by the Commission in its ARR order dated 30<sup>th</sup> May'2013. The Review of ARR for FY 2013-14 has been carried out as per the provisions of Terms and Conditions for Determining of Tariff and Formats for Tariff Filing Regulations – 2011, notified on 26<sup>th</sup> Dec. 2011, as under:

### Quote

Regulation 15. Review and Truing-Up

- (1) The Commission shall undertake a 'Review' of the expenses and revenues approved by the Commission in the Tariff Order. While doing so, the Commission shall consider variations between approvals and revised estimates/pre-actuals of sale of electricity, income and expenditure for the relevant year and permit necessary adjustments / changes in case such

variations are for adequate and justifiable reasons. Such an exercise shall be called 'Review'. “

**Unquote**

In view of the above, the Commission has reviewed the variations between approvals and actuals of sale of electricity, income and expenditure for FY 2013-14 and permitted necessary adjustments in cases where variations seemed to be for reasonable and justifiable reasons.

The detailed analysis & treatment of each component based on the revised estimates is provided in hereunder:

**Table 5.2: Commission's Review of ARR for FY 2013-14**

| Sl. | Description                          | Unit of Measurement | Approved by the Commission as per Tariff Order 30 May 2013 | FY2013-14 Actuals as per indicated in the Tariff Petition for FY 2015-16 for FY 2013-14 | % age Change from Approval | Ref. Petition for FY 2015-16 | Observations of the Commission   |
|-----|--------------------------------------|---------------------|--|---|----------------------------|------------------------------|--|
| A   | b                                    | c                   | d  | e   | f                          | g                            | h  |
| 1   | Energy Sales within the State        | MUs                 | 301  | 286.02  | 95.02                      | Table 3.1                    |  |
| 2   | Total number of Consumers            | Nos.                | 195549   | 193510  | 98.96                      | Table 3.2                    |  |
| 3   | T&D Loss                             | %                   | 53   | 59.65%  | 113.00                     | Table 3.3                    | DoP , AP has not put in efforts to reduce T&D Losses and infact has gone beyond the approval |
| 4   | Total Energy Availability            | MUs                 | 640.42   | 630.61  | 98.47                      | Table 3.3                    |  |
| 5   | State Share / Allocation in MWs      | MW                  | 149.24   | 149.24  | 100.00                     | Table 3.4                    |  |
| 6   | Capital Expenditure & Capitalization | Rs. Crs             | Nil : Order Para 5.8                                       | 206.7   |                            | Table 3.5                    |  |

| Sl. | Description                      | Unit of Measurement- UOM | Approved by the Commission as per Tariff Order 30 May 2013 | FY2013-14 Actuals as per indicated in the Tariff Petition for FY 2015-16 for FY 2013-14 | % age Change from Approval | Ref. Petition for FY 2015-16 | Observations of the Commission   |
|-----|----------------------------------|--------------------------|--|---|----------------------------|------------------------------|--|
| 7   | Power Purchase from ISGS i/c UI  | MUS                      | 420.63<br>Order Table 5.6                                  | 478.79  | 113.83                     | Table 3.6                    | Power purchase overshoot the approval  |
| 8   | Operation & Maintenance Expenses | Rs. Crs                  | 189.27   | 191.93  | 101.40                     | Table 3.8                    | O&M Expenses have overshoot the approval.  |
| 9   | Employee Cost                    | Rs. Crs                  | 160.81   | 164.48  | 102.28                     | Table 3.9                    | Efforts should be made by DoP, AP for correct estimation including projected increase  |
| 10  | Admn & Gen. Expenses             | Rs. Crs                  | 1.28   | 1.75  | 136.72                     | Table 3.10                   | Due diligence measures should be adopted by the DoP.AP to estimate these expenses correctly and while spending have a control on the expenses. |
| 11  | R&M Expenses                     | Rs. Crs                  | 27.18  | 25.7  | 94.55                      | Table 3.11                   |  |
| 12  | Interest & Finance Charges       | Rs. Crs                  | Nil-<br>Order Para 5.11                                    | 273.15  |                            | Table 3.17                   |  |

| Sl. | Description                        | Unit of Measurement- UOM | Approved by the Commission as per Tariff Order 30 May 2013 | FY2013-14 Actuals as per indicated in the Tariff Petition for FY 2015-16 for FY 2013-14 | % age Change from Approval | Ref. Petition for FY 2015-16 | Observations of the Commission |
|-----|------------------------------------|--------------------------|--|---|----------------------------|------------------------------|--------------------------------|
| 13  | Interest on working Capital        | Rs. Crs                  | 6.62   | 7.11  | 107.40                     | Table 3.18                   |                                |
| 14  | Amount Billed by APDOP from Tariff | Rs. Crs                  | 117.53   | 94.36   | 80.29                      | Table 3.19                   |                                |
| 15  | Total Power Purchase Cost          | Rs. Crs                  | 202.07   | 169.98  | 84.12                      | Sch.D4                       |                                |
| 16  | Fuel cost                          | Rs. Crs                  | 2.14   | 4.75  | 221.96                     | Sch.D7                       |                                |
| 17  | Total Revenue Requirements         | Rs. Crs                  | 400.10   | 908.90  | 227.17                     | Sch. D7                      |                                |
| 18  | Total Number of Employees          | Nos.                     | -  | 9961  | -                          | Sch.2                        |                                |
| 19  | Deprecation on Assets              | Rs Crs                   | Nil – details absent , Para 5.10 of the Tariff order       | 149.71  |                            | Sch.6                        |                                |

In the Review Process of ARR for FY 2013-14, some deviations have been noticed and Commission's observations have been given in the column "h" of the above table. The deviations have been met from the treasury of Arunachal Pradesh Government, thus leaving no impact that is required to be passed on to the Consumers due to these deviations. No additional Revenue gap or any surplus is generated for carrying these forward for adjustment in future years or converting these to Regulatory Assets.

The other aspect is maintaining the parameters of ARR as approved by the Commission.

The DoP, AP has to maintain a check on these deviations and put in efforts to get the auditing of the accounts urgently for proper True up before next Petition of ARR & Tariff for FY 2016-17.

DoP,AP shall create a Tariff Regulatory Cell (under an senior Officer of status/rank not below that of SE or an equivalent) from the existing staff strength. The Cell so created shall be provided with necessary authority and resources so as to look after all the tariff regulatory matters primarily to keep a vigil on the parameters approved by the Commission and also to provide correct and timely information to the Commission as well as stakeholders. The said officer shall be the primary source of all data and submissions being filed before the Commission, so as to ensure consistency and timeliness of the data submitted and proper co-ordination with the Commission in the tariff determination process specifically in Multi Year Tariff regime.

### **5.3 Approach for Determination of ARR & Retail Tariff for FY 2015-16**

In this regard various provisions of the APSERC Tariff Regulations pertaining to business of an integrated utility are relevant and Commission is guided by the principles contained in Section 61 of the Act among other things to examine the Sales forecast, Power purchase quantum, Self-generation and other income & expenditure.

The Commission, while determining the tariff is guided by the principles contained in Section 61 of the Act, namely

- a) The principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;
- b) The generation, transmission, distribution and supply of electricity are conducted on commercial principles;
- c) The factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;

- d) Safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;
- e) The principles rewarding efficiency in performance;
- f) That the tariff progressively reflects the cost of supply of electricity and also, reduces and eliminates cross-subsidies within the period to be specified by the Appropriate Commission;
- g) The promotion of co-generation and generation of electricity from renewable sources of energy;
- h) The National Electricity Policy and tariff policy;
- i) In addition to above the Commission has to take into account the Renewable Energy purchase obligations notified by the Commission vide APSERC's Regulation No. 8, Dtd.11/4/2012..
- j) Relevant directions given by the Hon'ble APTEL in the judgment in O.P. no. 1 of 2011.
- k)The ARR and tariff petition for the FY 2015-16 filed by DOP, AP was incomplete, as many of the specified formats required under APSERC (Terms and Conditions for determination of tariff) Regulations, 2011 were not submitted. DOP, AP have submitted some ARR formats with-NIL-data or data which does not commensurate with the required inputs.

#### **5.3.1. Consumer Base & Energy Sales- FY 2015-16**

Proper estimation of category-wise sales is essential to determine the quantum of Power Purchase and the likely assessment of revenue. This section examines the Customer base, category-wise sales projected by the DOP, AP in their petition for assessment of ARR for FY 2015-16 for various Consumer Categories.

##### **5.3.1.i. Customer Base**

DOP, AP has projected to serve 2,03,624 Consumers in FY 2015-16 in its licensed

area and the consumers are categorized as under.

DOP, AP serves the consumers at different voltages at which the consumers avail supply. Commission directs the DOP, AP to segregate the voltage wise consumers in the categories of Domestic with separate sub-category for KJ & BPL and Bulk supply, water works and General purpose categories, since these consumers would be subsidizing the KJ & BPL and Irrigation and Agriculture Consumers, in the tariff rates that progressively may emerge at cost to serve as per the NTP. DOP, AP has furnished growth of consumers and sales for the years FY 2012-13, to FY 2015-16 without furnishing the connected load as depicted in the Tables below.

**Table 5.3: Consumers in Numbers: FY 2015-16 Petitioner's Projections  
And comparison with previous years**

| Sl  | Category                       | FY 2013-14<br>Actual | FY 2014-15<br>Estimated | FY 2015-16<br>Projected | % in FY<br>2015-16 |
|-----|--------------------------------|----------------------|-------------------------|-------------------------|--------------------|
| 1.  | Domestic                       | 140303               | 142681                  | 145231                  | 71.32%             |
| 2.  | BPL(Kutir Jyoti)               | 23354                | 23749                   | 23905                   | 11.74%             |
| 3.  | Commercial                     | 17579                | 17940                   | 19900                   | 9.77%              |
| 4.  | Industrial<br>Consumers        | 315                  | 331                     | 285                     | 0.14%              |
| 5.  | Public Lighting                | 1138                 | 1152                    | 2400                    | 1.18%              |
| 6.  | Public Water<br>works & Sewage | 83                   | 138                     | 151                     | 0.07%              |
| 7.  | Irrigation and<br>Agriculture  | 0                    | 0                       | 0                       | 0.00%              |
| 8.  | Bulk                           | 10737                | 11387                   | 11751                   | 5.77%              |
| 9.  | Outside state                  | 1                    | 1                       | 1                       | 0.00%              |
| 10. | Total                          | 193510               | 197379                  | 203624                  | 100.00%            |

#### **Commission's Analysis of Consumer's Base**

No mention of number of Temporary Connections allowed during previous years and in the projections for FY 2015-16 has been made by the DOP. The Petitioner shall confirm if the Temporary Connections have been counted or not under any of the categories specially General Purpose (Sl. 9) of the above table. The numbers of Consumers in various categories have shown increase from FY 2013-14 (Actual) in FY 2014-15 (estimated) and a decline in FY 2015-16 (on projected basis). AP DOP is

required to reconcile the number of Consumers and also clarify the status of Temporary Connections during the year.

**The Commission accepts the number of consumers, as projected above by the APDOP, with the above directions to DoPAP.**

#### 5.3.1.ii. Energy Sales

**Table 5.4: Energy Sales FY 2015-16-Petitioner's Projections**

**And a comparison with previous years**

| <b>Category Wise Sales in Million Units (MUs)</b> | <b>FY 2013-14 Actual</b> | <b>FY 2014-15 Estimated</b> | <b>FY 2015-16 Projected</b> | <b>% Sales FY 2015-16</b> |
|---|--------------------------|-----------------------------|-----------------------------|---------------------------|
| Domestic  | 85.37                    | 98.61                       | 108.47                      | 27.02%                    |
| BPL (Kutir Jyoti)                                 | 5.87                     | 6.77                        | 7.45                        | 1.86%                     |
| Commercial  | 25.39                    | 33.51                       | 36.87                       | 9.18%                     |
| Industrial Consumers (HT & LT)                    | 48.40                    | 79.86                       | 87.85                       | 21.88%                    |
| Public Lighting                                   | 5.78                     | 7.63                        | 8.39                        | 2.09%                     |
| Public Water works & Sewage                       | 4.03                     | 4.91                        | 5.40                        | 1.35%                     |
| Irrigation and Agriculture                        | 0.00                     | 0.00                        | 0.00                        | 0.00%                     |
| Bulk  | 58.29                    | 69.67                       | 76.64                       | 19.09%                    |
| <b>Sales within the State</b>                     | <b>233.13</b>            | <b>300.96</b>               | <b>331.07</b>               | <b>82.46%</b>             |
| Outside state                                     | 52.89                    | 64.00                       | 70.40                       | 17.54%                    |
| <b>Total</b>                                      | <b>286.02</b>            | <b>364.96</b>               | <b>401.47</b>               | <b>100.00%</b>            |

DOP, AP submitted that the sales forecast is based on the trends observed in the sales pattern of various categories over the past years, new development on account of Government policies, socio-economic changes, Industrial growth, etc. that would affect consumption across various categories of consumers. The growth trend in number of consumers and connected load have been taken as guiding factors in arriving at the requirement of demand and energy.

#### **Commission's analysis**

The Petition has made Projections as per table 5.3 for Number of Consumers and as per table 5.4 with respect to the Energy Sales for FY 2015-16. These projections are built on the data base of previous two years FY 2013-14 and FY 2014-15. The

energy sales for FY 2015-16 are projected considering the trend and economic growth in the State. **The category-wise energy sales are analyzed by the Commission from the above Tables as under:**

- a. Domestic category:** The sales to this category accounts to about 27.02 % of total sales for FY 2015-16. It is observed that the estimated sales growth during FY 2014-15 is about 27% more than the sales for FY 2013-14 and the sales for FY 2015-16 are projected at a growth of 10% over FY 2014-15. Considering the growth of economy in the State the projected increase seems to be less. However Commission will review the Energy requirements at appropriate time if required.
- b. Commercial Category of Consumers:** The energy sales to this category of Consumers for about 9.18% but earns relatively high revenue. The growth for FY 2014-15 over FY 2013-14 was about 31.98%, the projected sales for FY 2015-16 are projected at 10% over the sales of FY 2014-15. In view of large-scale development taking place in the State there is a potential for more growth of commercial activity in the State.
- c. Industrial (LT & HT):** The Petitioner has submitted that the Power sales to industry during 2012-13 to 2015-16 is as given below:

**Table 5.5: HT & LT Energy Sales FY 2015-16– Petitioner’s Projections  
And a comparison with previous years**

| Category | FY 2012-13 | FY 2013-14 | FY 2014-15 | FY 2015-16 |
|----------|------------|------------|------------|------------|
| LT       | 3.47       | 1.75       | 2.88       | 3.17       |
| HT       | 92.68      | 46.65      | 76.98      | 84.68      |

The sales to industry, accounts for about 21.88 % of total Energy Sales in the State.

The Sales Growth in Industrial category for FY 2014-15 over the FY 2013-14 works out to 65%. The sales for FY 2015-16 over FY 2014-15 are projected at about 10%, which is considered conservative by the Commission.

#### **Commission’s Approval of Energy Sales**

With the above comments, Commission approves the category-wise sales projected by APDoP for the FY 2015-16 at 331.07 MUs for all categories of energy sales within the State as per table 5.5 above

### 5.3.2. Distribution Losses

#### Petitioner's Submission:

DoP, AP has filed the actual distribution losses for FY 2013-14 at 60.85% and estimated for 2014-15 at 48.67% and projected for the FY 2015-16 at 59.18% as per Format D2(A) of the petition.

**Table 5.6: Commission's Analysis of T&D Losses FY 2015-16  
And a comparison with previous years**

| Sl | Category  | Unit | FY 2012-13<br>Actual | FY 2013-14<br>Actual | FY<br>2014-15<br>Estimate | FY<br>2015-16<br>Projected |
|----|---|------|----------------------|----------------------|---------------------------|----------------------------|
| 1  | Power Purchase from Central Generating Stations                       | MUs  | 446.77               | 478.79               | 480.65                    | 614.22                     |
| 2  | Free Power  | MUs  | 147.24               | 117                  | 117                       | 175                        |
| 3  | Power available from Central Generating Stations including free power | MUs  | 594.01               | 595.79               | 597.65                    | 789.22                     |
| 4  | Less: Interstate transmission loss                                    | %    | 3.48%                | 3.48%                | 3.48%                     | 3.48%                      |
| 5  | Interstate transmission loss (MU) Shown Minus                         | MUs  | -20.67               | -20.73               | -20.80                    | -27.46                     |
| 6  | Add: Power from AP Hydro Generation                                   | MUs  | 49.95                | 51.86                | 51.86                     | 91.80                      |
| 7  | Add: UI Power   | MUs  | Included in Sl.1     | Included in Sl.1     | Included in Sl.1          | Included in Sl.1           |
| 8  | Sales outside State Shown Minus                                       | MUs  | -45.53               | -52.89               | -64.00                    | -70.40                     |

|    |   |     |        |        |        |        |
|----|---|-----|--------|--------|--------|--------|
| 9  | Total Power Available                         | MUs | 577.76 | 574.03 | 564.71 | 783.16 |
| 10 | Less intra states transmission loss- MUs @ 4% | MUs | -23.11 | -22.96 | -22.59 | -31.33 |
| 11 | Add: Own Generation- Diesel                   | MUs | 1.59   | 0.78   | 0.78   | 0.40   |
| 12 | Net power available for                       | MUs | 556.24 | 551.85 | 542.90 | 752.23 |
| 13 | Sales   | MUs | 237.60 | 233.12 | 300.96 | 331.07 |
| 14 | Distribution Loss (MU)                        | MUs | 318.64 | 318.73 | 241.94 | 421.16 |
| 15 | Distribution Loss (%)                         | %   | 57.28% | 57.76% | 44.56% | 56.00% |

#### Commission's Analysis of T&D Losses

Commission is aware that the distribution network of Arunachal Pradesh is spread over wide geographical area serving widely spread domestic consumers ( 70.18% of Consumers), with 27.02 % of the energy sales to this category and about 1.82 % energy sales to BPL( Kutir Jyoti) with a Consumer base of 11.68%. These Consumers are at LT voltage level, the reduction of distribution losses has been low.

The State / Share allocation indicated in the Table 3.1 of this order which is based on the Petitioner's inputs, is in terms of MWs. These need to be translated in terms of MUs, by the Petitioner from next Petition filing. The MUs may vary based on PLF.

The T&D losses were approved at 53% for FY 2013-14 as per Tariff Order dated 30.05.2013

Further the Commission in its ARR & Tariff order dated 30-05-2013 for FY 2013-14 has approved T&D losses for FY 2014-15 & FY 2015-16 at 50% and 47% respectively. After deducting 4% towards transmission losses, the distribution losses for FY 2014-15 shall be 46% and 43% for FY 2015-16. Once the AP DoP has achieved distribution loss of 44.50% in FY 2014-15, there is no valid reason

explained by the Petitioner for higher distribution loss to the tune of 56.00% for FY 2015-16.

The Commission had advised APDOP in regard to T&D losses as a directive under para 6.2.5 of the order dated 03.06.2014

**Quote** “APDOP should prepare a ‘Road Map’ on priority for reduction of AT&C losses indicating the measures proposed to be implemented to achieve the reduction for next three years including the cost involvement and the sources identified for funding.” **Unquote.**

APDOP has not informed the Commission in regards to steps taken in this direction.

Further, the technical and commercial losses are not segregated by the DoP. They should analyze the reasons for high distribution losses for each segment and effective measures are required be undertaken to reduce the losses by proper accounting of energy sales, conducting voltage-wise energy audit, by providing meters on all feeders etc. DOP, AP should also take action to arrest pilferage of energy, replacement of defective meters/ stopped meters, electro-mechanical meters with automatic meters. In addition to above automatic meters to all un-metered connections should also be provided at the earliest in a time bound manner.

**With the above directions the Commission sets the distribution losses at 43% for the FY 2015-16.**

### **5.3.3. Energy requirement & Energy Balance for FY 2015-16**

APDOP has projected energy requirements of 857.82 MUs vide Table 3.3 of the petition for the FY 2015-16 as depicted below:

**Table 5.7: Energy Requirement in MUs FY 2015-16 Petitioner’s Projections**

| Sl | Particulars                | FY 2013-14<br>Actual | FY 2014-15<br>Estimated | FY 2015-16<br>Projected |
|----|----------------------------|----------------------|-------------------------|-------------------------|
| 1. | <b>Energy Requirements</b> |                      |                         |                         |
| 2. | Energy sales within state  | 233.12               | 300.96                  | 331.07                  |

| SI  | Particulars                                | FY 2013-14<br>Actual | FY 2014-15<br>Estimated | FY 2015-16<br>Projected |
|-----|--|----------------------|-------------------------|-------------------------|
| 3.  | Sales to other distribution                | 52.89                | 64.00                   | 70.40                   |
| 4.  | Total energy sales                         | 286.02               | 364.96                  | 401.47                  |
| 5.  | T&D Losses in %age                         | 59.65                | 47.05                   | 57.96                   |
| 6.  | T&D losses in MU                           | 344.60               | 267.46                  | 456.35                  |
| 7.  | Total energy requirement                   | 630.61               | 632.42                  | 857.82                  |
| 8.  | <b>Energy availability</b>                 |                      |                         |                         |
| 9.  | Power Purchase from CGS and UI             | 478.79               | 480.65                  | 614.22                  |
| 10. | Hydel Generation (APHDP)                   | 51.86                | 51.86                   | 91.80                   |
| 11. | Own Generation (Diesel)                    | 0.78                 | 0.78                    | 0.40                    |
| 12. | Free Power                                 | 117.00               | 117.00                  | 175.00                  |
| 13. | Total Energy Availability                  | 630.61               | 632.42                  | 857.82                  |
| 14. | <b>Energy Surplus (Gap)<br/>Sl.13-Sl.7</b> | 0                    | 0                       | 0                       |

#### Commission's Analysis of Energy Requirements

The Commission has considered the projected power purchase for the FY 2015-16 from central generating stations wheeled through PGCIL Network and assessed total power availability for sale in the licensed area including the projected free power as per the energy balance given in the Table below. The Commission has considered a conservative figure of 55 MU of energy to be received from the AP DHPD based on the previous years' generation instead of the little optimistic figure of 91.80 MU projected by the AP DoP. This is however subject to review by the Commission during the true up process.

**Table 5.8 Energy Balance: FY 2015-16- Approved by the Commission**

| SI | Energy Requirements vs. Energy Availability |     |                 |        |
|----|---|-----|-----------------|--------|
| A  | Energy Requirements                         |     |                 | MUs    |
| 1  | Energy required for sales inside the State  |     |                 | 331.07 |
| 2  | Distribution Losses                         | 43% |                 |        |
| 3  | Energy requirement with Distribution losses |     | 331.07/(1-0.43) | 580.82 |
| 4  | Distribution losses in MUs ( Sl.3-1)        |     |                 | 249.75 |
| B  | Energy Availability                         |     |                 |        |
| 5  | Diesel Generation                           |     |                 | 0.40   |

|           |  |  |  |               |
|-----------|--|--|--|---------------|
| <b>6</b>  | Energy Sourced from AP DHPD  |  | <b>55.00</b>                           |               |
| <b>7</b>  | Transmission Losses with in the State in %   |  | <b>4%</b>                              |               |
| <b>8</b>  | Intrastate Transmission Losses in MUs  |  | <b>2.20</b>                            |               |
| <b>9</b>  | Usable Energy Sourced from AP DHPD ( Sl.6-Sl8)   |  |  | <b>52.80</b>  |
| <b>10</b> | Energy Required at Injection point in Arunachal Pradesh from Central Generating Stations ( Sl.3-sl 5-Sl.9) |  |  | <b>527.62</b> |
| <b>11</b> | Transmission Losses with in the State in %   |  | <b>4%</b>                              |               |
| <b>12</b> | Energy from Central Generating Stations to be received by the DoP, AP for Distribution within the State    |  | <b>527.62/(1-4% as per Sl. 11)</b>     | <b>549.60</b> |
| <b>13</b> | Inter State Transmission Losses in PGCIL network   |  | <b>3.48 %</b>                          |               |
| <b>14</b> | Energy to be exported by the Central Generating Station  |  | <b>549.60/ (1-3.48% as per Sl. 13)</b> | <b>569.42</b> |
| <b>15</b> | Total Energy Requirements Sl.5 + Sl. 6+ Sl 14 for sale within the State                                    |  |  | <b>624.82</b> |
| <b>16</b> | Sale of surplus power outside the state  |  |  | <b>70.40</b>  |
| <b>17</b> | Grand total energy requirement(sl. No. 15+ sl.no.16)   |  |  | <b>695.22</b> |
| <b>18</b> | Total energy to be sourced from CGS(Sl.no.14+Sl.no 16)   |  |  | <b>639.82</b> |

#### **Commission's Approval of Energy Requirements**

Based on the above analysis the Commission approves energy requirement at 695.22 MU for FY 2015-16.

#### **5.3.4.Cost Comparison of Power Purchase FY 2015-16 vs. FY 2014-15**

**Before analyzing the Power Purchase Cost projected by APDoP, the Costs of Purchase in FY 2014-15 were compared with Costs projected now. The Comparison is as under:**

**Table 5.9 Power Purchase Cost comparison: FY 2015-16 Vs. FY 2014-15**

| <b>Sl.</b> | <b>Source</b> | <b>Cost ( Rs./ Kwh approved by the Commission for FY 2014-15</b> | <b>Cost (Rs./kWh) FY 2015-16</b> |
|------------|---------------|--|----------------------------------|
| 1          | Loktak        | 4.03   | 4.23                             |
| 2          | Kahndong      | 2.83   | 3.10                             |
| 3          | Doyang        | 3.01   | 3.16                             |

|    |                 |      |      |
|----|-----------------|------|------|
| 4  | Kopili-I        | 1.24 | 1.19 |
| 5  | Kopili-II       | 2.00 | 2.22 |
| 6  | Ranganadi       | 5.49 | 2.39 |
| 7  | AGTPP (Tripura) | 3.22 | 4.16 |
| 8  | AGBPP           | 3.69 | 4.20 |
| 9  | Farakka         | 4.22 | 4.64 |
| 10 | Kahalgaoon      | 3.78 | 4.41 |
| 11 | Talcher         | 3.12 | 2.75 |
| 12 | ONGC (Palatana) |      | 2.67 |

#### Commission's Analysis:

The Commission notes that the rates at which Power is proposed to be purchased varies from previous years as above. The APDoP shall have a recheck on the Rates at which Power is proposed to be purchased. The Commission shall examine these during the review process of ARR for FY 2015-16 along with ARR for FY 2016-17.

#### 5.3.5. Power Purchase Cost FY 2015-16: Petitioner's Projections

APDOP has projected power purchase cost at Rs. 181.40 crore for 614.20 MUs to be purchased from CGS including U I/ Purchase of 116.20 MU. APDOP has to meet PGCIL charges at actuals, which is estimated at Rs.40.00 crore for 789.20 MUs to be wheeled including 116.03 for UI & 175 MUs entitled free power. Summing up of the purchase cost APDOP has claimed Rs.221.40 crore in ARR for FY 2015-16. The power drawn from AP DHPD has been shown to be free.

#### Power Purchase Cost: FY 2015-16 Commission's Approval

**Table 5.10: Power Purchase cost Commission's Approval for FY 2015- 16  
(Based on Petition table 3.7)**

| Sl. No.       | Source    | Cost (Rs./KWH) | Power Purchase (MUs) | Cost Rs. (crore) | Power Purchase Quantum : Commission's Approval | Cost Rs. (crore) : Commission's Approval |
|---------------|-----------|----------------|----------------------|------------------|--|--|
|               |           |                | Projected            |                  | Approved                                       |  |
| <b>NHPC</b>   |           |                |                      |                  |  |  |
| <b>1</b>      | Loktak    | 4.23           | 30.39                | 12.85            | <b>30.39</b>                                   | <b>12.85</b>                             |
| <b>NEEPCO</b> |           |                |                      |                  |  |  |
| <b>2</b>      | Kahndong  | 3.10           | 7.48                 | 2.32             | 7.48   | 2.32                                     |
| <b>3</b>      | Doyang    | 3.16           | 16.04                | 5.07             | 16.04  | 5.07                                     |
| <b>4</b>      | Kopili-I  | 1.19           | 36.66                | 4.36             | 36.66  | 4.36                                     |
| <b>5</b>      | Kopili-II | 2.22           | 4.64                 | 1.03             | 4.64   | 1.03                                     |

| Sl. No.     | Source                                | Cost (Rs./KWH) | Power Purchase (MUs) | Cost Rs. (crore) | Power Purchase Quantum : Commission's Approval | Cost Rs. (crore) : Commission's Approval |
|-------------|---------------------------------------|----------------|----------------------|------------------|--|--|
|             |                                       |                | <b>Projected</b>     |                  | <b>Approved</b>                                |  |
| 6           | Ranganadi                             | 2.39           | 63.60                | 15.20            | 63.60  | 15.20                                    |
| 7           | AGTPP (Tripura)                       | 4.16           | 38.53                | 16.01            | 38.53  | 16.01                                    |
| 8           | AGBPP                                 | 4.20           | 96.41                | 40.50            | <b>96.41</b>                                   | <b>40.50</b>                             |
| <b>NTPC</b> |                                       |                |                      |                  |  |  |
| 9           | Farakka                               | 4.64           | 23.78                | 11.04            |  |  |
| 10          | Kahalgaoon                            | 4.41           | 12.48                | 5.50             | <b>2.91</b>                                    | <b>1.28</b>                              |
| 11          | Talcher                               | 2.75           | 14.16                | 3.89             | 14.16  | 3.89                                     |
| 12          | ONGC (Palatana)                       | 2.67           | 154.00               | 41.12            | 154.00   | 41.12                                    |
| 13          | UI/Trading (-)                        | 1.94           | 116.03               | 22.51            |  |  |
| 14          | PGCIL charges (CGS +UI+ Free Power)   | 0.51           | 789.20               | 40.00            | 639.82   | 32.63                                    |
| 15          | Provision of Power Purchase from DHPD | -              | 91.80                | Nil              | 55.00  | 12.65                                    |
| 16          | Total Power purchase cost             |                |                      | 221.40           |  | 188.91                                   |

#### Commission's Approval towards Power Purchase Cost

The above amount of Rs 188.91 Crs towards purchase of 519.82 MU during FY 2015-16 is approved by the Commission.

#### 5.3.6. Aggregate Revenue Requirement (ARR) for FY 2015-16

The AP DOP in its petition for FY 2015-16 has projected a total revenue requirement of Rs. 949.93 Crore for 2015-16 as mentioned hereunder for FY 2015-16 :

**Table 5.11: Aggregate Revenue Requirement for FY 2015-16-AP DOP Projections**

| Sl. | Item of expense                          | Petition Ensuing Year 2015-16 Projected |
|-----|--|---|
| a   | b  | e                                       |
| 1.  | Cost of power Purchase                   | 221.40                                  |
| 2.  | Fuel Cost ( Diesel for Power Generation) | 5.39                                    |
| 3.  | Employee costs                           | 201.13                                  |
| 4.  | R&M expenses                             | 30.80                                   |

| Sl. | Item of expense  | Petition Ensuing<br>Year 2015-16<br>Projected |
|-----|--|---|
| a   | b  | e   |
| 5.  | Administration and general expenses                      | 2.00  |
| 6.  | Interest on Working Capital                              | -   |
| 7.  | Depreciation   | 149.71  |
| 8.  | Interest charges (including interest on working capital) | 220.12  |
| 9.  | Return on NFA /Equity                                    | 119.39  |
| 10. | Provision for Bad Debit                                  | 0.00  |
| 11. | Total revenue Requirement                                | 949.93  |
| 12. | Less: non-tariff income                                  | 0.50  |
| 13. | Net revenue requirement (11-12)                          | 949.43  |
| 14. | Revenue Billed   | 131.03  |
| 15. | Revenue from surplus sale of Power                       | 19.71   |
| 16. | Revenue Gap (13-14-15)                                   | 798.69  |
| 17. | Any other Revenue Gap / Previous Revenue Gap             | 0.00  |
| 18. | Total revenue gap (16+17)                                | 798.69  |
| 19. | Revenue surplus carried over                             | 0.00  |
| 20. | Additional revenue from proposed tariff                  | 0.00  |
| 21. | Regulatory asset   | 0.00  |
| 22. | Energy sales (MU)  | 401.47  |

**Average Cost of Power Supply (Sl.13/ Sl.22) : Rs. 23.65 / kWh**

Keeping the approach of determining the Annual Revenue requirements for FY 2015-16 as per guiding principles defined in para 5.3 above, each element of the ARR projected by DoP,AP has been analyzed by the Commission in the following paras.

**5.3.7 Fuel Cost for Power Generation (Diesel Power)**

DOP, AP has claimed Rs. 5.39 crores ( Petition table 3.19) towards Fuel Cost for an estimated 0.40 MU generation ( Petition table 3.3) during the FY 2015-16 by the diesel generating plant in emergencies.

**Commission's Analysis**

DOP, AP has shown Fuel Cost for the FY 2013-14 at Rs. 4.75 crore generation of 0.78 MU (actuals) as per petition table 3.3. DoP, AP has projected the same

quantity of generation during FY 2014-15 requiring Rs. 5.39 Crs. The Diesel Generation for 2015-16 has been shown as 0.40 MUs requiring Rs. 5.39 Crs. A provision of Rs. 1.26 crore is allowed for FY 2015-16, which is subject to review and True up.

The Commission approves fuel cost at Rs. 1.26 crore for FY 2015-16 subject to final approval during True up process on submission of plant performance data.

### 5.3.8 Employees' Cost- FY 2015-16- Petitioner's Submission

The Petitioner has submitted Employees' Costs towards Salaries and Allowances, Over Time Allowance, Expenses towards Medical Care, Leave Travel Concession (LTC) etc. as in the following table

**Table 5.12: Employees' Costs Petitioner Submission FY 2015- 16**

(Based on Petition Table 3.9)

| SI | Particulars                                  | FY 2013-14<br>Actuals | FY 2014-15<br>Estimated | FY 2015-16<br>Projected |
|----|--|-----------------------|-------------------------|-------------------------|
| 1  | Salaries & Allowances                        | 115.84                | 144.89                  | 150.06                  |
| 2  | Wages  | 42.00                 | 43.40                   | 44.00                   |
| 3  | OTA  | 0.00                  | 0.00                    | 0.00                    |
| 4  | Medical Treatment                            | 0.61                  | 0.65                    | 0.70                    |
| 5  | Other Allowances (O.E +<br>PoL + Minor Work) | 5.90                  | 6.00                    | 6.20                    |
| 6  | LTC  | 0.13                  | 0.15                    | 0.17                    |
| 7  | Total  | 168.48                | 195.09                  | 201.13                  |

### Commission's Approval of Employees' Costs:

Rs. 201.13 Crs. projection of Employees' expenses for FY 2015-16 is reasonable and approved by the Commission.

### 5.3.9 Repair & Maintenance Expenses: FY 2015-16

**Table 5.13: Repair & Maintenance Expenses: FY 2015-16 Petitioner's Projections in Rs. Crs.**

| SI | Particulars         | FY 2013-14<br>Actuals | FY 2014-15<br>Estimated | FY 2015- 16<br>Projected |
|----|---------------------|-----------------------|-------------------------|--------------------------|
| 1  | Plant and Machinery | 0.00                  | 0.00                    | 0.00                     |
| 2  | Building            | 0.00                  | 0.00                    | 0.00                     |

| SI | Particulars             | FY 2013-14<br>Actuals | FY 2014-15<br>Estimated | FY 2015- 16<br>Projected |
|----|-------------------------|-----------------------|-------------------------|--------------------------|
| 3  | Hydraulic works & Civil | 0.00                  | 0.50                    | 1.00                     |
| 4  | Line cable & Network    | 22.00                 | 25.00                   | 25.00                    |
| 5  | Vehicles                | 3.70                  | 4.65                    | 4.80                     |
| 6  | Furniture & Fixtures    | 0.00                  | 0.00                    | 0.00                     |
| 7  | Operating Expenses      | 0.00                  | 0.00                    | 0.00                     |
| 8  | Total Repairs &         | 25.70                 | 30.15                   | 30.80                    |

#### **Commission Approval of Repair & Maintenance**

The Commission finds Rs. 30.80 crore towards Projected amount for R&M expenses for the FY 2015-16 as reasonable and approves the same.

#### **5.3.10 Administrative & General ( A&G) Expenses- FY 2015-16**

**Table 5.14: A &G Expenses for FY 2015-16 : Petitioner's Projections**

Rs. Crs.

| SI | Particulars                             | FY 2013-14<br>Actuals | FY 2014-15<br>Estimated | FY 2015-16<br>Projected |
|----|---|-----------------------|-------------------------|-------------------------|
| 1  | Rent , rates & Taxes                    | 0.00                  | 0.00                    | 0.00                    |
| 2  | Telephone, Postage & Telegram           | 0.24                  | 0.24                    | 0.28                    |
| 3  | Consultancy Fees                        | 0.08                  | 0.08                    | 0.10                    |
| 4  | Technical Fee                           |                       |                         |                         |
| 5  | Other Professional Charges              |                       |                         |                         |
| 6  | Conveyance & Travel Expenses            | 0.46                  | 0.48                    | 0.52                    |
| 7  | Electricity & Water Charges             | 0.40                  | 0.40                    | 0.45                    |
| 8  | Others                                  | 0.56                  | 0.59                    | 0.65                    |
| 9  | Total Administrative & General expenses | 1.74                  | 1.79                    | 2.00                    |

#### **Commission's Approval of Administrative and General Expenses**

An amount of Rs. 2.00 Crs projected by the Petitioner towards Administrative & General Expenses for FY 2015-16 is found reasonable by the Commission and accordingly the amount is approved by the Commission towards this head.

#### **5.3.11 Summary of Operations & Maintenance(O&M) Cost**

The O&M expenses worked out above are summarized as here under:

**Table 5.15: O&M Expenses summarized for FY 2015-16**

And Comparison with Previous Years – Commission’s Analysis

| SI | Particulars                                       | FY 2013-14<br>Actuals | FY 2014-15<br>Estimated | FY 2015-16<br>Projected | Ref. Table of<br>this order |
|----|---|-----------------------|-------------------------|-------------------------|-----------------------------|
| 1  | Employee Cost<br>Rs. Crs.                         | 164.48                | 195.09                  | 201.13                  | 5.12                        |
| 2  | Repairs and<br>Maintenance Rs.<br>Crs             | 25.70                 | 30.15                   | 30.80                   | 5.13                        |
| 3  | Administration<br>and General<br>Expenses Rs. Crs | 1.75                  | 1.91                    | 2.00                    | 5.14                        |
| 4  | Total O&M<br>expenses Rs. Crs                     | 191.93                | 227.15                  | 233.93                  |                             |

**Commission’s Approval for Operation & Maintenance:**

Commission finds Rs. 233.93 crore projections of O&M expenses for FY 2015-16 is reasonable and approves the amount of Rs. 233.93 Crs.

**5.3.12 Depreciation - FY 2015-16**

DOP, AP has claimed Rs. 149.71 crore towards depreciation for FY 2015-16.

The DoP, AP has worked out depreciation on the opening value of GFA at an average rate of depreciation of 5.27% for FY 2015-16 as detailed in table below:

**Table 5.16: Depreciation: Petitioner’s Projections- FY 2015-16**

| Sl. | Particulars  | FY 2015-16<br>Projected Rs. Crs. |
|-----|--|----------------------------------|
| 1   | Gross Block in Beginning of the year                 | 2842.54                          |
| 2   | Additions during the Year                            | 0.00                             |
| 3   | Cumulative Depreciation at the Beginning of the Year | 634.24                           |
| 4   | Average Rate of Depreciation                         | 5.27%                            |
| 5   | Depreciation for the Year                            | 149.71                           |
| 6   | Cumulative Depreciation at the End of the Year       | 783.95                           |
| 7   | Net Block in the Beginning of the Year               | 2208.30                          |
| 8   | Net Block in the End of the Year                     | 2058.59                          |

The DoP, AP has mentioned that in the absence of fixed assets register as required by the regulations, the Gross Fixed Assets (GFA) have been built-up based on available information as on 31-03-2013. The DoP, AP further stated that in the absence of asset register, the asset wise details are not available and requested

the Commission to approve the depreciation as worked out above. The petitioner also stated that the details of assets capitalized during FY 2013-14 and FY 2014-15 and estimated capitalization during FY 2015-16 shall be submitted in future filings. The GFA movement is furnished by the Petitioner is in table below:

**Table 5.17 Gross Fixed Assets Opening – Closing Balance: Petitioner's submission**

| Sl. | Financial Year | Opening Balance | Additions during the year Rs. Crs | Closing Balance Rs. Crs |
|-----|----------------|-----------------|-----------------------------------|-------------------------|
| 1   | FY 2013-14     | 2842.54         | 0.00                              | 2842.54                 |
| 2   | FY 2014-15     | 2842.54         | 0.00                              | 2842.54                 |
| 3   | FY 2015-16     | 2842.54         | 0.00                              | 2842.54                 |

### **Commission's Analysis**

In the absence of fixed assets registers the value of Gross Fixed Assets built- up as on 31-03-2013 cannot be considered to allow depreciation, return on equity or reasonable return.

### **Commission's Analysis of Depreciation**

DOP, AP has nether shown any addition of assets during the FY 2013-14 and FY 2014-15 nor proposed any addition during FY 2015-16.

DOP, AP has not furnished details of Asset wise values and the average rate of depreciation stated in the petition has no basis for calculation of depreciation for FY 2015-16. Further, the assets acquired by the DOP deemed to be funded by the Government of India and Government of Arunachal Pradesh. As per the Regulation 87 of APSERC Regulation 2011, depreciation shall be admissible on the opening balance as per the Transfer Scheme notification excluding the value of contribution and capital subsidy/grants provided by the Government.

In the absence of the details of additions and contributions/grants/subsidies from the State / Central Governments, the Commission does not consider any depreciation in the ARR for the FY 2015-16.

### 5.3.13 Interest on loans & Finance Charges for FY 2015-16

#### Interest and Finance Charges-FY 2015-16

DoP, AP has projected interest on loan at Rs 220.12 crore for FY 2015-16 and no finance charges for FY 2015-16. DoP, AP has treated 50% GFA on 01-04-2013 as notional debt and repayment has been spread over to next 10 years. The rate of interest on loans has been considered at 14.75% being the SBI, PLR as on 1<sup>st</sup> April 2014. Interest on loan computed on the above methodology has been indicated in table below:

**Table 5.18: Interest & Finance Charges for FY 2015-16- Petitioner's Submission**

Rs. Crs

| Sl. | Particulars                      | FY 2013-14<br>(Actuals) | FY 2014-15<br>Estimated | FY 2015-16<br>Projected |
|-----|----------------------------------|-------------------------|-------------------------|-------------------------|
| 1   | Opening Balance                  | 1989.78                 | 1790.80                 | 1591.82                 |
| 2   | Loan Additions                   | 0.00                    | 0.00                    | 0.00                    |
| 3   | Repayment                        | 198.98                  | 198.98                  | 198.98                  |
| 4   | Closing Loan                     | 1790.80                 | 1591.82                 | 1392.84                 |
| 5   | Average Loan                     | 1890.29                 | 1691.31                 | 1492.33                 |
| 6   | Interest on Loan                 | 273.15                  | 249.47                  | 220.12                  |
| 7   | Total Interest & Finance Charges | 273.15                  | 249.47                  | 220.12                  |

#### Commission Approval of Interest & Finance Charges

The DOP, AP is a State Government Department and the assets and liabilities are not yet transferred to DOP, AP. As such the claim of DOP, AP to treat the debt equity ratio 50:50 cannot be made applicable. Further funding of capital assets so far acquired for DOP, AP are with the support of grants / subsidies from GOI/ Government of Arunachal Pradesh and **in the absence of details of actual loans borrowed, interest on normative loan shall not be admissible as per the regulation 83 of APSERC (Terms and Conditions for determination of Tariff) Regulations, 2011.**

**The Rate of interest at which Loan is drawn is also not presented by the Petitioner. The Interest is not admissible.**

### 5.3.14 Interest on Working Capital-FY 2015-16

DoP, AP has projected interest on working capital at Rs9.02 crore for FY 2015-16 as detailed in table below:

**Table 5.19: Interest on Working Capital: FY 2015-16 -Petitioner's Submission**

| Sl | Particulars                 | FY 2013-14<br>Actuals | FY<br>2014-15<br>Estimated | FY 2015- 16<br>Projected |
|----|-----------------------------|-----------------------|----------------------------|--------------------------|
| 1  | Fuel Cost                   | 0.40                  | 0.45                       | 0.45                     |
| 2  | Power Purchase Cost         | 14.16                 | 14.37                      | 18.45                    |
| 3  | One month's employee cost   | 13.71                 | 16.26                      | 16.76                    |
| 4  | One month's A&G Exp.        | 0.15                  | 0.16                       | 0.17                     |
| 5  | One month's R&M Cost        | 2.14                  | 2.51                       | 2.57                     |
| 6  | Two month's receivables     | 18.64                 | 20.15                      | 22.77                    |
| 7  | Total Working Capital       | 49.20                 | 53.89                      | 61.16                    |
| 8  | Interest on working capital | 7.11                  | 7.95                       | 9.02                     |

### Commission's Approval of Interest on Working Capital

As per regulation 85 of APSERC (Terms and Conditions for determination of tariff) Regulation 2011

(1) Working capital shall consist of :

- (a) O&M Expenses for one month
- (b) Budget for maintenance of the rate of 1% of the historical cost escalated at the rate of 6% PA from the date of commercial operation.
- (c) Receivables equivalent to two months fixed and variable charges of sale of electricity.
- (d) Rate of interest on working charges shall be equal to short term PLR of SBI as on 1<sup>st</sup> April of the relevant financial year.

Interest on Working Capital shall be calculated on normative basis not withstanding that the licensee has not taken working capital loan from any outside agency.

Accordingly interest on working capital has been worked out on the approved costs and revenue as detailed in table below.

**Table 5.20: Interest on working capital for FY 2015-16 – Commission’s Analysis**

| Sl. No | Particulars   | Working capital requirements Rs Crs FY-2015-16 |
|--------|---|--|
| 1      | Employee Cost One Month   | 16.76  |
| 2      | R&M expenses One Month  | 2.57   |
| 3      | A&G expenses One Month  | 0.17   |
| 4      | Maintain Spares @ 1% on GFA   | 28.43  |
| 5      | Receivables Two months  | 23.31  |
| 6      | Total Working Capital   | 71.24  |
| 7      | Rate of Interest being SBI PLR as on 1 <sup>st</sup> April of Previous Year | 14.75%   |
| 8      | Interest on Working Capital   | 10.51  |

#### **Commission’s Approval of Interest on Working Capital**

The Commission approves interest on working capital at Rs. 10.51 crore for FY 2015-16 as projected by DOP, AP.

#### **5.3.15 Return on equity**

DOP, AP has claimed Rs. 119.39 crore as Return on Equity at 14% for the FY 2015-16.

#### **Commission’s Analysis**

As per regulations 82 of APSERC Regulations 2011, Return on Equity shall be computed on the Equity base determined in accordance with regulation 81 (2) & 82 at 14% per annum.

As equity Infusion was not made into the Books of Accounts of DOP, AP and that the Government of Arunachal Pradesh has not issued any notification transferring Assets and Liabilities in the name of DOP, AP, **Commission does not consider any Return on Equity for the FY 2015-16.**

#### **5.3.16 Provision for Bad and Doubtful Debts.**

DOP, AP has not made any provision for Bad and Doubtful Debts for the FY 2015-16

## Commission's Analysis

Commission has not allowed any provision towards bad debt and expects DoPAP to ensure that such debts do not accumulate to make DoPAP a healthy Distribution Licensee.

### 5.3.17 Renewable Power Purchase Obligations- Compliance

Deptt. of Hydro Power Development (DHPD) of Arunachal Pradesh has number of hydro stations with a rating of < 25 MW that come under Renewable Energy Compliance. The DOP is drawing the 100% power generated by these small/mini/micro hydro stations which is enough to meet the Renewable Energy Compliance for non-Solar RPOs as shown in the table below as per the Regulations dated 11<sup>th</sup> April 2012 for Renewable Power Purchase Obligations and its Compliance Regulation 2012 as defined for FY 2012-13 onwards as under:

**Table 5.21: RPPO- Financial Provisions by the Commission**

| SI | Year    | Minimum Quantum of purchase (in %) from renewable sources (in terms of energy in kWh) of total consumption |           |       |
|----|---------|--|-----------|-------|
| a  | b       | c  | d         | e     |
|    |         | Total  | Non Solar | Solar |
| 1  | 2012-13 | 4.2%   | 4.1%      | 0.1%  |
| 2  | 2013-14 | 5.6%   | 5.45%     | 0.15% |
| 3  | 2014-15 | 7.0%   | 6.8%      | 0.20% |
| 4  | 2015-16 | Above % age to continue till revision  |           |       |

The APDoP has however not been able to fulfill the Renewable Energy Compliance Solar power which is getting accumulated since FY 2012-13.

### Commission's Analysis in respect of RPO Compliance

The Commission suo-moto allows under this order in the ARR, a provision of Rs. 2.09 Crore for purchase of Solar RECs at the forbearance price fixed by CERC to meet the previous years' RPO Compliance and at Floor price for RPO Compliance of FY 2015-16.

### 5.3.18 Provision in ARR for Solar RPO Compliance.

**Table 5.22: Calculation for Solar RPO Compliance- Commission's analysis**

| FY      | Units Consumed MUs | Solar RPO %          | RPOs in MUs | Rs / kWh | Amount in Rs Crs.               |
|---------|--------------------|----------------------|-------------|----------|---------------------------------|
| 2012-13 | 645.55             | 0.10%                | 0.646       | 5.80     | 0.375                           |
| 2013-14 | 630.61             | 0.15%                | 0.946       | 5.80     | 0.549                           |
| 2014-15 | 632.42             | 0.20%                | 1.265       | 5.80     | 0.734                           |
| 2015-16 | 624.82             | 0.20%                | 1.249       | 3.50     | 0.437                           |
|         |                    | <b>Total Rs. Crs</b> |             |          | <b>2.095</b><br><b>Say 2.10</b> |

#### Commission's Approval

The Commission allows and accordingly approves the amount of Rs. 2.10 Crs for compliance of backlog of Solar RPO Compliance and for the FY 2015-16.

### 5.3.19 Annual License Fee for Deemed Distribution Licensee

As per the provisions of the APSERC Fee Regulations, 2011, Annual License Fee is to be paid by every licensee including the Deemed Licensee. The APDOP though a deemed distribution licensee has not paid the same for FY 2012-13, 2013-14, 2014-15 and is due for 2015-16 as well. The annual license fee for a distribution licensee including a deemed licensee as per the Regulation is 0.067 paise per unit of energy handled/to be handled in a particular year (which is including the T&D losses). The year wise energy handled by the APDOP as per the information available in Tariff Orders and Petitions of various FYs w.e.f 2012-13 onwards is as follows:

1. FY 2012-13 : 645.55 MU
2. FY 2013-14 : 630.61 MU
3. FY 2014-15 : 632.42 MU
4. FY 2015-16 : 624.82 MU
5. **Total : 2533.40MU @ 0.067 paise per unit = Rs. 0.17 Crore.**

#### Commission Analysis and Approval towards License Fee:

The Commission approves suo-moto, a provision of Rs. 0.17 Cr. in the ARR.

### **5.3.20 Non-Tariff Income**

DOP, AP has estimated Rs. 0.50 crore towards Non-Tariff Income for the FY 2015-16.

#### **Commission's Analysis of Non- Tariff Income**

As per the schedule of miscellaneous charges for LT Connections with single phase supply Rs. 16/- per month is payable by the consumers towards meter rent.

Similarly meter rent for HT Consumers of 11 KV system at Rs. 670/- per month shall be payable. Considering 1,85,697 LT connections and considering that at least 60% of the consumers are having metered electrical supply, meter rent at Rs. 16/- per connection would amount to Rs. 2.14 crore/ annum and for 4400 connections under HT category for 11KV system at Rs. 670/- would amount to Rs. 2.12 crore per Annum even if Commission considers a conservative estimate of 60% of the HT consumers are having metered electric supply. In all AP DOP is expected to receive Rs.4.26 crore during FY 2015-16 as meter rent only

#### **Commission's Approval of Non-Tariff Income**

Based on the above analysis Commission considers the non-tariff Income at Rs 4.26 crore for the FY 2015-16 as appropriate and approves this amount in meeting ARR. DOP, AP should maintain proper accounts for Regulatory requirements regarding the nos. of consumers who are metered and submit to the Commission for scrutiny.

### **5.3.21 Capital Investment**

The DoP, AP has projected capital investment of Rs. 103.05 crore during FY 2015-16. The petitioner has stated that the objective of incurring capital expenditure is to upgrade and strengthen the distribution network to meet the desirable standards of performance and provide better network reliability and sustainable performance to the consumers of DoP, AP. The Capital expenditure plan envisaged will also assist in reducing system losses.

### **Commission's Analysis**

As seen from the submission of the DoP, AP incurred capital expenditure of Rs. 103.05 crores during FY 2013-14, estimated capital expenditure of Rs.103.05 crore during FY 2014-15 and FY 2014-15. Commission notes that no amount is proposed for capitalization nor any amount has been shown capitalized during FY 2013-14 & 2014-15. Moreover no break up details of the plan and programmes to be carried during 2015-16 out of the proposed amount of Rs103.05 Crore has been provided. In absence of the above the capital investment of Rs. 103.05 crore as proposed by the DOP, AP cannot be considered.

Unless the assets are put to use the required results cannot be achieved. In addition to above, in absence of the transfer of fixed gross assets to the DOP by the Govt., Commission does not consider the capital cost at the beginning and capitalization during FY 2015-16.

**No amount is approved by the Commission for making any requirements for Capitalization / Interest towards Capital Investment on the ARR for FY 2015-16.**

#### **5.3.22 Investments for Training & Safety of Personnel of APDoP**

The Commission also lays stress on improving the Skills and multiskilling of its manpower as well as the investment on the safety harness for the manpower of DoP,AP. The Commission makes a provision of Rs 0.75 Crs. in the ARR with a directive to utilize the amount effectively.

#### **5.3.23 Estimated Revenue at Existing tariffs for LT and HT Category**

The Commission has estimated revenue from sale of power within the state at existing tariff which worked out to **Rs. 139.87 crores** as detailed in table below.

**Table 5.23 Estimated Revenue at existing tariffs for LT and HT Consumers**

| Sl.       | Category             | No. of consumers | Sale in each Slab (MU) | Existing Tariff Rate (paise per kWh) | Amount (Rs.Cr) | Average Tariff for the year (Rs. per Kwhr) |
|-----------|----------------------|------------------|------------------------|--------------------------------------|----------------|--|
| <b>LT</b> |                      |                  |                        |                                      |                |  |
| <b>1</b>  | Domestic             | <b>145231</b>    | 108.47                 | 4.00                                 | 43.39          | 4.00                                       |
| <b>2</b>  | KJP & BPL Connection | <b>23905</b>     | 7.45                   | 2.65                                 | 1.97           | 2.65                                       |
| <b>3</b>  | Commercial           | 19900            | 36.87                  | 5.00                                 | 18.44          | 5.00                                       |
| <b>4</b>  | Industry (LT)        | 275              | 3.17                   | 4.20                                 | 1.33           | 4.20                                       |
| <b>5</b>  | Bulk                 | 0                | 0                      |                                      |                |  |
| <b>6</b>  | Public Light         | 2400             | 8.39                   | 5.10                                 | 4.28           | 5.10                                       |
| <b>7</b>  | Public Water         | 151              | 5.40                   | 5.10                                 | 2.75           | 5.10                                       |
| <b>8</b>  | Agriculture          | 0                | 0                      |                                      |                |  |
|           | Total (LT)           | 191862           | 169.75                 |                                      | 72.15          | 4.25                                       |
| <b>HT</b> |                      |                  |                        |                                      |                |  |
| <b>1</b>  | Industry (HT)        | 10               | 84.68                  | 3.75                                 | 31.76          | 3.75                                       |
| <b>2</b>  | Bulk                 | <b>11751</b>     | <b>76.64</b>           | 3.75                                 | <b>28.74</b>   | 3.75                                       |
| <b>3</b>  | Total (HT)           | 11761            | 161.32                 |                                      | 60.50          | 3.75                                       |
|           | Total (LT+HT)        | 203623           | 331.07                 |                                      | 132.65         | 4.00                                       |

- Notes: 1. The Category wise no. of consumers & sales considered as per break up furnished in Format D1.
2. Tariff rates for General purpose Category considered as applicable to commercial HT category in the absence of the categorization.
3. Bulk supply rates considered as applicable to 11KV normal voltage HT as per the tariff schedule in the absence of voltage wise break up data.
4. HT Industrial rates considered as at 11KV nominal voltage in the absence of break up data on voltage wise basis.

#### 5.3.24 ARR for 2015-16–Commission’s Approval

The Commission has analyzed and approved amounts against various heads covering all the elements of ARR projected by the Petitioner for FY 2015-16. The Commission’s approval as in paras 5.3.3, 5.3.5 to 5.3.22, for each element is summarized as under. During Review Process for FY 2015-16 these amounts against each element approved by the Commission hereunder shall form the basis

of actual expenses against approved expenses of ARR. The Petitioner shall ensure that the expenses are contained within these approved amounts.

**Table 5.24 ARR FY 2015-16 Commission's Approval**

| Sl | Item of expense  | Projected by DoP for FY 2015-16 | Approved by the Commission for FY 2015-16 |
|----|--|---------------------------------|---|
| a  | b  | c                               | d   |
| 1  | Cost of power Purchase                                   | 221.40                          | 188.91                                    |
| 2  | Fuel Cost  | 5.39                            | 1.26                                      |
| 3  | Employee costs   | 201.13                          | 201.13                                    |
| 4  | R&M expenses   | 30.80                           | 30.80                                     |
| 5  | Administration and general expenses                      | 2.00                            | 2.00                                      |
| 6  | Depreciation   | 149.71                          | -   |
| 7  | Interest on Working Capital                              | -                               | 10.51                                     |
| 8  | Interest charges (including interest on working capital) | 220.12                          | -   |
| 9  | Return on NFA /Equity                                    | 119.39                          | -   |
| 10 | Provision for Bad Debit                                  | 0.00                            | -   |
| 11 | Renewable energy(solar) purchase obligation compliance   |                                 | 2.10                                      |
| 12 | Annual license fee 2012-13 to 2015-16                    |                                 | 0.17                                      |
| 13 | Safety Harness & Skilling/Training                       |                                 | 0.75                                      |
| 14 | Total Revenue requirement                                | 949.93                          | 437.63                                    |
| 15 | Less: non-tariff income                                  | 0.50                            | (-) 4.26                                  |
| 16 | Net revenue requirement (14-15)                          | 949.43                          | 433.37                                    |
| 17 | Revenue Billed   | 150.74                          | 132.65                                    |
| 18 | Revenue from surplus sale of Power                       | 19.71                           | 19.71                                     |
| 19 | Gap (16-17-18)   | 778.98                          | 281.01                                    |
| 20 | Any other Revenue Gap                                    | 0.00                            | Nil                                       |
| 21 | Total gap (19+20)  | 778.98                          | 281.01                                    |
| 22 | Additional revenue from proposed tariff                  | 0.00                            | Nil                                       |
| 23 | Regulatory asset   | 0.00                            | Nil                                       |
| 24 | Energy sales (MU)  | 401.47                          | 401.47                                    |

| Sl | Item of expense                                      | Projected by DoP for FY 2015-16 | Approved by the Commission for FY 2015-16 |
|----|--|---------------------------------|---|
| a  | b  | c                               | d   |
| 25 | Average Cost of Supply Rs/ kWh(Sl. No. 16/Sl.No. 24) | 23.65                           | 10.80                                     |

### 5.3.25 Regulatory Asset

APDOP vide para 4.1 of the petition has not proposed any tariff hike during the FY 2015-16 citing the reason that increase in tariff would result on huge burden on the Consumers.

#### Commission's View:

As per the National Tariff Policy, where the losses incurred in the previous years that are in the nature of deferred expenditure, and that can be recovered from consumers in future, shall be allowed as Regulatory Asset by the Regulatory Commission.

The APDOP has filed the tariff petition for the third time after the APSERC came into existence, and the gap projected by the Department of Power cannot be recovered in the next two to three years through retail tariffs from the consumers. Even if Regulatory Asset is created, it cannot be liquidated in the next three or four years. Therefore, the Commission does not consider any Regulatory Asset for the remaining unadjusted gap. The APDOP shall improve the performance by reducing AT&C losses and exercising controls over the O&M Expenditure to make good of unadjusted revenue gap. As such, all efforts shall be made by DoP,AP to ensure the gradual reduction in net gap between the ARR and revenue and the budgetary support from the State Govt.

**Thus, the Commission does not approve any Regulatory Asset to get reflected in the ARR for FY 2015-16.**

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## **6 Directives**

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### **6.1 General**

Commission observes from the Petition filed by APDOP for FY 2015-16, that there are some important issues, which need immediate attention of APDOP to improve its efficiency in power delivery and reduction of costs. The Commission had also issued similar directives in its tariff order for FY 2013-14 & 2014-15. The Commission is deeply concerned that the DoP AP is not taking any initiative for complying with these directives. It is in this context, that the Commission considered it necessary that the DoP set up a Regulatory Compliance Cell manned by a team who is sensitive to understanding the Electricity Act and Electricity Regulations. Such a Regulatory Compliance cell will co-ordinate and pursue with all concerned to comply with the directives issued by the Commission from time to time particularly in its tariff orders.

APDOP shall take prompt action on the following directives and submit implementation report and the progress achieved by it in implementing the directives to the Commission from time to time.

### **6.2 Directives for FY 2015-16**

#### **6.2.1 Annual Accounts**

APDOP is directed to prepare annual accounts, Annual Profit and Loss Account and Balance Sheet at the CE's office level and get it audited by C&AG regularly on annual basis. This directive was given in Commission's Tariff Order for FY 2013-14 and 2014-15 which has not been complied by the APDOP till now. In line with the notification of the Multi Year Tariff Regulations -2013 by the Commission, the preparation of Annual Accounts at the level of the Head of Deptt. is mandatory.

APDOP shall maintain the books of accounts and Database as prescribed by Government of India, Ministry of Energy Department of Power in the Commercial Accounting system for State Electricity utilities. The Electricity (Supply) (Annual-

Accounts) Rules 1985 and Section 185 of EA 2003. A copy of various formats shall be sent separately by the Commission to the APDOP.

### 6.2.2 Management Information System

APDOP shall maintain data for voltage-wise consumers, connected load and sales in the format given below. APDOP shall accordingly build up the database required for regulatory process and submit the same every year in the ARR & Tariff Petition which it has not been doing for the last three year's petitions though APDOP has been committing for submittals of the same every year.

**Table 6.1 MIS Format - Consumer, Connected Load, and Category wise Energy Sales**

| Sl.                | Category of Consumers             | Consumers at the end of the year (Nos.) | Connected load (KW) | Sales (MU) |
|--------------------|-----------------------------------|---|---------------------|------------|
| <b>LT category</b> |                                   |   |                     |            |
| <b>1</b>           | Domestic (DLT) Single phase       |   |                     |            |
|                    | Domestic (DLT) Three phase        |   |                     |            |
| <b>2</b>           | Commercial (CLT) Single phase     |   |                     |            |
|                    | Commercial (CLT) Three phase      |   |                     |            |
| <b>3</b>           | Industrial (ILT) Single phase     |   |                     |            |
|                    | Industrial (ILT) Three phase      |   |                     |            |
| <b>4</b>           | Agriculture Single phase          |   |                     |            |
|                    | Agriculture Three phase           |   |                     |            |
| <b>5</b>           | Public Lighting (PL) Single phase |   |                     |            |
|                    | Public Lighting (PL) Three phase  |   |                     |            |
| <b>6</b>           | Water supply (WSLT) Single phase  |   |                     |            |
|                    | Water supply (WSLT) Three phase   |   |                     |            |
| <b>7</b>           | General Purpose Single phase      |   |                     |            |
|                    | General Purpose Three Phase       |   |                     |            |

| Sl.                | Category of Consumers                    | Consumers at the end of the year (Nos.) | Connected load (KW) | Sales (MU) |
|--------------------|--|---|---------------------|------------|
| 8                  | Kutir Jyoti                              |   |                     |            |
| 9                  | Temporary Single phase                   |   |                     |            |
|                    | Temporary Three phase                    |   |                     |            |
| <b>HT Category</b> |  |   |                     |            |
| 10                 | Water supply (WS HT)                     |   |                     |            |
| 11                 | Industrial (IHT) 11KV                    |   |                     |            |
|                    | Industrial (IHT) 33 KV                   |   |                     |            |
|                    | Industrial (IHT) 132 KV                  |   |                     |            |
| 12                 | General purpose including Domestic (DHT) |   |                     |            |
| 13                 | Bulk supply (HT) – 11 KV                 |   |                     |            |
|                    | Bulk supply (HT) – 33 KV                 |   |                     |            |
|                    | Bulk supply (HT) – 132 KV                |   |                     |            |
| 14                 | Commercial (CHT)                         |   |                     |            |
| 15                 | Agriculture (HT)                         |   |                     |            |

### 6.2.3 Fixed Assets Register

APDOP informed in its letter dated 20.03.2013 that the fixed assets register is not available. APDOP shall build up the fixed asset registers separately for Diesel Generation, Transmission and Distribution. Existing assets as on 31.3.2013 and new assets being added with new investments are to be entered in this register with quantities and costs. Format of the fixed asset register is given below. A separate register shall be maintained by the APDoP for Diesel Generators, Transmission and the Distribution Assets.

**Table 6.2 Fixed Asset Register- Format**

| Sl | Name of the asset | Unit of Measurement | Quantity | Commissioning |      | Remarks |
|----|-------------------|---------------------|----------|---------------|------|---------|
|    |                   |                     |          | Date          | Cost |         |
|    |                   |                     |          |               |      |         |

#### 6.2.4 Bad and Doubtful Debts

The records of bad and doubtful debts should be invariably maintained to seek approval of the Commission to withdraw the un-realizable debts for supply of energy. The DoP shall make an analysis of the existing debts and segregate the un-realizable debts.

#### 6.2.5 T&D Losses and Conducting Energy Audit

APDOP has projected T&D loss at 57.96% for the energy requirement for FY 2015-16. Commission considered T&D loss at 53% for FY 2013-14 and 50% for FY 2014-15 as per the trajectory fixed by the Commission in its Tariff Order of FY 2014-15. In the current tariff order for FY 2015-16, Commission has fixed the distribution losses at 43%. APDOP should conduct energy audit immediately and assess losses accurately in the distribution system. For carrying out energy audit, meters are required to be provided for all the feeders at 220 KV, 132 KV, 33KV & 11 kV levels and also at all the distribution transformers on LT side. Energy audit shall help to identify high loss areas so as to take remedial measures. The DoP is also directed to compile the following information as on 31-3-2015 and submit to the Commission by 30-9-2015.

| Sl. No. | Category of Feeder        | Nos .of Feeders Metered | Nos. of Feeders Unmetered |
|---------|---------------------------|-------------------------|---------------------------|
| 1.      | 220 KV                    |                         |                           |
| 2.      | 132 KV                    |                         |                           |
| 3.      | 33 KV                     |                         |                           |
| 4.      | 11 KV                     |                         |                           |
| 5.      | Distribution Transformers |                         |                           |

Also, Commission did not find any rational in seeing lower T&D losses estimated in FY 2014-15 (the Year nearly on the close at the time of preparing the Petition Document). The T&D Loss for FY 2014-15 may be reconciled. The same will be examined during Review Process for FY 2014-15.

**The Commission directs APDoP to revisit these losses. The T&D losses can be better understood if these are targeted as per the Business Plan.**

#### **6.2.6 Energy Audit at Different Voltages**

##### **1. 220 KV system**

- i) Energy received at incoming points of different 220 KV lines from supply sources.
- ii) Energy received at 220 KV sub-stations within the state on 220 KV lines.
- iii) Loss on 220KV system (MUs) (i-ii)
- iv) % loss on 220 KV  $((i-ii)/i) \times 100$

##### **2. 132 KV system**

- i) Energy received at incoming points through different 132 KV feeders in the State.
- ii) Energy received at various 132/33 KV sub-stations
- iii) Loss on 132 KV system (MUs) (i-ii)
- iv) % losses on 132 KV system  $((i-ii)/i) \times 100$

##### **3. 33 KV system**

- (i) Energy sent out on 33 KV feeders from 220/33 KV and 132/33 KV sub stations.
- (ii) Energy received at all 33/11 KV sub-stations at 33 KV
- (iii) Loss on 33 KV (MUs) (i-ii)
- (iv) % of losses on 33 KV  $((i-ii)/i) \times 100$

##### **4. 11 KV system**

- i) Energy sent out on 11 KV feeders from 132/11 kV sub-stations, 33/11 KV sub-stations.
- ii) Energy recorded at all Distribution Transformers
- iii) Loss on 11 KV system (i-ii)
- iv) % loss on 11 kV system  $((i-ii)/i) \times 100$

##### **5. LT system**

- i) Energy sent out on all LT feeders
- ii) Energy sold to all LT consumers
- iii) Loss on LT system (i-ii)

- iv) % loss on LT system  $((i-ii)/i) \times 100$

**Total T&D system losses for the State of Arunachal Pradesh**

**1. Energy Purchased (in MUs)**

- i)
    - a) From sources outside the state
    - b) Less Transmission Loss on PGCIL network
    - c) Net energy available at the periphery of the state.
  - ii. a) **Energy generated and supplied by DHPD ( in MUs)**  
b) **Diesel Generation**
  - iii) UI power utilization
  - iv) Total energy purchased and available = i(c) + (ii) a+b+ (iii)
2. Energy sales category wise, including sales under UI
3. T&D loss (1-2)
4. % T&D loss  $((1-2)/1) \times 100$

**6.2.7 100% Metering**

No connection shall be given to any category of consumer without a correct automatic meter by APDOP. Defective meters, if any, in the consumer premises shall be identified and replaced on top priority with correct automatic meter.

**6.2.8 Replacement of electromagnetic meters with automatic meters**

Due to ageing, the existing electromagnetic meters/static might have become sluggish/defective and thus recording less consumption. All such meters, are to be replaced with automatic meters to record the consumption correctly. A report on the status of metering, type of meters provided in HT, Bulk and others high value LT installations, along with a programme for replacement of such meters with automatic Meters shall be submitted to the Commission.

**6.2.9 Repairs and Maintenance**

Repairs and Maintenance is controllable item. APDOP should ensure the reduction of expenses and achieve sustainable levels compared with the value of the network in operation.

#### **6.2.10 Filing of ARR and Tariff Petition for 2016-17**

APDOP has to buildup required data as directed in directives 6.2.1, 6.2.2, 6.2.3, 6.2.6 and file the ARR and Tariff Petition timely in complete shape i.e by Nov 2015 for the FY 2016-17 as per Multi Year Tariff Regulations 2013 of the Commission.

#### **6.2.11 Payment of Annual License Fees**

In accordance to the Clause 5 (ii) of the Arunachal Pradesh State Electricity Regulatory Commission Fees Regulations-2011, all Distribution licensee and Transmission licensee including the Deemed Distribution & Transmission licensee are required to pay Annual License Fee at the rate as mentioned in Schedule of Fees, ( Sl. No. II ) of the above stated Regulation.

It is noted by the Commission that the APDOP has not paid the Annual License Fee since inception of the Commission. The APDOP is directed to pay the Annual License Fee for the year 2011-12, 2012-13, 2013-14, 2014-15 & 2015-16 as per the fees prescribed in the APSERC's Fee Regulation-2011 for the following entities separately before November 2015:

- i) Transmission License (Deemed)
- ii) Distribution License (Deemed)

#### **6.2.12 Payment of Power Purchase Cost to DHPD by Petitioner**

The APDOP was directed in the Commission's Tariff Order for 2013-14 to make payment to the Deptt. of Hydro Power Development (DHPD) for the power(in KWh) received by it w.e.f FY 2013-14 onwards from them at the rate(Rs. 2.09 /Unit) determined by the Commission. However, the Petitions filed by the APDOP for the FY 2014-15 and FY 2015-16 reveal that the Deptt. did not abide by the Commission's directive in this regard till now. The APDOP is directed to pay the cost of energy received from APDHPD w.e.f FY 2013-14 immediately and report compliance to the Commission.

APDOP is once again directed to make all efforts to utilize the generation of DHPD to the maximum possible extent so as to gradually reduce the dependence on

external power purchases. The APDOP should in consultation with DHPD should make a road map in this regard and intimate to the Commission.

#### **6.2.13 Reforms and Restructuring of DOP in Arunachal Pradesh**

Electricity functions covering Transmission and Distribution are being performed by the Department of Power (DoP) as a Government functionary as of now. As per the provisions of the Electricity Act 2003, the functions are to be separated and entrusted to reorganized entities that have to function as independent bodies.

Department of Power is once again directed to take urgent steps for complete restructuring of the power sector in Arunachal Pradesh.

#### **6.2.14 Collection of security deposit**

Security Deposit has to be paid by all the consumers of electricity covering the period of billing cycle.

Estimated security deposit for different categories of consumers shall be calculated as per the methodology indicated by the Commission in the Arunachal Pradesh Electricity Supply Code-2013.

- (a) Payment of additional deposit,
- (b) Adjustment of excess or deficit deposit,
- (c) Payment of interest on security deposit has to be done as per the A. A.P. Electricity Supply Code-2013 notified by the Commission at the SBI's Base Rate which is 10% as of now.

The APDOP is directed to provide the above data at (a), (b) and (c) for the FY 2013-14 and 2014-15 to the Commission including the no of consumers covered in this exercise.

#### **6.2.15 Introduction of Slab based tariff:**

The APDOP did not conduct the techno-commercial study for assessing the feasibility of introducing Unit Consumed Slab Based Tariff w.e.f FY 2014-15 as directed by the Commission as it did not make any proposal to this effect in their Tariff Petition for the FY 2014-15 and 2015-16. However the

APDOP is again directed to conduct this exercise at the earliest and appraise the Commission for introducing it w.e.f. FY 2016-17.

This will have an added advantage to encourage the habit of energy conservation amongst the consumers.

**6.2.16 Road Map for Smart Grid in the State:**

Subsequent to the launching of Smart Grid Vision and Road Map for India by Govt. of India in August'2013, the APDOP was directed to intimate whether the APDOP has formulated any Smart Grid road map for the State of Arunachal Pradesh and the steps being taken in this regard if the road map has not been prepared as yet. The report is still awaited and should be submitted at the earliest.

**6.2.17 Consumers' Grievances Redressal Forum:**

APDOP is directed to constitute Consumers' Grievances' Redressal Forum immediately without any further delay in accordance to the Commission's "Redressal of Grievances & Ombudsman Regulation-2011".

**6.2.18 Creation of Regulatory Cell:**

DoP,AP shall create/constitute a Tariff Regulatory Cell (under an senior Officer not below the rank of SE) from the existing staff strength. The Cell so created shall be provided with necessary authority and resources so as to look after all the tariff and regulatory matters primarily to keep a vigil on the parameters approved by the Commission and also to provide correct and timely information to the Commission as well as stakeholders. The said officer shall be the primary source of all data and submissions being filed before the Commission, so as to ensure consistency and timelines of the data to be submitted and to have proper co-ordination with the Commission in the Tariff determination process.

**6.2.19 Compiling of Accounts at CE's Office Level:**

The APDOP is directed to compile and create all necessary data base and adopt required procedures of compiling Annual Accounts at CE's office level to ensure filing of tariff petition for the FY 2016-17 as per the Multi

Year Tariff Regulations-2013.

**6.2.20 Procurement of Power during Lean Hydro Season:**

The APDOP is directed to explore the possibility of drawing short term and medium term power purchase agreements by open tendering i/c purchase of power through power exchanges to arrange sufficient power in advance for the consumers of the state during lean hydro season to mitigate the grievances of the public regarding huge power cuts. This will also help to save money incurred by the govt. on power purchase because the power might be available at a cheaper cost than that the DOP is purchasing the power at present out of its allotted capacity/quota of certain Central Generating Stations and through UI. The DoP should make the monthly/quarterly assessment of power and plan power procurement accordingly in advance, to avoid load shedding in any case.

**6.2.21 Power Banking arrangement during peak Hydro Season:**

AP DoP vide their letter no. CE(P)/WEZ/COM-10/Tariff/2014-15/446, Dated 22-5-14 had assured the Commission at the time of finalizing the tariff petition for FY 2014-15 that it will consider the option of power banking arrangements of its surplus power during the peak hydro season with other state govt./utilities so as to mitigate the problem of power shortfall to its consumers during the lean hydro system. For FY 2015-16 also, DoP vide their letter no. CE(P)/WEZ/COM/10/14-15/106 Dtd.16-4-2015 has mentioned to consider all available options in this regard.

It is observed that the DoP hasn't taken any initiative/made any efforts in this regard as assured.

The AP DoP is directed to explore the possibility of power banking arrangements during the ensuing peak hydro season in FY 2015-16 in the interest of the electricity consumers of the state and intimate the action taken by it and its outcome to the Commission.

**6.2.22 Renewable Power Purchase Obligation(Solar RPO):**

As intimated by the APDOP vide their letter no.

CE(P)/WEZ/SLDC/Tariff/Part-I/2013- 14/148 Dtd. 02/3/2013, they will either procure the quantity of solar power on account of FY 2012-13 in FY 2013-14 or will purchase equivalent solar REC. However, the compliance of the same has not been submitted to the Commission as yet in spite of reminders from the Commission. The APDOP is also required to Comply with the Solar RPO for the FY 2013-14 and 2014-15.

**The APDOP is directed to submit the report of status of complying with the Renewable Power Purchase Obligation of Solar Power for the FY 2012-13, 2013-14 & 2014-15 and the road map for compliance during 2015-16 to the Commission immediately.**

The quantum of Renewable Energy Purchase shall remain unchanged for further year (s) as for FY 2014-15 till the new quantum is notified by the Commission. The Commission has made a provision in the ARR for FY 2015-16 for purchase of Solar Renewable Energy Certificates (RECs) or Solar Power. Solar Power Purchase obligations should be complied with urgently.

**6.2.23 Accounting for of Solar Energy:**

AP DoP is directed to account for the solar energy received by it from the solar installations of the APEDA with mutual consultation and utilize it for fulfilling the solar RPO.

**6.2.24 Providing of breakup of cost of providing Electric Plant & Meter to the premises of an Electricity Consumer:**

The amount mentioned under Item No. 8 of the Schedule-II of this Tariff Order (which were adopted/retained by the APSERC in its tariff order of 2013-14) appears to be quite old. Its breakup as per Annexure-11.21 (Sl.No. F, G, H, I, J & K) of the A.P. Electricity Supply Code Regulation, Dtd.5.4.2013 be furnished by the AP DoP to the Commission at an early date.

## **7 Tariff Principles and Design**

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### **7.1. Background**

**7.1.1.** The Commission in determining the Annual Revenue Requirement (ARR) of Arunachal Pradesh Department of Power, (APDOP) for the year 2015-16 and the retail tariff has been guided by the provisions of the Electricity Act, 2003, the National Tariff Policy (NTP), Regulations on Terms and Conditions of Tariff issued by the Central Electricity Regulatory Commission (CERC) and Regulations on Terms and Conditions for determination of Tariff notified by the APSERC. Section 61 of the Act lays down the broad principles, which shall guide determination of retail tariff. As per these principles the tariff should progressively reflect cost of supply and also reduce cross subsidies within the period to be specified by the Commission. The Act also lays special emphasis on safeguarding consumer interests and also requires that the costs should be recovered in a reasonable manner. The Act mandates that tariff determination should be guided by the factors, which encourage competition, efficiency, economical use of resources, good performance and optimum investment.

The National Tariff Policy (NTP) notified by Government of India in January 2006 provides comprehensive guidelines for determination of tariff as also working out the revenue requirement of power utilities. The Commission has endeavored to follow these guidelines as far as possible.

**7.1.2.** The Electricity Act, 2003 requires consideration of Multi-Year-Tariff principles and Tariff Policy mandates that the Multi-Year-Tariff (MYT) framework be adopted for determination of tariff from 1<sup>st</sup> April 2006. Though APSERC's Multi Year Tariff Regulation-2013 has been made effective w.e.f 23<sup>rd</sup> October'2013, the DOP has filed the petition in accordance to Tariff Regulations of 2011 citing the reason of lack of requisite and reliable data required for MYT Regime. The present MIS and regulatory reporting system

of the APDOP is not adequate for any such exercise at this stage. There has been no initiative taken up to assess voltage wise losses in the absence of metering of feeders, distribution transformers and consumers. Technical and commercial losses are yet to be segregated and quantified voltage wise. Moreover, the DOP has to start preparing/compiling its Annual Accounts, profit- loss accounts, balance sheet at the level of the Head of the Deptt. in the manner directed by the Commission in its directives in Chapter-6. Under these conditions it would not be practicable to implement the MYT framework this year. In view of the above and considering the plea of the APDOP, the Commission has granted exemption for this year for filing the petition for the FY 2015-16 in accordance to the Tariff Regulations of 2011.

- 7.1.3.** The Tariff Policy mandates that Tariff should be within plus/minus 20% of the average cost of supply by 2010-11 and requires Commissions to lay down a road map for reduction of cross subsidy. But it is not possible for the Commission to lay down the road map for reduction of cross subsidy, mainly because of lack of data regarding cost of supply at various voltage levels. The APDOP has not furnished the voltage-wise network cost. The Commission has gone on the basis of average cost of supply in the absence of relevant data for working out consumer category wise cost of supply.

## **7.2 Tariff categories**

In the Petition for 2015-16, APDOP has not proposed any change for the existing Categories of consumers and tariff structure. The Commission considers, retaining the existing categories as stated below:

1. Domestic
  - a) *Kutir Jyoti*
  - b) *Domestic LT*
  - c) *Domestic HT*
2. Commercial
  - a) *Commercial LT*
  - b) *Commercial HT*
3. Public Lighting & Water Works
  - a) Public Lighting & Water works LT
  - b) Public Lighting & Water Works HT

4. Agriculture
  - a) *Agricultural LT*
  - b) *Agricultural HT*
5. Industrial
  - a) *Industrial LT*
  - b) *industrial HT*
6. Mixed Bulk Consumers HT
7. Temporary Consumers LT

### **7.3 Tariff Proposed by APDOP and Approved by the Commission**

#### **7.3.1 Existing and Proposed Tariff**

APDOP in its tariff petition has not proposed any revision of the existing retail tariffs to various categories of consumers to meet the revenue gap for the FY 2015-16. It is submitted by APDOP that it being a state govt. Deptt. receives budgetary support from the Govt. of Arunachal Pradesh and hence the revenue gap for the FY 2015-16 shall be funded by the State Govt.

#### **7.3.2 Tariff Approved by the Commission:**

The Commission, after detailed analysis and prudent scrutiny of the aggregate revenue requirement filed by the APDOP, has arrived at a more realistic revenue requirement.

The Commission considering the Petition filed with lots of data gaps, observed that the cost of power purchase and employee expenses have increased over the actual expenditure of earlier years. Even though having approved the Annual Revenue Requirement (ARR) vide para 5.3.23 of chapter-5, the Commission does not consider revision of retail tariffs for any of the categories of the consumers in view of the submission of the APDOP and in view of the fact that the revenue gap for the FY 2015-16 shall be funded by the Govt. of Arunachal Pradesh.

Tariff proposed by the APDOP and approved by the Commission are shown in Table 7.1 below

The Tariff schedule indicating category wise Tariffs, miscellaneous charges and general terms and conditions of supply are attached in schedule I, II and III.

**Table 7.1: Tariffs Approved by the Commission for FY 2015-16**

| Sl. | Category                                     |   |                    | Existing<br>Tariff<br>FY 2014-<br>15<br>Rs. kWh | Proposed<br>Tariff<br>FY 2015-<br>16<br>Rs. kWh | Approved<br>Tariff for<br>FY 2015-16<br>Rs. kWh |
|-----|--|---|--------------------|---|---|---|
|     |  | Phase   | Nominal<br>Voltage |   |   |   |
| 1   | Non Commercial<br>Consumers<br>(Domestic)    | <b>Non Commercial Consumers (Domestic)- LT, AC 50Hz</b>                       |                    |   |   |   |
|     |  | 1.1.  | 1-Phase,           | 230 Volt  | 4.00  | 4.00  |
|     |  | 1.2.  | 3- Phase           | 400 Volt  | 4.00  | 4.00  |
|     |  | <b>Non Commercial Consumers (Domestic)- HT, AC 50Hz</b>                       |                    |   |   |   |
|     |  | 1.3.  | 3- Phase           | 11 kV   | 3.40  | 3.40  |
|     |  | 1.4.  | 3- Phase           | 33 kV   | 3.25  | 3.25  |
|     |  | <b>KJP &amp; BPL connection- Non Commercial Consumers (Domestic)- AC 50Hz</b> |                    |   |   |   |
|     |  | 1.5.  | 1-Phase,           | 230 Volt  | 2.65  | 2.65  |
| 2   | Commercial<br>Consumers (Non-<br>Industrial) | <b>Commercial Consumers (Non-Industrial)-LT, AC 50Hz</b>                      |                    |   |   |   |
|     |  | 2.1.  | 1-Phase,           | 230 Volt  | 5.00  | 5.00  |
|     |  | 2.2.  | 3- Phase           | 400 Volt  | 5.00  | 5.00  |
|     |  | <b>Commercial Consumers (Non-Industrial)-HT , AC 50Hz</b>                     |                    |   |   |   |
|     |  | 2.3.  | 3- Phase           | 11 kV   | 4.20  | 4.20  |
|     |  | 2.4.  | 3- Phase           | 33 kV   | 4.00  | 4.00  |
| 3   | Public<br>Lighting and<br>Water              | <b>Public Lighting and Water Supply Consumers- LT AC 50Hz</b>                 |                    |   |   |   |
|     |  | 3.1.  | 1-Phase            | 230 Volt  | 5.10  | 5.10  |
|     |  | 3.2.  | 3- Phase           | 400 Volt  | 5.10  | 5.10  |
|     |  | <b>Public Lighting and Water Supply Consumers- HT, AC 50Hz</b>                |                    |   |   |   |
|     |  | 3.3.  | 3-Phase            | 11kV  | 4.20  | 4.20  |
|     |  | 3.4.  | 3-Phase            | 33kV  | 4.00  | 4.00  |
| 4   | Agricultural<br>Consumers                    | <b>Agricultural Consumers- LT, AC 50Hz</b>                                    |                    |   |   |   |
|     |  | 4.1.  | 1-Phase            | 230 Volt  | 3.10  | 3.10  |
|     |  | 4.2.  | 3- Phase           | 400 Volt  | 3.10  | 3.10  |
|     |  | <b>Agricultural Consumers- HT ,AC 50Hz</b>                                    |                    |   |   |   |
|     |  | 4.3.  | 3-Phase            | 11kV  | 2.75  | 2.75  |
|     |  | 4.4.  | 3-Phase            | 33kV  | 2.65  | 2.65  |
| 5   | Industrial<br>Consumers                      | <b>Industrial Consumers- LT, AC 50Hz</b>                                      |                    |   |   |   |
|     |  | 5.1.  | 1-Phase            | 230 Volt  | 4.20  | 4.20  |
|     |  | 5.2.  | 3- Phase           | 400 Volt  | 4.20  | 4.20  |
|     |  | <b>Industrial Consumers- HT, AC 50Hz</b>                                      |                    |   |   |   |
|     |  | 5.3.  | 3-Phase            | 11kV  | 3.75  | 3.75  |
|     |  | 5.4.  | 3-Phase            | 33kV  | 3.40  | 3.40  |
|     |  | 5.5.  | 3-Phase            | 132kV & above                                   | 3.25  | 3.25  |
| 6   | Bulk<br>Mixed<br>Consumer                    | <b>Bulk Mixed Consumers- HT, AC 50Hz</b>                                      |                    |   |   |   |
|     |  | 6.1.  | 3-Phase            | 11kV  | 3.75  | 3.75  |
|     |  | 6.2.  | 3-Phase            | 33kV  | 3.40  | 3.40  |
|     |  | 6.3.  | 3-Phase            | 132kV & above                                   | 3.25  | 3.25  |
| 7   |  | <b>Temporary Consumers</b>  |                    |   |   |   |

| Sl.  | Category       |                    | Existing<br>Tariff<br>FY 2014-<br>15<br>Rs. kWh | Proposed<br>Tariff<br>FY 2015-<br>16<br>Rs. kWh | Approved<br>Tariff for<br>FY 2015-16<br>Rs. kWh |
|------|----------------|--------------------|---|---|---|
|      | Phase          | Nominal<br>Voltage |   |   |   |
| 7.1. | Metered Supply |                    | 6.35  | 6.35  | 6.35  |

Based on the Consumer base and the Cost of Power Purchase and other inputs, **the average cost of supply thus works out to Rs. 10.80 per kWh against Rs. 23.65** per kWh projected by the DOP, AP. The charges for common items and miscellaneous charges as in force are retained for the FY 2015-16.

This order shall come into force with effect from 01-04-2015 and shall remain effective till revised/amended by the Commission. The order shall be given wide publicity by the petitioner for information of the general public within seven days of the issue of the order.

Place: Naharlagun

sd/-

Date: 21<sup>st</sup> April'2015

(Digvijai Nath)  
Chairman

## Schedule-I

### Category Wise Tariffs: FY 2015-16

#### Category-1 Non- Commercial Consumers (Domestic)

**A) Definition:** The consumers under this category are defined as consumers using the electrical energy for domestic and nonprofit purpose such as lights, fans., heating devices, Televisions, VCR/VCP, Radio, Refrigerator, Air - conditioners, lift motors and all others appliances only for bonafied residential & non-residential but non-commercial use. This will also cover consumption of energy supplied for Government owned Residential and Non-Residential buildings Educational and Research Institutions. Charitable Institutions, Government owned Hospitals and Dispensaries, farm houses, Religious premises like Churches, Temples, Mosques, community halls and any other Institutions, Religious printing press (not engaged in commercial activity or private again, excluding those which are specially covered under other categories of this Tariff) or classifications as may be amended by the Commission from time to time.

| Sl.      | System of supply & Metering Point         | Tariff<br>(Rs. /<br>Kwh) | Minimum<br>Charges (in<br>Rs./month) |
|----------|---|--------------------------|--------------------------------------|
| <b>1</b> | <b>LT- AC 50Hz</b>                        |                          |                                      |
| 1.1.     | 1 - Phase, 230 Volt nominal Voltage       | 4.00                     | 32 per KW                            |
| 1.2.     | 3 - Phase, 400 Volt nominal Voltage       | 4.00                     | 53 per KW                            |
| 1.3.     | 1 - Phase, 230 Volt KJP & BPL connections | 2.65                     | 53 per Kw per connection             |
| <b>2</b> | <b>HT- AC 50Hz</b>                        |                          |                                      |
| 2.1.     | 3 - Phase, 11 KV nominal Voltage          | 3.40                     | 168 per KW                           |
| 2.2.     | 3 - Phase, 33 KV nominal Voltage          | 3.25                     | 134 per KW                           |

Note: Yard lighting, gate lighting, pumps and motors used in the same premises shall be integral part of this category.

### Category -2 Commercial Consumers (Non Industrial)

**Definition:** The consumers under this category are defined as non -industrial commercial consumers such as installations of commercial places, Government undertaking, public sector undertaking, Commercial houses, markets, and optical houses. Restaurant, Bars, tailoring shops, Refreshment and tea stalls, show-cases of advertisement, Hoarding theatres, cinemas, Hotels, Lodging and Boarding, Private nursing Homes and Hospitals, religious Hospitals, private run schools and Hostels and Boarding facilities and other educational institute demanding fees, photographic studios, Battery charging units, repair workshops and Newspapers press 9 newspaper printing press only) Petrol Pumps, etc or classifications as may be amended by the Commission from time to time.

| Sl       | System of supply & Metering Point   | Tariff<br>(Rs. / | Minimum Charges<br>(in Rs./month) |
|----------|-------------------------------------|------------------|-----------------------------------|
| <b>1</b> | <b>LT- AC 50Hz</b>                  |                  |                                   |
| 1.1.     | 1 - Phase, 230 Volt nominal Voltage | 5.00             | 32 per KW                         |
| 1.2.     | 3 - Phase, 400 Volt nominal Voltage | 5.00             | 53 per KW                         |
| <b>2</b> | <b>HT- AC 50Hz</b>                  |                  |                                   |
| 2.1.     | 3 - Phase, 11 KV nominal Voltage    | 4.20             | 168 per KW                        |
| 2.2.     | 3 - Phase, 33 KV nominal Voltage    | 4.00             | 134 per KW                        |

### Category - 3 Public Lighting And Water Supply Consumers

**Definition:** This category of the consumers shall be applicable to public Street lighting Systems in Municipality Towns, sub-Towns / Villages, etc. including Signal system, Ropeways on Roads and park lighting in areas of Municipality Town. Sub - town / villages. Pumps & equipments for public water supply systems and Treatment plants and associated applications shall also be covered in this category or classifications as may be amended by the Commission from time to time.

| Sl.      | System of supply & Metering Point   | Tariff<br>(Rs. / Kwh) | Minimum Charges<br>(in Rs./month) |
|----------|-------------------------------------|-----------------------|-----------------------------------|
| <b>1</b> | <b>LT- AC 50Hz,</b>                 |                       |                                   |
| 1.1.     | 1 - Phase, 230 Volt nominal Voltage | 5.10                  | 32 per KW                         |
| 1.2.     | 3 - Phase, 400 Volt nominal Voltage | 5.10                  | 53 per KW                         |
| <b>2</b> | <b>HT- AC 50Hz,</b>                 |                       |                                   |
| 2.1.     | 3 - Phase, 11 KV nominal Voltage    | 4.20                  | 168 per KW                        |
| 2.2.     | 3 - Phase, 33 KV nominal Voltage    | 4.00                  | 134 per KW                        |

#### Category - 4 Agricultural Consumers

**Definition:** The consumers in agricultural fields /firms for the purpose of (a) Pumps field lighting & other applications for farmers in their irrigation and cultivation & not connected to any attached commercial or industrial installations in the agricultural field of farm or classifications as may be amended by the Commission from time to time.

| Sl.      | System of supply & Metering Point   | Tariff<br>(Rs. / | Minimum Charges<br>(in Rs./month) |
|----------|-------------------------------------|------------------|-----------------------------------|
| <b>1</b> | <b>LT- AC 50Hz</b>                  |                  |                                   |
| 1.1.     | 1 - Phase, 230 Volt nominal Voltage | 3.10             | 32 per KW                         |
| 1.2.     | 3 - Phase, 400 Volt nominal Voltage | 3.10             | 53 per KW                         |
| <b>2</b> | <b>HT- AC 50Hz,</b>                 |                  |                                   |
| 2.1.     | 3 - Phase, 11 KV nominal Voltage    | 2.75             | 168 per KW                        |
| 2.2.     | 3 - Phase, 33 KV nominal Voltage    | 2.65             | 134 per KW                        |

#### Category - 5 Industrial Consumers

**Definition:** The Industrial consumers shall cover all Government registered Industrial power consumers which are not covered by category No.2 (supply for Commercial Purposes), such as steel fabrication, motor body builders, power handloom industry, poultry farming, pisciculture, prawn culture, floriculture in green house, mushroom production, cold storage unit of pisciculture, agriculture, horticulture and any other type of industry where raw material is covered into finished products with the help of electrical motive power, colour

photo labs. Government owned printing press and other printing press (Primarily engaged in printing for commercial gain), and government owned, public sector industries, etc. or classifications as may be amended by the Commission from time to time.

**Note:** All Non-Industrial & Commercial consumers within the same complex under a single service connections shall also be treated as industrial consumers if the total distribution is integrated in the industrial complex and load on non-industrial side is below 10% of the total sanctioned load.

| Sl       | System of supply & Metering Point         | Tariff<br>(Rs. / Kwh) | Minimum Charges (in<br>Rs./month) |
|----------|---|-----------------------|-----------------------------------|
| <b>1</b> | <b>LT- AC 50Hz</b>                        |                       |                                   |
| 1.1.     | 1 - Phase, 230 Volt nominal Voltage       | 4.20                  | 32 per KW                         |
| 1.2.     | 3 - Phase, 400 Volt nominal Voltage       | 4.20                  | 32 per KW                         |
| <b>2</b> | <b>HT- AC 50Hz,</b>                       |                       |                                   |
| 2.1.     | 3 - Phase, 11 KV nominal Voltage          | 3.75                  | 168 per KW                        |
| 2.2.     | 3 - Phase, 33 KV nominal Voltage          | 3.40                  | 134 per KW                        |
| 2.3.     | 3 - Phase, 132 KV nominal Voltage & above | 3.25                  | 101 per KW                        |

#### Category - 6 Bulk Mixed Consumers

**Applicability:** The Bulk mixed consumers are those consumers drawing bulk powers at HT voltage having a mixed load of all categories of consumers such as a village, a town, a city, a colony, or a State or Region etc. drawing power at one metering point. It will also include a University Campus, All India ratio complex College complex. Defense Installations, Railway complex, Government Complexes, etc. who arranges their own distribution of power with approval of competent authority. This will not include Industrial complex which may consist mixed load category 1,2,3,& 5 or classifications as may be amended by the Commission from time to time.

| SI   | System of supply & Metering Point | Tariff      | Minimum Charges |
|------|-----------------------------------|-------------|-----------------|
| i.   | HT- AC 3 Phase , 50 Hz            | (Rs. / Kwh) | (in Rs./month)  |
| ii.  | 11 kV Nominal Voltage             | 3.75        | 168.00 / kW     |
| iii. | 33 kV Nominal Voltage             | 3.40        | 134.00 / kW     |
| iv.  | 132 kV Nominal Voltage & above    | 3.25        | 101.00/ kW      |

### Category - 7 Temporary Consumers

**Definition:** A Temporary consumers are those who would consume electricity for a limited period of time, which could be determined at its initial application itself such as:

- For marriage, puja, religious / public function / gathering, festivals and ceremonies which are of temporary nature up to a period not exceeding 90 days in case of metered supply.
- For commercial and Industrial purposes like cinemas, theatres, circus, carnivals, exhibitions, concerts etc, which are of temporary nature for private gain for a period not exceeding 30 days in case of metered supply or classifications as may be amended by the Commission from time to time.

#### Supply systems:

- Single phase, 50Hz, 230 Volts.
- Three Phases, 50 Hz, 400 Volts.

**Note:** Temporary connection shall be given at HT supply only on specific agreements of supply.

#### Tariff:

Metered supply Rs. 6.35 per Kwh:

In case of metered supply consumer shall be given temporary connection, with energy meter by the department after receiving full advance from consumer the cost of energy estimated as per connected load for the whole period and service connection charges. On closure of the programme accounts shall be settled as per

actual meter reading.

**Notes:**

- a) Temporary services connection shall require prior approval from the next higher load sanctioning authority.
- b) The energy cost as per tariff above along with connection and disconnection charge will be realized in advance from the applicant before making the supply available to him.
- c) Applicant at his own expenses shall arrange the complete wiring for which temporary supply of power is required. It will also be the responsibility of the applicant to ensure that the wiring conforms to the technical & safety requirement as specified by authorities.
- d) Energy bill, based in actual consumption shall be served to the consumer at reasonable interval. The amount of each bill shall be adjusted from the amount of advance & security deposit on closure of the temporary services.

**Schedule- II – Miscellaneous Charges**

1. **Meter Rent:** The Energy meter and its allied instruments required for registering of energy consumed as deemed to be under the ownership of the supplier, shall attract following monthly rental charges against regular maintenance, repair and labor cost of its replacement.

| Sl. | Voltage Level | Energy Meter Specification   | Rent. Rs/ Month         |
|-----|---------------|--|-------------------------|
| 1.  |               | <b>Meter Rent</b>  |                         |
| a   |               | <b>LT Metering- AC</b>   |                         |
|     | i.            | Single Phase 220V  | 16.00                   |
|     | ii.           | Three Phase 400 V between phases ( without CT)   | 26.00                   |
|     | iii.          | Three Phase 400 V between phases ( with CT)  | 68.00                   |
| b   |               | <b>HT Metering- AC</b> Complete Energy meter with CT/PT & other monitoring and indication requirement for AC Three phase HT supply |                         |
|     | i.            | 11 KV system   | 670.00                  |
|     | ii.           | 33 KV system   | 3350.00                 |
|     | iii.          | 132 KV system  | 13401.00                |
| c   |               | <b>Other Charges for Meters</b>  |                         |
|     | i.            | if resulted from reconstruction / modification of building and on the request of the consumer                                      | per shifting Rs. 168.00 |

|    |      |   |               |
|----|------|---|---------------|
|    | ii.  | If, the shifting is in the interest of the department.  | Free of cost  |
| 2. |      | Replacement of the energy meter and its associated fittings and equipment   |               |
|    | i.   | The supplier shall replace the meters & the allied fitting & the equipment free of cost in case of scheduled replacement under normal wear & tear of ageing or technology change. |               |
|    | ii.  | The Consumer shall bear all the necessary cost in case of temporary shifting of the meters & its associated fittings and the equipment.   |               |
|    | iii. | The Consumers shall have to bear the cost if replacement due to negligence of the consumer or losses attributable to the negligence of the consumer.                              |               |
| 3. |      | Charges for testing of Meters at the request of consumers   | For each time |
|    | i.   | For AC Single Phase LT Energy Meter   | 134.00        |
|    | ii.  | For energy meter without CT for AC three phase LT Supply  | 202.00        |
|    | iii. | For energy meter with CT for AC three phase LT supply   | 336.00        |
|    | iv.  | For energy meter AC three phase HT supply   | 670.00        |

In case the meter fitted to the consumer premises is found to be defective from the very date of fitting, testing and replacement of meter will be done free of cost.

#### 4. Testing of Consumer's Installation:

Testing & Inspection charges of consumer's installation:-

Should any consumer require the services of the supplier for testing and inspection & certification of the supplier's electrical installation on technical grounds following charges shall be paid in advance along with the application.

| Sl.  | Testing at Consumer Installation             | Charges per Installation in Rs. |
|------|--|---------------------------------|
| i.   | 1 phase service Wiring installations         | 202.00                          |
| ii.  | 3 phase service Wiring installations         | 320.00                          |
| iii. | HT Line installation of 11 KV system         | 670.00                          |
| iv.  | HT Line installation of 33 KV & above system | 1336.00                         |

5. Disconnection and reconnection:

Charges towards each disconnection and reconnection as the case may be wither for punitive measures or on the request of the consumer, shall be as follows.

| Sl. | Category of Work              | Charges Per Connection |
|-----|-------------------------------|------------------------|
| i.  | All categories of connections | 134.00                 |
| ii. | Disconnection only            | 134.00                 |

6. Charges for new service connection or Replacement of connection wire, cut out, fuse etc. or any other works / jobs etc.

The cost of new service connection i/c the meter and other materials & services rendered or cost of replacement of connection n wire, cut-out, fuses etc. will be borne by the consumer and shall be payable by the consumer in advance as per purchase rate of department plus 25% departmental charges. If the consumer intends to supply the materials, then the 25% departmental charge only shall be paid in advance to the department.

7. Re-rating of Installation & revised load sanction:

Fees for rerating of the consumer's installation at the request of the consumer & for revised load sanction.

- i. Rs. 134/- per case for LT supply voltage systems.
- ii. Rs. 670/- per case for HT supply voltage systems.

8. Security amount for providing Electric Plant & Meter to the premises of Consumers : (interest bearing/ refundable)

All consumers except under special provisions made under Govt. policy, such as under KJP or BPL household electrification, interest bearing meter security shall have to be paid against the energy meter provided. The interest rate shall be as defined in Para 4.119 of the Arunachal Pradesh Electricity Supply Code-2013.

| Sl.  | Meter Specification  | Security Amount<br>– Rs. |
|------|--|--------------------------|
| i.   | For AC single phase LT supply of connected load                | 1336.00                  |
| ii.  | For AC three phase LT supply of connected<br>(without CT) load | 2681.00                  |
| iii. | For AC three phase LT supply CT operated                       | 4691.00                  |
| iv.  | For AC three phase HT supply, CT & PT operated                 | 33448.00                 |

**Note:** In case of deposit works/ or of a new connection where this amount is incorporated into the estimate, then no separate security amount on account of above is required to be deposited by the consumer.

#### 8.1. Security Deposit: (interest bearing refundable / adjustable)

To safe guard against default by non-payment of bills against energy consumed interest bearing security deposit shall be deposited by the consumer in advance before the service is provided in accordance to the provisions of A.P.Electricity Supply Code-2013 (KJP & BPL household connection shall not pay Security deposit as per present policy of the Govt.) The interest rate shall be as defined in Para 4.119 of the Arunachal Pradesh Electricity Supply Code-2013. A sample calculation showing Security Deposit payable per KW of connected load for new connections is given below :-

**RATES OF SECURITY DEPOSIT (As per A.P. Electricity Supply Code-2013**  
**Formula for calculating security Deposit for new connection = Load x Load**  
**Factor of the category in which consumer falls as per Electricity supply code x (Billing**  
**cycle + 30 days) x 24 hours x Current Tariff**

| Sl.No. | Category of Consumers  | As per A.P. Electricity Supply Code' 2013<br>(Per KW)                               |
|--------|--|---|
| 1.     | <b>Domestic Category:</b><br>LT 230 Volts<br>LT 440 Volts<br>HT 11 KV<br>HT 33 KV<br>KJP | Rs. 1728.00<br>Rs. 1728.00<br>Rs. 1469.00<br>Rs. 1404.00<br>Nil as per Govt. Policy |
| 2.     | <b>Commercial Category:</b><br>LT 230 Volts<br>LT 440 Volts                              | Rs. 3600.00<br>Rs. 3600.00  |

| Sl.No. | Category of Consumers                           | As per A.P. Electricity Supply Code' 2013<br>(Per KW) |
|--------|---|---|
|        | HT 11 KV  | Rs. 3024.00   |
|        | HT 33 KV  | Rs. 2880.00   |
| 3.     | <b>Public Lighting:</b>                         |   |
|        | LT 230 Volts                                    | Rs. 2938.00   |
|        | LT 440 Volts                                    | Rs. 2938.00   |
|        | 11 KV   | Rs. 2419.00   |
|        | 33 KV   | Rs. 2304.00   |
| 4.     | <b>Agricultural Consumers:</b>                  |   |
|        | LT 230 Volts                                    | Rs. 1473.00   |
|        | LT 440 Volts                                    | Rs. 1473.00   |
|        | 11 KV HT  | Rs. 1307.00   |
|        | 33 KV HT  | Rs. 1259.00   |
| 5.     | <b>Industrial Consumers:</b>                    |   |
|        | LT 230 Volts                                    | Rs. 3024.00   |
|        | LT 440 Volts                                    | Rs. 3024.00   |
|        | HT 11 KV - Single shift                         | Rs. 2700.00   |
|        | HT 11 KV - Double shift                         | Rs. 4050.00   |
|        | HT 11 KV - Continuous                           | Rs. 5400.00   |
| 6.     | <b>Industrial Consumers:</b>                    |   |
|        | HT 33KV - Single shift                          | Rs. 2448.00   |
|        | HT 33KV - Double shift                          | Rs. 3672.00   |
|        | HT 33KV - Continuous                            | Rs. 4896.00   |
| 7.     | <b>Industrial Consumers: 132 KV &amp; Above</b> |   |
|        | Single shift                                    | Rs. 2340.00   |
|        | Double shift                                    | Rs. 3510.00   |
|        | Continuous                                      | Rs. 4680.00   |
| 8.     | <b>Bulk Mixed Consumers:</b>                    |   |
|        | HT 11 KV (LF-50%)                               | Rs. 2700.00   |
|        | HT 33 KV (LF-50%)                               | Rs. 2448.00   |
|        | EHT 132 KV & above (LF-50%)                     | Rs. 2340.00   |
| 9.     | <b>Public Water Supply</b>                      |   |
|        | LT (220 V & 400 V )                             | Rs. 2424.00   |
|        | HT 11 KV  | Rs. 1996.00   |
|        | HT 33 KV  | Rs. 1901.00   |

- 8.2. Charges for Testing of Transformer Oil:** The departmental charge for testing oil of private owned transformers for each sample of oil shall be charged Rs. 134.00 per sample test.

### **Schedule - III GENERAL CONDITIONS OF SUPPLY**

- 1. Payment:** The bill shall be paid in full inclusive of all arrears if the consumer within the last day for payment indicated on the body of the bill. However the consumer making payment in full within due date indicated on the body of the bill will be entitled to avail rebate.
- 2. Application for Connection:** The Consumer shall apply for service connection to the nearest Assistant Engineer (Electrical) intimating details of demand, location etc.
- 3 Surcharge/Penalty for late payment of bill:** If payments is not received within last date for payment, the bill will be treated as invalid and the amount outstanding will be carried over to the next month's bill as arrear. Simple interest @2% will be charged as penalty on outstanding amount each 30 days successive period or part thereof until the amount is paid in full.
- 4 Sanctioning Authority:** Service connection shall be given only after load sanction by the competent authority as per delegation of power accorded as under.

#### **Categories of consumers**

- |   |                 |
|---|-----------------|
| a. AE (E) up to 5 KW of connected load        | 1,2,3,4,5 & 7   |
| b. EE up to 50 KW of connected load           | 1,2,3,4,5 & 7   |
| c. SE up to 500 KW of connected load          | 1,2,3,4,5,6 & 7 |
| d. E Full power of connected load above 500KW | 1,2,3,4,5,6 & 7 |

Security deposit and cost of service connection shall have to be deposited in advance on receipt of technically sanctioned estimate.

- 5 Rebate:** Rebate of 2.0% on the bill amount shall be available to the billed amount on current bills if the dues are cleared within due dates. The

electricity bill shall show the amounts to be paid within due date (after 2% discount) and payable after due date.

- 6 Single Point Delivery:** The above tariff is based on the supply being given through a single point of delivery and metering at one voltage. Supply at other points at other voltage shall be separately metered and billed for and shall be considered as separate connection.
- 7 Mixed Load:** Mixed domestic and commercial establishment shall be treated as commercial establishments if the load on commercial side is more than 10% of the total connected load nearest Assistant Engineer (Electrical) intimating details of demand, location etc.
- 8 Metering Point:** The metering point shall be the point of delivery of energy at the declared nominal voltage.
- 9 Billing Cycle:** Normally the billing cycle shall on monthly basis.
- 10 Minimum charge:** A consumer shall have to pay the minimum charge calculated on the sanctioned connected load if the energy charge amount payable is below the minimum charge in a month. The consumer shall continue to pay minimum charge as long as the assets are in place and not being dismantled after disconnection owing to default or after permanent disconnection.
- 11 Ownership meter:** The energy meter and its allied instrument used for registration of energy data only shall deem to be the property of the supplier and the consumer shall have no right over it for ownership after the commencement of supply.

All consumers getting their supply at HT but metered on LT side of the transformer shall be charged an additional 3% over the metered consumption

- 12 Maintenance & Replacement of Energy meter:** the supplier shall maintain & replace the energy meter associated measuring instruments free of cost during the validity of the supply.

- 13 Default:** A Consumer shall be automatically called a defaulter if he fails to clear all the outstanding & current bills accumulated for a period of 2 months. On being a defaulter, the consumer shall be liable for disconnection after adjustment of security deposit against the energy bill account. After adjustment of security deposit, if the consumer desires for reconnection the consumer shall have to clear all outstanding dues and pay fresh security deposit.
- 14 Watch and Ward of Meters:** The consumers shall be responsible for the cost of repairs / replacement of CT/PTs and other connecting and transformation devices of the service connections. The energy meter and reading or scanning devices including the meter box shall be as per clause 9 and 10 of this tariff notification.
- 15 Billing :** All the bills raised within billing cycle of April month shall have the stepped-up tariff irrespective of whether a portion of the billing cycle falls within the previous month of March or not.
- 16 Existing connections / agreements in force:** All such connections the before the commencement of this tariff structure shall deem to be effected under this tariff schedule & related terms and conditions shall have precedence over the existing agreements.

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