



**ARUNACHAL PRADESH STATE ELECTRICITY REGULATORY  
COMMISSION**

**Tariff Order for FY 2013-14  
For  
Department of Power  
Govt. of Arunachal Pradesh**

**Issued on 30<sup>th</sup> May'2013**

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## List of Abbreviations

Abbreviation	Description
A&G	Administration & General
AC	Alternating Current
Act	Electricity Act, 2003
APDOP	Department of Power, Govt. of Arunachal Pradesh
APSERC	Arunachal Pradesh State Electricity Regulatory Commission
ARR	Annual Revenue Requirement
ATE	Appellate Tribunal For Electricity
CAGR	Compound Annual Growth Rate
CD	Contract Demand
CERC	Central Electricity Regulatory Commission
Crs	Core
CGS	Central Generating Stations
CoS	Cost of Supply
CPSU	Central Power Sector Undertakings
D/E	Debt Equity
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

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

**Petition No. TP 1 of 2013**

**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 2013-14**

**AND**

**Department of Power,  
Government of Arunachal Pradesh, Itanagar \_\_\_\_\_ Petitioner**

**Present :**

**Digvijai Nath, Chair person**

**ORDER**

**(Passed on 30<sup>th</sup> May'2013)**

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 2013-14 for supply of electricity by the Department of Power, Arunachal Pradesh (APDOP) to the consumers 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 30<sup>th</sup> November of the preceding

year. Hence the tariff petition for the financial year 2012-13 should have been filed by the Licensee immediately after 26<sup>th</sup> December' 2011 i.e. when the Regulation in this regard was notified by the Commission.

But the APDOP filed the petition for 2012-13 before the Commission on 1<sup>st</sup> March' 2013 and subsequently vide their letter dated 19.03.2013, APDOP submitted that the petition filed by them on 1<sup>st</sup> March'2013 for 2012-13 may be processed for the FY 2013-14. On scrutiny it was observed that it does not contain necessary information. The Commission communicated its observations regarding deficiencies in the tariff petition to APDOP vide its letter dated 11<sup>th</sup> March, 2013. APDOP submitted information on 20<sup>th</sup> March, 2013 which was also incomplete. However, the Commission admitted the petition on 20<sup>th</sup> March'2013 though certain information/data were still wanting in the tariff petition.

The Commission took into consideration the facts presented by the APDOP in its tariff petition and subsequent various filings, the objections/suggestions received from consumer organizations, general public and State Advisory Committee and response of the APDOP to those objections. Since the Commission has to ensure transparency in the process of tariff determination, it conducted public hearing at Naharlagun on 10<sup>th</sup> April'2013 providing platform to the stakeholders and members of the public to discuss the issues raised by them and response of the APDOP thereon. The Commission had an occasion to peruse other relevant facts and materials placed on the record.

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 2013-14. The Commission directs the APDOP 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.

**This order shall be effective from 1<sup>st</sup> April, 2013 and shall remain in force till the next tariff order issued by the Commission.**

**Sd/-  
(DIGVIJAI NATH)  
Chairperson**

# 1. Introduction

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## 1.1 Arunachal Pradesh State Electricity Regulatory Commission (APSERC)

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” 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) Determine 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) Regulate 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) Facilitate Intra-State transmission and wheeling of electricity;
- (d) Issue licenses to persons seeking to act as transmission licensees, distribution licensees and electricity traders with respect to their operations within the State;
- (e) Promote 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) Adjudicate upon the disputes between the licensees and generating companies; and to refer any dispute for arbitration;
- (g) Levy fee for the purpose of this Act;
- (h) Specify State Grid Code consistent with the Grid Code specified under Clause (h) of sub-section (1) of Section 79;
- (i) Specify or enforce standards with respect to quality, continuity and reliability of services by licensees;
- (j) Fix the trading margin in the Intra-State trading of electricity, if considered, necessary;
- (k) Discharge 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 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) as 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.

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

- (i) State Advisory Committee (SAC) Notification – 2011
- (ii) Conduct of Business Regulations
- (iii) Redressal of Grievances and Ombudsmen Regulations-2011
- (iv) Fee Regulations-2011
- (v) Grant of Intra State trading Licence 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

## **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 as per 2011 census. The State of Arunachal Pradesh is bounded by Assam in South, Bhutan in West, China in North, and Nagaland and Myanmar in East. It's Capital Itanagar is about 380 kms. from Guwahati.

### **1.2.1 Arunachal Pradesh Department of Power (APDOP)**

The Arunachal Pradesh Department of Power (APDOP) is a deemed licensee in terms of Section 14 of the Electricity Act, 2003. APDOP, being an integrated utility, is responsible for transmission and distribution of electricity in the State of Arunachal Pradesh and also trading functions. The Department of Power of the State of Arunachal Pradesh (APDOP) is responsible for power supply in the State of Arunachal Pradesh. APDOP receives around 60 MUs of free power from Arunachal Pradesh Department of Hydro Power Development. Apart from this, the entire power requirement for APDOP 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 electricity traders/other sources. It also has small diesel generating units with annual generation of 2 MUs (approx.)

The present demand for Arunachal Pradesh is being met by drawing power from various central generating stations, and power from Arunachal Pradesh Hydro Power Department. APDOP serves about 1,84,402 consumers with an annual energy consumption of about 244.67 MUs (FY 2011-12). The consumers can be broadly classified into following four categories:

- Domestic (84.92%)
- Commercial (9.29%)
- Industrial both HT & LT (0.14%)
- Others - Public Lighting, water works etc. (5.65%)

### **1.3 Filing ARR and Tariff Petition for FY 2013-14**

As per the Tariff Regulations, the utility was required to submit the petition for ARR and Tariff in the month of November for fixing the Tariff for the next financial year. However, the Department filed the tariff Petition for the FY 2012-13, on 1<sup>st</sup> March' 2013 and subsequently vide their letter Dated 19<sup>th</sup> March'2013 submitted to the Commission that the petition may be processed for the FY 2013-14.

In the petition, APDOP has estimated an ARR of Rs. 806.13 crore and worked out a net revenue gap of Rs. 692.54 crore.

It is noticed from the petition filed by APDOP, that the State Government vide notification No. CE(P)/EEZ/SP&C/Tariff/2012-13/756-905 dated 16<sup>th</sup> May, 2012 issued the order revising the retail tariffs for FY 2012-13 effective from 1<sup>st</sup> April, 2012. In view of this the Commission sought clarification, from APDOP, on the purpose of filing a petition for approval of ARR and determination of Tariff for FY 2012-13. In response APDOP vide its letter No. CE(P)/WEZ/SLDC/Tariff/Part-I/2012-13/5801-02 dated 19.03.2013 has submitted that the petition filed may be processed for FY 2013-14 instead of 2012-13. Hence the petition is processed for FY 2013-14 and the tariff is determined for FY 2013-14.

Under section 62 of the Electricity Act, 2003 only the State Electricity Regulatory Commission has the powers to determine retail supply tariff for the consumers in the State. The State Government has notified the tariffs for FY 2012-13 as mentioned above as per earlier practice, even though the State Commission was in position. Since the orders are already issued and are being implemented, the Commission endorses the tariffs issued by the State Government vide notification dated 16<sup>th</sup> May, 2012, effective from 1<sup>st</sup> April, 2012 to 31<sup>st</sup> March, 2013.

#### 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 required as specified in Commission's Regulations on Terms and Conditions for Determination of Tariff.

APDOP was asked to submit the required information vide Commission's letter dated 11<sup>th</sup> March'2013. The APDOP submitted incomplete information vide its letter Dtd. 20/3/2013.

Pending receipt of additional information the ARR and Tariff Petition was admitted on 20<sup>th</sup> March'2013 and marked as case No. TP 1 of 2013 to avoid delay in processing of ARR.

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

The notification of proposed ARR for FY 2013-14 was published by the APDOP in the following newspapers.

SI.No	Name of the newspaper	Language	Date of publication
1	Echo of Arunachal	English	12-03-2013
2	The Dawnlit Post	English	12-03-2013

Through the public notice, the stakeholders/public were invited to furnish their objections and suggestions on the petition on or before 1<sup>st</sup> April'2013.

The Commission received a few objections/suggestions on the petition filed by APDOP. The Commission considered the objections received and sent them to APDOP for communicating their response to the objections raised.

#### 1.5 Notice for Public hearing

A notification was published by the Commission in the following leading newspapers on 3<sup>rd</sup> April'2013 giving due intimation to the general public, interested parties, objectors and the consumers about the public hearing to be held at Naharlagun in the office chamber of the Secretary, APSERC on 10<sup>th</sup> April'2013 from 1130 Hours to 1330 Hours.

SI.No	Name of the News-paper	Language	Date of Publication
1	The Arunachal Times	English	3-4-2013
2	The Arunachal Front	English	3-4-2013
3	The Independent Review	English	3-4-2013

## **1.6 Public Hearing**

Public hearing was held as scheduled on 10<sup>th</sup> April'2013 at the Naharlagun. During the public hearing each objector was provided a time slot for presenting their views on the petition of APDOP before the Commission. The proceedings of the public hearing are briefly reproduced in Chapter-4.

The list of participants in public hearing are given in Annexure-I in Chapter-4.

## **1.7 Meeting of State Advisory Committee**

The State Advisory Committee met on 11<sup>th</sup> April'2013 and discussed the ARR & Tariff proposal for FY 2013-14 of DOP, Arunachal Pradesh. 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 are given in Annexure-II in Chapter-4.

## 2. Summary of Petition for Determination of ARR & Tariff

### 2.1 Aggregate Revenue Requirement (ARR)

The APDOP in its petition has submitted the Aggregate Revenue requirement for the year 2013-14 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 for FY 2013-14**

		(Rs. crores)
Sl. No	Item of expense	FY 2013-14 (Projected)
1	Cost of Fuel	2.14
2	Cost of Power Purchase	249.64
3	Employee Costs	153.10
4	O&M expenses	30.52
5	Administration and General Expenses	1.28
6	Depreciation	111.61
7	Interest charges (including interest on working capital)	109.94
8	Return on NFA/Equity	148.34
9	Provisions for Bad Debt	0.00
10	Total Revenue requirement	806.58
11	Less: non tariff income	0.45
<b>12</b>	<b>Net Revenue Requirement (10-11)</b>	<b>806.13</b>
13	Revenue from tariff	107.05
14	Revenue from surplus sale of power	6.53
15	Gap (12-13-14)	692.54
16	Additional revenue from proposed tariff	34.63
17	Regulatory asset	0.00
<b>18</b>	<b>Energy sales (MU)</b>	<b>313.35</b>
<b>19</b>	<b>Average cost of supply (Rs./KWH)</b>	<b>25.73</b>

### 2.2 APDOP has requested the Commission

- (a) To accept the Annual Revenue Requirement and Tariff Petition for FY 2013-14.
- (b) To approve partial recovery of Aggregate Revenue Requirement (ARR) for FY 2013-14.
- (c) To approve category-wise tariff including fixed/demand/ energy charges to meet revenue requirement for FY 2013-14.
- (d) Approve the tariff philosophy suggestions requested.
- (e) 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

APDOP has a Diesel Generation plant which generates about 2 MU power per Annum.

APDOP gets about 60 MU free energy from Arunachal Pradesh Hydro Power Department.

APDOP has a provision of free power from NEEPCO Rangandi hydro station.

APDOP has firm Power allocation from NHPC, NEEPCO, NTPC as stated in the Table below. APDOP purchases power in open market to meet its requirement in the State particularly, during peak hours and APDOP sells surplus from allocated energy to outside State licensees. APDOP receives power from CGS and other sources as per allocation from time to time.

**Table 3.1: Firm Power Allocation (MW)**

Sl. No	Source	FY 2010-11 Allocation		Current Year (Actual) FY 2011-12 Allocation		Ensuring Year (Projected) FY 2013-14 Allocation	
		%	MW	%	MW	%	MW
	<b>NHPC</b>						
1	Loktak 105 MW	4.76	5.28	4.76	5.28	4.76	5.28
	<b>NEEPCO</b>						
2	Kahndong 50 MW	4.00	2.14	4.00	2.14	4.00	2.14
3	Doyang 75 MW	6.67	6.09	6.67	6.09	6.67	6.09
4	Kopili-I 200 MW	5.00	10.56	5.00	10.56	5.00	10.56
5	Kopili-II 25 MW	5.00	1.52	5.00	1.52	5.00	1.52
6	Ranganadi	18.27	72.99	18.27	72.99	18.27	72.99
7	AGTPP (Tripura)	5.59	5.22	5.59	5.22	5.59	5.22
8	AGBPP	5.50	16.82	5.50	16.82	5.50	16.82
	<b>NTPC</b>						
9	Farakka	0.44	5.20	0.44	5.20	0.44	5.20
10	Kahalgaon	0.43	3.20	0.43	3.20	0.43	3.20
11	Talcher	0.44	3.08	0.44	3.08	0.44	3.08
	<b>Total</b>		<b>133.10</b>		<b>133.10</b>		<b>133.10</b>

APDOP Purchased power from Central Generating Stations and other sources outside the state as depicted in the table below for FY 2010-11 & FY 2011-12.

**Table 3.2: Power Purchase**

(MU)			
Sl. No	Source	FY 2010-11 (Actual)	FY 2011-12 (Actual)
	<b>NHPC</b>		
1	Loktak	29.19	25.13
	<b>NEEPCO</b>		
2	Kahndong	6.59	7.43
3	Doyang	16.86	14.99
4	Kopili-I	36.05	46.76
5	Kopili-II	4.95	5.50
6	Ranganadi	90.46	62.68
7	AGTPP (Tripuira)	38.71	39.77
8	AGBPP	102.39	98.64
	<b>NTPC</b>		
9	Farakka	20.16	33.
10	Kahalgaon	8.68	16.26
11	Talcher	12.62	19.26
	<b>Total</b>	<b>366.66</b>	<b>370.31</b>

APDOP is able to meet the demand by drawal of power from AP Hydro power department and purchase from Central Generating stations.

### 3.2 Consumers base and sales profile.

The category wise consumers and sales are as depicted in the table 3.3 below for FY 2010-11 and FY 2011-12.

**Table 3.3: Energy Sales in MU for FY 2010-11 & FY 2011-12**

Sl. No	Category	FY 2010-11 (Actual)	FY 2011-12 (Actual)
1	Domestic including BPL	66.52	73.68
2	Commercial	15.49	19.29
3	Industrial Consumers	56.11	94.84
4	Public Lighting	6.45	6.79
5	Public Water works & Sewage	3.54	3.78
6	Irrigation and Agriculture	0.00	0.00
7	Bulk	13.89	14.22
8	General Purpose	25.54	32.07
9	Outside State	132.35	65.37
<b>10</b>	<b>Total</b>	<b>319.89</b>	<b>310.04</b>



**Table 3.4: Number of Consumers during FY 2010-11 & FY 2011-12**

<b>Sl. No</b>	<b>Category</b>	<b>FY 2010-11 (Actual)</b>	<b>FY 2011-12 (Actual)</b>
1	Domestic including BPL	150912	156599
2	Commercial	16467	17126
3	Industrial Consumers	264	259
4	Public Lighting	2077	1750
5	Public Water works & Sewage	75	66
6	Irrigation and Agriculture	0	0
7	Bulk	4574	4588
8	General Purpose	277	4014
9	Outside State	1	1
<b>10</b>	<b>Total</b>	<b>174647</b>	<b>184403</b>

### **3.3 Distribution Losses (T&D Losses)**

APDOP has mentioned that the distribution losses at 62.10% and 59.13% for the FY 2010-11 and FY 2011-12 respectively. It is submitted that the distribution network is spread over wide geographical area, with the domestic consumers segment, loss levels could not be reduced as anticipated during the previous year.

### **3.4 PGCIL Charges**

APDOP will be receiving the energy through PGCIL Network, for which the charges as claimed by PGCIL would be paid at actuals.

## 4. Proceedings of Public-Hearing and Proceedings of SAC Meeting

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### 4.1 Public objections, response from DOP and Commission's view

The Department of Power, Government of Arunachal Pradesh has filed a Petition for approval of Aggregate Revenue Requirement (ARR) and determination of Tariff for retail sale of electricity for FY 2013-14 under Section 62 of the Electricity Act, 2003 before the State Electricity Regulatory Commission of Arunachal Pradesh. The Department of Power has also published public notice on 12-03-2013 in leading newspapers of the State inviting suggestions/objections from the public. In response to the said notice, the Department of Power received certain objections / suggestions from the public. The objections / suggestions made by the public, the response from the Department of Power and the Commission's view are mentioned below:

### 4.2 Proceedings of the Public Hearing held by the Commission on 10<sup>th</sup> April'2013.

As per the Press Notification dated 2<sup>nd</sup> April'2013 of the Commission in various leading newspapers published from Itanagar, a public hearing was held in the Commission's office on 10/4/2013 from 11:30 AM to 1:30 PM. The list of the persons present in the public hearing is placed in **Annexure-I**.

### 4.3 The proceedings of the public hearing is detailed below:

At the outset the Secretary and then the Chairperson of the Commission briefed the gathering about the importance, purpose and procedure of the public hearing which was being conducted by the Commission for the first time. Thereafter the process of public hearing was started and the people were invited to speak one by one, viz.

**Participant No.1:** Shri N.K.Sahu, AGM, BSNL, Itanagar had submitted a written representation of the BSNL especially on the billing cycle and extension of due date of the electricity payment.

**Participant No.2:** Sri Nawan Lamnio, Secretary, Bazaar Welfare Society, Naharlagun, mentioned that the electricity bills are inflated and there is extensive load shedding in the State. He also mentioned that there is huge leakage of electricity(theft etc.) the State and that the Department is trying to pass on its losses of energy and revenue by passing on the burden to the general consumers of

electricity by way of increasing in tariff many fold. He further stated that for the first time the proposed tariff by the Department of Power is very high and that too after the inception of the Electricity Regulatory Commission and requested to address these issues in the overall interest of the general public.

**Participant No.3:** There was single petition from Industries side representing 5(five) industries viz. SMS Smelters Limited, Naharlagun, Shree Salasar Industries, Naharlagun, Satyam Ispat, Banderdewa, Satyam Ispat North East Limited, Banderdewa and Platinum Alloy Private Limited, Naharlagun.

Sri Neeraj Shree on behalf of the above mentioned industries mentioned that there is lack of proper management in the power sector of Arunachal Pradesh and there is no metering of large number of consumers which is causing huge energy loss and hence revenue loss and because of which the Department is unable to even recover the cost of the power purchases being made by it. Hence to neutralize the burden of its financial losses, the Department is intending to increase the tariff of the electricity consumers and the price hike in the Industrial category is too much which the Commission has to look into sympathetically. He also mentioned that there is no system to address acute shortage of power in the State and the poor people cannot afford such increase in tariff.

**Participant No.4:** Sri Kento Jini, Advocate, representing Mr.Tadar Nima, who had already sent a representation dated 1/4/2013 earlier, requested to stop the public hearing by the Commission on the ground that there is a court case pending before the Itanagar Bench of Gauhati High Court against the corrigendum dated 19/3/2013 of the Department of Power, Government of Arunachal Pradesh for processing their tariff petition of 2012-13 for the financial year 2013-14. He mentioned that the Itanagar Bench of Gauhati High Court in petition No.112(AP)/2013 has issued a notice to the Department of Power. He further mentioned that since the ARR petition has not been properly projected for 2013-14, as such, the present exercise of the commission for tariff finalization should be stopped.

**Participant No.5:** Sri Amit Saran representing the Arunachal Chamber of Commerce submitted the objections in a written letter vide letter dated 10/4/2013 and requested the Commission that the grievances of Arunachal Chamber of Commerce be addressed while finalizing the tariff for 2013-14.

**Participant No.6:** Sri Kamta Lapung, President, AAPSU mentioned that the common people of the State are financially not sound to afford any increase in the existing tariff and he strongly opposed any increase in tariff for financial year 2013-14 to address the problems of the poor.

Apart from above, there were some general observations about the hike in security deposit proposed by Department of Power and they mentioned that in Tripura the security is taken from the consumers based on the average of three months electricity consumption of the consumers and accordingly similar procedure can also be adopted in Arunachal Pradesh after making needful changes as required.

4.4 The abstract of the above points mentioned during the public hearing along with the written objections/suggestions submitted by them were sent to APDOP by the Commission vide letter no. APSERC/RA-9/TP/2013-14/41-42 Dtd. 11-4-2013 for their point wise comments within the specified date of 29-4-2013.

4.5 The APDOP vide their letter no. CE(P)/WEZ/COML/Tariff/Part-I/2012-13/237-38 Dtd. 26-4-2013 conveyed to the Commission their issue wise comments on all the objections of the participants put forward till the public hearing.

4.6 **The issue wise comments of the APDOP are reproduced as below :**

**“ Objection No. 1**

**Name of objector:** Sri N K Sahu, AGM, Bharat Sanchar Nigam Limited, Itanagar

Department of Power, after going through the detailed observations made by the objector, has summarized the following objections for which the replies are presented below:

**Issue No. 1: Schedule of Payment**

The objector has stated that time period allowed for payment of monthly bills without penalty is very less and has proposed as follows:

- i. Billing cycle may be done bi-monthly for central govt. organizations/PSUs.
- ii. The payment due date period may be extended from 12 days to 40 days for central govt. organizations/PSUs.

**Reply to Issue No. 1:**

*It is submitted that deciding on the schedule of tariff and other terms & conditions for supply of electricity is the prerogative of the Hon'ble Commission. However, it is requested that the Hon'ble Commission may kindly keep in view the interest of the Department of power and Government of Arunachal Pradesh while deciding on the issue. The tariff of neighbouring state may also be compared and examine while fixing the tariff.*

**Issue No. 2: Penalty**

The objector has stated that the system/quantum of penalty for delayed payment of electricity bills is required to be reviewed in view of the short time available for payment of electricity bills

**Reply to Issue No. 2:**

*Same as reply to issue No. 1 above.*

**Objection No. 2**

**Name of objector: Sri Nawan Lamnio, Bazaar Welfare Society**

Department of Power, after going through the detailed observations made by the objector, has summarized the following objections for which the replies are presented below:

**Issue No. 1 : No hike in Tariff**

The objector has stated that there is excessive load and there is huge theft of electricity. It is further stated that tariff should not be increased in the interest of the general public.

**Reply to Issue No. 1:**

*It is submitted that Department of power is making all efforts to provide reliable & continuous power to the consumers of the state. However further steps shall be taken to improve the supply of power & check theft/pilferage of electricity.*

*In regard to the increase of tariff it is submitted that deciding on the tariff hike is the prerogative of the Hon'ble Commission. However, it is requested the Hon'ble Commission may kindly keep in view the interest of the Department of power and Government of Arunachal Pradesh while deciding on the issue. The tariff of neighbouring state may also be compared and examine while fixing the tariff.*

**Objection No. 3**

**Name of objector:**

- i. SMS Smelters Ltd.,
- ii. Shree Salasar Industries,
- iii. Satyam Ispat,

- iv. Satyam Ispat North East Ltd. &
- v. Platinum Alloy Private Ltd.

Department of Power, after going through the detailed observations made by the objector, has summarized the following objections for which the replies are presented below:

**Issue:**

The objector has stated that Arunachal Pradesh is lacking in infrastructure and skilled workers and costs are much higher than compared to other parts of the country.

It has been further stated that availability of power at cheaper rate is essential for sustainability of the industry. It has been prayed that the hike in power tariff should not be allowed.

**Reply:**

*It is submitted that the Department of Power has submitted the ARR & Tariff Petition as required by the "Terms & Conditions for Determining of Tariff and Formats for Tariff Regulations-2011" issued by the Hon'ble Arunachal Pradesh State Electricity Regulatory Commission.*

*Deciding on the tariff hike is the prerogative of the Hon'ble Commission. However, it is requested the Hon'ble Commission may kindly keep in view the interest of the Department of power and Government of Arunachal Pradesh while deciding on the issue. The tariff of neighbouring state may also be compared and examine while fixing the tariff.*

**Objection No. 4**

**Name of objector:** Sri Kento Jini, Advocate representing Shri Tadar Nima

Department of Power, after going through the detailed observations made by the objector, has summarized the following objections for which the point wise replies are presented below:

1. The ARR is as per actual records.

2. The detail Power Purchase Agreement with Central Sector Power Producers and free power available from RHEP is not the part of ARR and Tariff Petition.
3. The proposed expenditure for employees, numbers of employee and numbers of consumers as per actual.
4. The operation and maintenance cost is as per actual.
5. Earlier tariff fixation was done by Government of Arunachal Pradesh. Relevant earlier orders are available at <http://www.arunachalpower.org.in/orders.html>.

The objector has also requested the Hon'ble Commission to stop the proceeding of public hearing on the ground that there is a court case pending before the Itanagar bench of Gauhati high court.

**Reply:**

*It is submitted that deciding on the proceedings of the public hearing is prerogative of Hon'ble Commission.*

**Objection No. 5**

**Name of objector:** Shri Tarh Nachung, GS, Arunachal Chamber of Commerce & Industries Department of Power, after going through the detailed observations made by the objector, has summarized the following objections for which the replies are presented below:

**Issue No. 1: Regarding proposal for the revision of ARR & Tariff for the Year 2012-13**

The objector has stated that Arunachal Pradesh is a very back ward in terms of development and industrialization. Any revision in power tariff will repel the forthcoming industries as well affect the current industries.

It has been further stated that hike in power tariff will affect the general public badly as the source of income is very low.

The objector has stated that there should not be any hike in tariff.

**Reply to Issue No. 1:**

*It is submitted that the Department of Power has submitted the ARR & Tariff Petition as required by the "Terms & Conditions for Determining of Tariff and Formats for Tariff Regulations-2011" issued by the Hon'ble Arunachal Pradesh State Electricity Regulatory Commission.*

*Deciding on the tariff hike is the prerogative of the Hon'ble Commission. However, it is requested the Hon'ble Commission may kindly keep in view the interest of the Department of power and Government of Arunachal Pradesh while deciding on the issue. The tariff of neighbouring state may also be compared and examine while fixing the tariff.*

**Issue No. 2: Memorandum against the hike in power tariff**

The objector has stated that the current phase of economic development is lacking in many aspects the traders have to face stiff competition. The proposed tariff hike shall affect the industry very badly.

It has been further stated that in interest of the business community and people of Arunachal Pradesh no tariff hike should be allowed.

**Reply to Issue No. 2:**

*Same as reply to issue No. 1 above.*

**Objection No. 6**

**Name of objector:** Shri Kamta Lapung, President, All Arunachal Pradesh Student Union.

Department of Power, after going through the objection raised by the objector, has summarized the following objections for which the replies are presented below:

**Issue:**

The objector stated that there should not be any increase in the existing tariff as it would difficult for the people to afford.

**Reply:**



*It is submitted that deciding on the tariff hike is the prerogative of the Hon'ble Commission. However, it is requested the Hon'ble Commission may kindly keep in view the interest of the Department of power and Government of Arunachal Pradesh while deciding on the issue. The tariff of neighbouring state may also be compared and examine while fixing the tariff."*

#### **4.7 Proceedings of the 2<sup>nd</sup> Meeting of the State Advisory Committee of the Arunachal Pradesh State Electricity Regulatory Commission**

The 2<sup>nd</sup> SAC meeting of the APSERC was held on 11<sup>th</sup> April'2013 with the agenda to discuss the Annual Revenue Requirement (ARR) & Tariff Petition for 2013-14 filed by the Department of Power, Government of Arunachal Pradesh before the Commission. (Total four nos. Agenda Points)

The list of the SAC members who were present in the meeting is enclosed as **Annexure-II**.

Following points emerged after detailed discussion of various agenda points in the SAC:

**Agenda point No. 1: Aggregate Revenue Requirement:** 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.

**Agenda point No. 2: Comparison of existing tariff with tariff proposed by the Department of Power:** It was felt by all the participants that the Commission should cautiously and sympathetically look into the complaints registered by the consumers during the public hearing on 10<sup>th</sup> April'2013 against the proposed tariff hike. The increase in the tariff should be of a reasonable amount and should be absorbable by all sections of the society. There was a general opinion that the proposed tariff needs to be reviewed for reduction 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.

It was also stated that the industries have come to the State by availing the subsidies provided by the Government of India and there is no major subsidy extended to such industries by the State Government. As such the proposed 40% hike in the industrial tariff would be a discouraging factor for the present and upcoming industries in the State which may be a major setback for uplifting the economic condition of the State.

**Agenda point No. 3: Transmission & Distribution Losses:** It was mentioned that a plan and policy of taking up 100% metering has already been approved by the State Government and that on its completion it may reduce 30 to 35% of AT&C losses in the state.

**Agenda point No. 4: Security deposit:** It was felt by all present in the meeting that the security deposit of the consumers can be on higher side. However the SAC was apprised about the existing regulation of the APSEERC on AP Electricity Supply Code, 2013 having a definite formula based on the Model Electricity Supply Code framed by the Forum of Regulators for working out the security deposit to be taken from various categories of the consumers.

#### **4.8 Commission's view on Public Hearing & SAC Meeting :**

The Commission noted the views of the participants in the public hearing as well as the comments/response of the APDOP. The Commission also noted the various suggestions of the members of the SAC during its 2<sup>nd</sup> meeting.

Regarding monthly billing cycle and time allowed for payment in respect of the PSU's, the Commission is of the view that the present system of billing cycle and the time allowed for monthly realization of electricity charges is alright and do not require any change. However, it is suggested that PSUs can make an advance monthly payment in time based on their average monthly bills subject to their final adjustments as per actuals in next month's bill.

## Annexure- I

### LIST OF PARTICIPANTS IN THE PUBLIC HEARING

Sl. No.	Name of Person and Organisation	Address
1.	N.K Sahu, AGM (A&P)	O/o GMTD, Itanagar
2	B.S. Kaneri SE(E), DoP	O/o (P) W E Z. Deptt. of Power Itanagar.
3.	Nawan Lamnio, G.S.B.W.C	O/O Bazaar Welfare Society, Naharlgun.
4.	Anirban Hazra Consultant (Power Deptt.)	Kolkata
5.	Arvind Tewari Consultant (Power Deptt.)	Kolkata
6.	Vijay Vyas, Partner	Sri Salasar Industries Lekhi Village, Naharlagun
7.	Amit Saran, Chamber of Commerce, Naharlagun	Arunachal Chamber of Commerce.
8.	Niraj Sharee, Partner	Platinum Alloys Pvt. Ltd, Bhalukpong
9.	Rajesh Sharma, JE (E)	WEZ, Deptt. of Power, Vidyut Bhawan , Itanagar.
10.	Tadar Nima	F- Sector, Naharlagun.
11.	D. Loyi (Advocate)	Gauhati High Court, Itanagar Bench
12.	Taku Budung (ASW)	C E(P) WEZ, Deptt. of Power, Vidyut Bhawan , Itanagar
13	Kento Jini ( Advocate)	Gauhati High Court, Itanagar Bench
14	Binter Dicha ( Advocate)	Gauhati High Court, Itanagar Bench

## Annexure-II

**Following members of the State Advisory Committee of the APSRC were present in the meeting held on 11<sup>th</sup> April'2013:**

1. Sh. Digvijai Nath, Chairman APSERC
2. Sh. Lipe Ete, Chief Engineer DHPD
3. Sh. O. Moyong, Chief Engineer, EEZ DOP
4. Sh. Repo Ronya, Director of Industries GoAP
5. Sh. Toko Onuj, MD, HPDCAPL
6. Sh. Ojing Darung, Labor Commissioner GoAP
7. Sh. Techilala, President Arunachal Chamber of Commerce

**In addition to the above following were present as special invitees:**

1. Sh. A. Perme, Chief Engineer(Transmission) DoP
2. Sh. T. Mara, Chief Engineer, CEZ, DoP

## 5. Analysis of ARR for the FY 2013-14

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### 5.1 Energy Sales

Proper estimation of category-wise sales is essential to determine the quantum of Power Purchase and the likely assessment of revenue. This section examines in detail the Customer category-wise sales projected by the APDOP in their petition for assessment of ARR for FY 2013-14.

### 5.2 Consumer Categories

APDOP serves 1.84 lakh consumers in its licensed area and the consumers are categorized as under.

1. Domestic including Kutir Jyoti & BPL
2. Commercial
3. Industrial LT & HT
4. Public Lighting
5. Public water works & sewage
6. Irrigation and Agriculture
7. Bulk Supply
8. General Purpose

APDOP serves the consumers at different voltages at which the consumers avail supply. Commission directs the DOP 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.

### 5.3 Additional information/Data

The ARR and tariff petition for the FY 2013-14 filed by APDOP was incomplete, as many of the specified formats required under APSERC (Terms and Conditions for determination of tariff) Regulations, 2011 were not submitted. APDOP have submitted the ARR formats with-NIL-data or data not commensurate with the required inputs.

#### 5.4 Growth of Consumers and Energy Sales

APDOP has filed growth of consumers and sales for the years FY 2010-11, FY 2011-12 and FY 2013-14 with out furnishing the connected load as depicted in the Table below.

**Table 5.1: Consumers**

<b>Category</b>	<b>FY 2010-11 (Actual)</b>	<b>FY 2011-12 (Actual)</b>	<b>FY 2013-14 (Projected)</b>
Domestic including BPL	150912	156599	165995
Commercial	16467	17126	18154
Industrial Consumers	264	259	284
Public Lighting	2077	1750	1925
Public Water works & Sewage	75	66	73
Irrigation and Agriculture	0	0	0
Bulk	4574	4588	4863
General Purpose	277	4014	4255
Outside State	1	1	1
<b>Total</b>	<b>174647</b>	<b>184403</b>	<b>195550</b>

**Table 5.2: Energy Sales in MU**

<b>Category</b>	<b>FY 2010-11 (Actual)</b>	<b>FY 2011-12 (Actual)</b>	<b>FY 2013-14 (Projected)</b>
Domestic including BPL	66.52	73.68	88.42
Commercial	15.49	19.29	23.15
Industrial Consumers	56.11	94.84	118.38
Public Lighting	6.45	6.79	8.14
Public Water works & Sewage	3.54	3.78	4.54
Irrigation and Agriculture	0.00	0.00	0.00
Bulk	13.89	14.22	15.64
General Purpose	25.54	32.07	38.48
Outside State	132.35	65.37	16.60
<b>Total</b>	<b>319.89</b>	<b>310.04</b>	<b>313.35</b>

APDOP 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**

As can be seen from tables 5.1, 5.2 above, the data on number of consumers and energy sales is available only for two years 2010-11 and 2011-12. Based on the limited data available, the energy sales for FY 2013-14 is projected considering the

trend and economic growth in the State. The category-wise energy sales are mentioned below:

The details of category-wise energy sales are provided in Format-D1, of the petition.

**Domestic:** The sales to this category accounts to about 28% of total sales. It is observed that the sales growth during FY 2011-12 is about 10% more than the sales for FY 2010-11 but the sales for FY 2013-14 are projected at a growth of 20% over FY 2011-12 (2 years). Considering the growth of economy in the State the projected increase is considered reasonable.

**The Commission approves energy sales at 89 MU for domestic for FY 2013-14.**

**Commercial:** The sales to this category account for about 7% but earns relatively high revenue. The year to year growth for FY 2011-12 and FY 2010-11 was about 24%, the sales for FY 2013-14 are projected at 20% over the sales of FY 2011-12. In view of large-scale development taking place in the State there is a potential for growth of commercial activity in the State. The projected sales up to 25 MU is considered reasonable.

**The Commission approves energy sales of 25 MU for commercial category for FY 2013-14.**

**Industrial (LT & HT):** The sales for industry during 2010-11 and 2011-12 was as given below:

Category	FY 2010-11	FY 2011-12	FY 2013-14
LT	3.11	3.42	4.10
HT	53.00	91.42	114.28

The sales to industry account to about 38% of total energy sales in the State.

The sales growth in Industrial category for FY 2011-12 over the FY 2010-11 actuals works out to 69%. The sales for FY 2013-14 over FY 2011-12 are projected at about 25%. The growth of 69% during FY 2011-12 over FY 2010-11 might be one time due to intense development activity in the State with a number of power projects coming up in the State. The same level of growth may not sustain. Since the development activity is likely to contribute the growth of industry, 12% per annum over the FY 2010-11 is considered achievable.

The Commission approved 119 MU for industrial category for FY 2013-14. The sales to the other categories – public lighting, water supply, general purpose, bulk supply etc., are approved for FY 2013-14 as below.

Category	Sales (MU)
Public lighting	8.00
Public water works	5.00
Bulk supply	16.00
General purpose	39.00

Commission approves the category-wise sales projected for the FY 2013-14 at 301.00 MU for sales within the State.

The category-wise sales considered for the FY 2013-14 as shown in the table below are approved.

**Table 5.3: Approved sales for FY 2013-14**

Category	FY 2013-14
Domestic including BPL	89
Commercial	25
Industrial Consumers	119
Public Lighting	8
Public Water works & Sewage	5
Irrigation and Agriculture	0
Bulk	16
General Purpose	39
<b>Total</b>	<b>301</b>

## 5.5 T&D Losses

APDOP has filed the T&D losses actuals for FY 2010-11 and FY 2011-12 at 62.10% and 59.13% respectively. The T&D losses projected for the FY 2013-14 are at 62.06%. It is stated that since the distribution network is spread over wide geographical area serving only domestic consumers the loss level is high.

### Commission's Analysis

APDOP has claimed T&D losses at 62.06% for FY 2013-14 which is very high. APDOP should have taken effective steps to reduce the losses, particularly non-technical losses instead the loss level is projected up to 62.06% for the FY 2013-14 from 59.13% during FY 2011-12.

The AT&C losses data furnished vide format-D2A, in the petition appears to be not in accordance with the Regulation 71(a) AT&C losses of APSERC Regulations (Tariff determination) 2011.

As per Regulation 71(a) if the T&D losses are in excess of 30% in the previous year, the petitioner shall project 3 percent loss reduction during the year for which the tariff application is made. Any short-fall in the projected level of AT&C losses for such year in this regard, shall be penalized by an amount equivalent to the cost of the quantum of energy to be lost due to inability of the licensee to plan and achieve reduction of AT&C losses by a minimum of 3 percent from the previous year's level.

The APDOP has filed Distribution losses actuals for the FY 2011-12 at 59.13%. Therefore the projection for the FY 2013-14 shall be at 53%(i.e. 3% less for 2012-13 plus another 3% less for 2013-14), whereas the DOP has claimed 62.06% which is contrary to the Regulations. Commission therefore considers T&D losses at 53% for the FY 2013-14 for energy requirement and ARR calculations.

**The Commission approves the benchmarking trajectory of T&D losses for next three years as detailed below:**

**Table 5.4: Trajectory of T&D losses approved**

<b>FY 2013-14</b>	<b>FY 2014-15</b>	<b>FY 2015-16</b>
53 %	50%	47 %

The APDOP shall achieve the T&D losses as approved. Failure to achieve the set levels, will entail reduction of power purchase and the cost proportionately in the respective tariff years.

## **5.6 Energy requirement & Energy Balance for FY 2013-14**

APDOP has projected energy requirement vide Table 3.3 of the petition for the FY 2013-14 as depicted below:



**Table 5.5: Energy Balance Projected for FY 2013-14**

<b>Particulars</b>	<b>Projected MU for FY 2013-14</b>
Energy sales within state	296.75
Sales to other distribution licensees	16.60
Total energy sales	313.35
T&D Losses in	62.06
T&D losses in MU	485.83
Total energy requirement	798.78
Energy availability	798.78
Hydel Generation (APHDP)	61.19
Own Generation (Diesel)	2.58
Free Power	156.02
Power Purchase from CGS and UI	578.99
Energy Surplus (Gap)	-

**Commission's Analysis**

APDOP has not submitted the data on the availability of power from APHPD & their Diesel Generation plant.

The Commission, in the absence of required data is not able to scrutinize the power availability as projected. However, the Commission has considered the projected power purchase for the FY 2013-14 from central Generating stations wheeled through PGCIL Network and assessed total power availability for sale in the licensed area including free power as projected and approves the energy to be purchased in open market through UI Mechanism, as per the energy balance given in the Table below:

**Table 5.6: Approved Energy Balance for the FY 2013-14**

<b>Sl. No</b>	<b>Energy Balance</b>	<b>Projected by APDOP (MU)</b>	<b>Approved by Commission (MU)</b>
<b>I</b>	<b>Energy requirement</b>		
	Energy Sales within state	296.75	301.00
	Sales to other distribution licensees	16.60	-
	Total energy sales	313.35	301.00
	Overall T&D losses %		53.00
	Overall T&D losses (MU)	485.43	339.42
	Total Energy requirement	798.78	640.42
<b>II</b>	<b>Energy availability</b>		
1	Power Purchase from CGS	382.95	382.95
2	Hydel Generation (APHDP)	61.19	61.19
3	Diesel Generation (Own)	2.58	2.58
4	Free power from Ranganadi	156.02	156.02
5	Power purchase through UI	196.04	37.68
<b>6</b>	<b>Total Energy availability</b>	<b>798.78</b>	<b>640.42</b>

**Commission approves energy requirement at 640.42 MU for FY 2013-14.**

## 5.7 Power Purchase cost for the FY 2013-14

APDOP has projected power purchase cost at Rs. 215.18 crore for 578.99 MU to be purchased from CGS including UI/Purchase of 196.04 MU. APDOP has to meet PGCIL charges at actuals, which is estimated at Rs. 34.46 crore for 578.99 MU to be wheeled including 196.04 MU proposed to be purchased under UI/Trading. Summing up of the purchase cost APDOP has claimed Rs. 249.64 crore for ARR for FY 2013-14.

**Table 5.7: Summary of Power Purchase cost projected for FY 2013-14**

Sl. No.	Source	Purchase (MU) Projected	Rate (Rs./kWh)	Total Cost in Rs. crores Projected
	NHPC			
1	Loktak	22.12	4.03	8.92
	NEEPCO			
2	Kahndong	6.12	2.82	1.73
3	Doyang	15.54	3.01	4.68
4	Kopili-I	49.33	1.24	6.10
5	Kopili-II	4.50	1.99	0.90
6	Ranganadi	83.99	5.49	46.13
7	AGTPP (Tripuira)	38.34	3.22	12.34
8	AGBPP	99.47	3.69	36.69
	NTPC			
9	Farakka	30.50	4.22	12.86
10	Kahalgaon	15.25	3.78	5.77
11	Talcher	17.79	3.12	5.55
12	U.I	196.04	3.75	73.52
13	<b>Sub-Total</b>	<b>578.99</b>		<b>215.18</b>
14	<b>PGCIL charges</b>	-	-	<b>34.46</b>
15	<b>Total</b>	-	-	<b>249.64</b>

### Commission's Analysis

APDOP has estimated power purchase cost for purchase of 578.99 MU (including UI/Purchase & PGCIL charges) at Rs. 249.64 crore for the FY 2013-14. Considering the T&D losses at 53%, the Commission has computed power purchase cost as depicted in the table 5.8 below.

The Deptt. of Hydro Power Development(DHPD) has already filed a petition before the Commission for the tariff fixation for all of their 102 nos. small hydro electric projects. So far these projects have been supplying electricity to APDOP without any payment. Subject to finalization of their tariff by the Commission wef FY 2013-14, an additional tentative provision of 12.00 crore has also been taken in account which the

APDOP shall pay to DHPD for the electricity to be supplied by them .The above said amount of Rs. 12.00 crore is subject to truing up.

**Table 5.8: Power Purchase cost approved for FY 2013-14**

Sl. No.	Source	Power Purchase (MU)	Cost (crore)	Power Purchase Approved (MU)	Approved Cost (crore)
		Projected			
	<b>NHPC</b>				
1	Loktak	22.12	8.92	22.12	8.92
	NEEPCO				
2	Kahndong	6.12	1.73	6.12	1.73
3	Doyang	15.54	4.68	15.54	4.68
4	Kopili-I	49.33	6.10	49.33	6.10
5	Kopili-II	4.50	0.90	4.50	0.90
6	Ranganadi	83.99	46.13	83.99	46.13
7	AGTPP (Tripura)	38.34	12.34	38.34	12.34
8	AGBPP	99.47	36.69	99.47	36.69
	<b>NTPC</b>				
9	Farakka	30.50	12.86	30.50	12.86
10	Kahalgaon	15.25	5.77	15.25	5.77
11	Talcher	17.79	5.55	17.79	5.55
12	UI/Trading (-) Purchase Cost	196.04	73.52	37.68	13.94
13	PGCIL charges		<b>34.46*</b>		<b>34.46</b>
14	Provision of Power Purchase from DHPD	61.19	Nil	61.19	12.00
15	Total Power purchase cost including PGCIL charges	<b>578.99</b>	<b>249.65</b>	<b>481.82</b>	<b>202.07</b>

Average cost per unit is Rs. 3.699/KWh

\* APDOP has projected PGCIL cost for 578.99 MU to be wheeled

**Commission approves Power purchase cost at Rs. 202.07 crore for the FY 2013-14.**

#### 5.7.1 Fuel Cost

APDOP has claimed Rs. 2.14 crore towards Fuel Cost for an estimated 2.0 MU (approx). Generation during the FY 2013-14 in the diesel generating plant in emergencies.

#### Commission's Analysis

APDOP has shown Fuel Cost for the FY 2011-12 at Rs. 2.86 crore as actual and has not furnished any generation and plant performance data for the previous years. It is presumed that the Diesel Generation plant would be operated during emergencies as standby.

**The Commission approves fuel cost at Rs. 2.14 crore for FY 2013-14 subject to final approval during True up process on submission of plant performance data.**

## **5.8 GFA & Capital Cost**

APDOP has furnished GFA details in Format-6. The Gross block at the beginning of FY 2010-11 shown at Table 3.14 of the petition is Rs. 2119.61 crore. Additions to GFA during the FY 2011-12 and FY 2013-14 shown are nil as per the Table 3.12 of the petition.

### **Commission's Analysis**

The GFA details furnished in the Format-6 are not in conformity with the required break-up such as, Land, Building, Hydraulics, Plant & Machinery, lines and Cable Network, Vehicles, Furniture & Fixtures, Office Equipment and Computers. The break-up details are required to calculate depreciation at different percentages as per CERC Regulations and assets movement with their useful life has to be recorded in the books of accounts retaining 10% salvage value. APDOP should maintain the books of Accounts as required for Regulatory analysis/purpose.

### **Capital Cost**

Capital Cost as per the Regulations 80 of APSERC (terms and conditions of determination Tariff) 2011, consist of capital expenditure incurred till the date of commercial operation of asset. Any contributions, grants received for acquiring the capital asset should invariably be recorded there of. The data furnished by APDOP does not specify any such details in the Regulatory formats. Capital cost is arrived at after deducting accumulated Depreciation, grants & contributions. But the APDOP has not submitted any such data.

### **Capital Expenditure and Capitalisation**

APDOP has proposed to incur capital expenditure of Rs. 185.00 crore during the FY 2013-14.

But APDOP has neither furnished the details of the capital expenditure schemes to be executed, nor the sources of funding to the proposed capital expenditure during the FY 2013-14. APDOP has not projected any capitalization vide Table 3.12 of the petition. In the absence of the transfer of Gross Fixed Assets to DOP by the

Government of Arunachal Pradesh, Commission does not consider the Capital Cost at the beginning and capitalization during FY 2013-14.

## 5.9 O&M Expenses

APDOP has filed O&M expenses consisting of the employee cost, Repairs and Maintenance and Administrative Expenses at Rs. 138.31 crore, Rs.154.70 and Rs. 184.90 crore for the FY 2010-11, FY 2011-12 and FY 2013-14 respectively vide Table 3.8 of the petition for ARR for the FY 2013-14.

**Table 5.9: Operation & Maintenance Expenses projected for FY 2013-14**

Sl. No	Particulars	FY 2010-11 (Actuals)	FY 2011-12 (Actuals)	FY 2013-14 (Projections)
1	Employee Cost	114.70	128.21	153.10
2	Repairs and Maintenance	23.00	25.50	30.52
3	Administration and General Expenses	0.61	0.99	1.28
	<b>Total O&amp;M expenses</b>	<b>138.31</b>	<b>154.70</b>	<b>184.90</b>

It is stated that APDOP has not considered pension and terminal benefits of the employees. It is also stated that the projected employee cost includes increase in basic salary and related other remunerations on account of implementation of 6<sup>th</sup> pay Commission recommendations.

### Commission's Analysis

#### Employee Cost

APDOP claimed Rs. 128.21 crore as actuals for the FY 2011-12 which is 11.78% increase over the FY 2010-11 i.e. Rs. 114.70 crore; But the projection for FY 2013-14 shown is Rs. 153.10 crore appears to be not justified. APDOP has not furnished any audited accounts for the previous year or current year actuals. The 6<sup>th</sup> pay Commission recommendations were given effect in 2009 itself, the basis for O&M projections not supported with any documentary evidence.

Commission therefore, is of the view that 12% increase in employee cost will meet the inflation, increments, etc. towards employee cost for FY 2013-14, over the FY 2011-12 actuals of Rs. 128.21 crore i.e. for FY 2012-13 & FY 2013-14 which works out to be 160.81.

**Commission approves Rs. 160.81 crore towards employee cost for the FY 2013-14.**

## Repairs and Maintenance

APDOP has claimed Rs. 30.52 crore for the FY 2013-14 which is 19.69% increase over FY 2011-12 i.e Rs. 25.50 crore (Actuals). Commission observed that asset base remained at Rs. 2119 crore from FY 2010-11 to FY 2013-14 and addition of new assets has not taken place during the previous two years. Therefore, the Commission is of the view that an increase of 5.72% per year from the FY 2010-11 to FY 2013-14 would meet the inflation in the expenses for the Repairs and Maintenance expenses requirement as depicted below.

**Table 5.10: R&M for FY 2013-14**

(Rs. crore)		
FY 2010-11 (actuals)	FY 2011-12 (actuals)	FY 2013-14
Rs. 23.00	Rs. 24.32	Rs. 27.18

**Accordingly Commission approves Rs. 27.18 crore for the FY 2013-14 to meet Repairs and Maintenance expenses.**

## Administrative and General Expenses

APDOP has claimed Rs. 1.28 crore for the FY 2013-14.

### Commission's Analysis

Keeping in view that these expenditure are on actual basis plus the expenses on account of Regulatory fee etc., Commission feels this to be reasonable.

**Accordingly Commission approves Rs. 1.28 crore for FY 2013-14 towards Administration and General expenses.**

**Summing up of the O&M expenses analyzed at Para 5.9 Commission approves O&M expenses for ARR of FY 2013-14 as per the Table below:**

**Table 5.11: O&M expenses approved for FY 2013-14**

Sl. No	Particulars	Claimed by APDOP (Rs. crore)	Approved by the Commission (Rs. crore)
1	Employee Cost	153.10	160.81
2	Repairs and Maintenance	30.52	27.18
3	Administration and General Expenses	1.28	1.28
4	<b>Total O&amp;M expenses</b>	<b>184.90</b>	<b>189.27</b>

## **5.10 Depreciation**

APDOP has claimed Rs. 111.61 crore towards depreciation at 5.27% on the Gross block of GFA Rs. 2119.61 crore as per Table 3.13 of the petition.

It is stated that average rate of depreciation at 5.27% applied on opening GFA of Rs. 2119.61 crore and 50% of additions proposed during FY 2013-14.

### **Commission's Analysis**

APDOP has not shown any addition of assets during the FY 2010-11 to FY 2012-13 as per the table 3.12 of the petition.

APDOP has not furnished details of Asset wise values and the average rate of depreciation stated in the petition has no basis for considering the calculation for FY 2013-14. 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 APERC 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 Commission does not consider any depreciation for ARR for the FY 2013-14.

**Commission does not consider any Depreciation for the ARR for FY 2013-14.**

## **5.11 Interest and Finance Charges**

APDOP has claimed Interest and finance charges at Rs. 103.58 crore projecting the opening loan as Rs. 953.68 crore for the FY 2013-14 vide Table 3.17 of the petition. It is stated that 50% of GFA is treated as funded through loan and interest rate 11.50% as per the SBI PLR as on 01.04.2011 is considered for ARR for FY 2013-14.

### **Commission's Analysis**

The APDOP is a State Government Department, the Assets and Liabilities are not transferred to the DOP yet. The claim of the APDOP as to treat the Debt-Equity Ratio 50:50 referred as at Para 3.8 of the petition can not be made applicable, as long as the utility is functioning as State Government Department and Assets and Liabilities are not transferred to the DOP. The funding of capital assets so far acquired for DOP are with the support of grants/subsidies from GOI/Government of Arunachal Pradesh and in the absence of the details of actual loans borrowed by the petitioner, Interest on loans shall not be admissible as per the Regulation 83 of APERC Regulations,

2011. Commission does not consider any Interest and Finance Charges for FY 2013-14.

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

APDOP has claimed Interest on working capital at Rs. 6.36 crore for the FY 2013-14 vide Table No. 3.18 of the petition on normative basis at interest rate of 11.5% as on 01.04.2011 (SBI PLR).

#### **Commission's Analysis**

Interest on working capital is admissible on the following components on normative basis as per regulations 85 of APSERC Regulations, 2011.

**Table No. 5.12 : Calculation Details of Interest on Working Capital**

a) O&M Expenses for one month Rs. 189.27*1/12	15.77
b) Maintenance spares at 1% on GFA cost 2119.16	21.20
c) Receivables for two months 124.07*2/12	20.68
<b>Total working capital</b>	<b>57.65</b>
d) Interest @ 11.5%	6.62

**Commission approves Interest on working capital at Rs. 6.62 crore for the FY 2013-14.**

### **5.13 Return on equity**

APDOP has claimed Rs. 148.34 crore as Return on Equity at 14% for the FY 2013-14 as per Table 3.16 of the petition.

#### **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 already mentioned vide para 5.10 and 5.11, Equity Infusion was not made into the Books of Accounts of APDOP. The Government of Arunachal Pradesh has not issued any notification transferring Assets and Liabilities in the name of APDOP.

**Commission does not consider any Return on Equity for the FY 2013-14.**



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

APDOP has not claimed any provision for Bad and Doubtful Debts for the FY 2013-14.

#### **5.15 Non-Tariff Income**

APDOP has estimated Rs. 0.45 crore towards Non-Tariff Income for the FY 2013-14.

##### **Commissions Analysis**

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 HT Consumers for 11KV system at Rs. 670/- per month shall be payable. Considering 1,90,679 connections LT 1 phase at Rs. 16/- would amount to Rs. 366,10,368 and 4870 connections under HT category for 11KV system at Rs. 670/- would amount to Rs. 3,91,54,800 per Annum. In all Rs. 7.58 crore the APDOP will receive on account of meter rent only.

Assuming the other Miscellaneous Income on account of delayed payment surcharge at 2%, theft of energy charges trading income, Interest on loans recovered from employees, etc, the Commission considers non-tariff Income at Rs. 8.00 crore for the FY 2013-14. APDOP should maintain proper accounts for Regulatory requirement and submit to the Commission for scrutiny.

#### **5.16 ARR approved for FY 2013-14:**

Summation of the above analysis the Annual Revenue Requirement for FY 2013-14 is drawn as detailed in the table below

**Table 5.13: Annual Revenue Requirement for FY 2013-14 approved by the Commission**

(Rs. crore)

Sl.No.	ARR Element	Claimed by APDOP	Approved by Commission
1	Fuel cost	2.14	2.14
2	Power Purchase cost	249.64	202.07
<b>3</b>	<b>O&amp;M Expenses</b>	<b>184.90</b>	<b>189.27</b>
	a) Employee cost	153.10	160.81
	b) R&M Expenses	30.52	27.18
	c) Adm & General Expenses	1.28	1.28
4	Depreciation	111.61	-
5	Interest & Finance charges	103.58	-
6	Interest on working capital	6.36	6.62
7	Return on Equity	148.34	-
<b>8</b>	<b>Total ARR</b>	<b>806.58</b>	<b>400.10</b>
9	Less Non-Tariff Income	0.45	8.00
<b>10</b>	<b>Net ARR</b>	<b>806.13</b>	<b>392.10</b>
11	Revenue at Existing Tariff	107.05	117.53
<b>12</b>	<b>Revenue Gap</b>	<b>699.08</b>	<b>274.57</b>
13	Sale of power to other Distribution Licensee	6.53	-
<b>14</b>	<b>Net Gap</b>	<b>692.55</b>	<b>274.57</b>
<b>15</b>	<b>Regulatory asset</b>	<b>0</b>	<b>0</b>
15	Energy sales (MU)	313.35	301.00
16	Average cost of supply (Rs/kWh)	25.73	13.03

#### 5.16.1 Estimated Revenue at Existing tariffs for LT and HT Category

**Table 5.14: Estimated Revenue at existing tariffs for LT and HT**

Sl. No.	Category	No. of consumers	Sale in each Slab (MU)	Existing Tariff Rate (paise per kWh)	Amount (Cr)	Average Tariff for the year (paise per Kwhr)
	<b>LT</b>					
1	Domestic	139922	81.85	4.00	32.74	4.00
2	KJP & BPL Connection	26073	7.15	2.65	1.9	2.66
3	Commercial	18154	25.00	4.75	11.88	4.75
4	Industry (LT)	277	4.1	4.00	1.64	4.00
5	Bulk	-	-			
6	Public Light	1925	8.14	4.85	3.88	4.85
7	Public Water Works	73	5.0	4.85	2.42	4.85
8	Agriculture	-	0			
9	General Purpose	4255	39.48	4.75	18.53	4.75
	<b>Total (LT)</b>	<b>190679</b>	<b>170.10</b>		<b>72.99</b>	<b>4.28</b>
	<b>HT</b>					
1	Industry (HT)	7	114.90	3.40	39.07	3.40
2	Bulk	4863	16.00	3.40	5.44	3.40
<b>3</b>	<b>Total (HT)</b>	<b>195549</b>	<b>130.90</b>		<b>44.51</b>	<b>3.40</b>
	<b>Total (LT+HT)</b>		<b>301</b>		<b>117.53</b>	<b>3.90</b>

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 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 voltage wise break up data.

### 5.16.2 Tariffs & Revenue Assessment

APDOP has assessed the expected Revenue from existing tariffs as approved by the Government of Arunachal Pradesh Department of Power vide notification NO CE (P) EE(Z) SP & C/Tariff/2012-13/756-905 dated Itanagar the 16<sup>th</sup> May 2012.

#### Commissions Views

The APSERC came into existence with effect from 02.03.2011.

The Government of Arunachal Pradesh have notified the Tariff rates effective from midnight of 31.03.2012 in the order dated 16<sup>th</sup> May 2012. APSERC was in existence as on the date of above orders.

The APDOP has filed tariff petition in February 2013 with State Electricity Regulatory Commission for determination of tariffs for the FY 2013-14 considering the tariffs approved by the Government of Arunachal Pradesh.

APSERC, considering the petition filed with reference to the tariffs rates notified by the Government of Arunachal Pradesh accepts the revenue assessed by APDOP for calculation of revenue Gap.

### 5.16.3 Revenue Gap for FY 2013-14:

**Table 5.15: Revenue Gap for FY 2013-14**

	(Rs. crore)
Net ARR for FY 2013-14	392.10
Less: Revenue from existing Tariffs	117.53
Less: Revenue from sale of power to other Distribution Licensee	-
Net revenue Gap	274.57
Add: Revenue anticipated from increase in Tariff rates	6.54
Balance Gap to be addressed	268.03

#### **5.16.4 Regulatory Asset**

APDOP has requested vide para 4.1 of the petition to allow the unadjusted Revenue gap of Rs. 657.91 Cr after taking into account the additional revenue due to proposed increase in tariffs for Rs 34.63 Cr.

##### **Commissions 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 first time after the APERC 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. remaining unadjusted gap. Even if Regulatory Asset is created, it can not 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 out efforts be made to ensure the gradual reduction in net gap between revenue and the budgetary support from the State Govt.

Sl. No.	Category	No. of consumers	Sale in each Slab (MU)	Revised Tariff Rate (paise per kWh)	Amount (crore)	Average Realization for the year (paise per Kwhr)
<b>LT</b>						
1	Domestic	139922	81.85	4.00	32.74	4.00
2	KJP & BPL Connection	26073	7.15	2.65	1.89	2.65
3	Commercial	18154	25.00	5.00	12.50	5.00
4	Industry (LT)	277	4.10	4.20	1.72	4.20
5	Bulk	-	-			
6	Public Light	1925	8.00	5.10	4.08	5.10
7	Public Water Works	73	5.00	5.10	2.55	5.10
8	Agriculture	-	0			
9	General Purpose	4255	39.00	5.00	19.50	5.00
	<b>Total (LT)</b>	<b>190679</b>	<b>170.10</b>		<b>74.98</b>	<b>4.40</b>
<b>HT</b>						
1	Industry (HT)	7	114.90	3.75	43.09	3.75
2	Bulk	4863	16.00	3.75	6.00	3.75
3	<b>Total (HT)</b>	<b>4870</b>	<b>130.90</b>		<b>49.09</b>	<b>3.75</b>
<b>3</b>	<b>Total (LT+HT)</b>	<b>195549</b>	<b>301</b>		<b>124.07</b>	<b>4.12</b>

## Directives

### 6.1 General

It is observed from the Petition filed by APDOP for FY 2013-14, that there are some issues, which need immediate attention of APDOP to improve its efficiency in power delivery and reduce costs. It is in this context, the Commission considered it necessary to issue certain directives to APDOP.

APDOP shall take prompt action on the following directives and submit implementation reports to the Commission from time to time.

### 6.2 Directives for FY 2013-14

#### 6.2.1 Annual Accounts

APDOP is directed to prepare monthly accounts, Annual Profit and Loss Account and Balance Sheet and get audited by C&AG.

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. (Section 185 of EA 2003).

#### 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.

##### Consumers and connected load - category wise energy sales

Sl. No	Category of Consumers	No. of consumers at the end of the year (No s)	Connected load (KW)	Sales (MU)
	<b>LT category</b>			
1	Domestic (DLT) Single phase Three phase			
2	Commercial (CLT) Single phase Three phase			
3	Industrial (ILT) Single phase Three phase			
4	Agriculture			

	Single phase Three phase			
5	Public Lighting (PL) Single phase Three phase			
6	Water supply (WSLT) Single phase Three phase			
7	General Purpose Single phase Three Phase			
8	Kutir Jyoti			
9	Temporary Single phase Three phase			
	<b>HT Category</b>			
10	Water supply (WS HT)			
11	Industrial (IHT) 11 KV 33KV 132 KV			
12	General purpose including Domestic (DHT)			
13	Bulk supply (HT) 11 KV 33 KV 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 registered is given below.

**Fixed Asset Register (Separately to be maintained for Diesel Generation, Transmission & Distribution)**

Sl. No	Name of the asset	Quantity	Date of Commissioning	Cost on Commissioning	Remarks

**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.

**6.2.5 T&D Losses & Conducting Energy Audit**

APDOP has projected T&D loss at 62.06% for the energy requirement for FY 2013-14. Commission considered T&D loss at 53% for FY 2013-14. APDOP should conduct energy audit regularly 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 helps to identify high loss areas so as to take remedial measures. APDOP should prepare a 'Road Map' for reduction of distribution losses indicating the measures proposed to be implemented to achieve the reduction for next three years. Energy audit may be conducted as follows.

**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.

Loss on 220KV system (MU) (i-ii)  
 % loss  $((i-ii)/i) \times 100$

**(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

Loss on 132 KV system (i-ii)  
 % 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

Loss of units (i-ii)  
 % of loss  $((i-ii)/i) \times 100$



**(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

Loss on 11 KV system (i-ii)  
% loss  $((i-ii)/i) \times 100$

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

**1. Total T&D system loss for the State of Arunachal Pradesh**

1. Energy Purchased (in MU)

- i) a) From sources outside the state  
c) Less Transmission Loss on PGCIL network.  
d) Net energy available at the periphery of the state.
- ii) (a) Energy generated and supplied by DHPD  
(b) Diesel Generation
- iii) UI power utilization

Total energy purchased and available  $i(d) + (ii) + (iii) =$

- 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 Static meter by APDOP. Defective meters, if any, in the consumer premises should be identified and replaced on top priority with correct static meter.

### **6.2.8 Replacement of electromagnetic meters with static meters**

Due to ageing, the existing electromagnetic meters might have become sluggish and thus recording less consumption. All such meters, are to be replaced with static 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 Static Meters shall be submitted to the Commission.

### **6.2.9 Repairs and Maintenance**

Repairs and Maintenance expenses 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 2014-15**

APDOP has to buildup required data as directed in directives 6.2.2 and file the ARR and Tariff Petition regularly in complete shape. The ARR and Tariff petition for FY 2014-15 shall be filed by November, 2013 positively.

### **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 a rate as mentioned in Schedule of Fees, ( SI 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 as per the fees prescribed in the APSERC's Fee Regulation-2011 for the following separately within November'2013 :

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

### **6.2.12 Payment of Power Purchase Cost to Deptt. of Hydro Power Development**

The APDOP is directed to make payment to the Deptt. of Hydro Power Development for the power(in Kwh) received by it from them at the rate determined by the Commission. The payment shall be paid by the APDOP for the power received by it wef FY 2013-14.

APDOP is further 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 Reform and Restructuring of Department of Power in Arunachal Pradesh**

Electricity functions covering Transmission and Distribution are being performed by the Department of Power 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 who have to function as independent bodies.

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

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

Security Deposit is to be paid by all the consumers of electricity covering the period of billing cycle and one month.

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

Payment of additional deposit, adjustment of excess or deficit deposit, payment of interest on security deposit is to be done as per the A.P.Electricity Supply Code-2013 notified by the State Commission.

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

The APDOP should conduct a techno-commercial study for assessing the feasibility of introducing Unit Consumed Slab Based Tariff wef FY 2014-15 and the APDOP should make proposal to this effect in their Tariff Petition for the FY 2014-15.

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

**6.2.16** 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. The compliance of the same shall be submitted to the Commission.

## 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 2013-14 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 APERC. 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. APERC (Terms and Conditions for determining of Tariff) Regulation, 2011 provide the MYT framework to be made applicable from the date to be notified by the Commission. However the Commission is not in a position to introduce MYT Regime in the State mainly because of lack of requisite and reliable data with the APDOP. The present MIS and regulatory reporting system of the APDOP is not adequate for any such exercise at this stage. There has been no initiatives 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. The Commission has indicated T&D loss levels to be achieved for years upto 2015-16, maintain correct data, energy audit, and submit to the Commission by November 2013. Under these conditions it would not be practicable to implement the MYT framework this year. The Commission taking into account all factors, has decided to introduce MYT in due course, as soon as the data is made available.

- 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 Proposed by APDOP and Approved by the Commission**

### **7.2.1 Tariff categories**

In the Petition for 2013-14, APDOP has not proposed any changes in the existing categories of consumers and tariff structure. The Commission considers, retaining the existing categories as stated below:

1. (a) Kutir Jyoti  
(b) Domestic LT  
(c) Domestic HT
2. (a) Commercial LT  
(b) Commercial HT
3. (a) Public Lighting & Water works LT  
(b) Public Lighting & Water Works HT
5. (a) Agricultural LT  
(b) Agricultural HT
6. (a) Industrial LT  
(b) Industrial HT
7. Bulk Supply HT
8. Temp Supply

### **7.2.2 Existing and Proposed Tariff**

APDOP in its tariff petition has proposed for revision of the existing retail tariffs to various categories of consumers to earn additional revenue of Rs. 35.11 Crore to meet the gap partially for FY 2013-14 as shown below: The APDOP has proposed tariff revision in energy charges only resulting increase varying from 20 to 40% across various categories and overall increase of 32 %.

**Table 7.1 Comparison of Existing Tariff with Tariff Proposed by APDOP**

Sl. No.	Category	Existing Tariff (Rs./ KWh) FY12-13	Proposed Tariff (Rs./ KWh) FY13-14	%age increase in the existing tariff
<b>1</b>	<b>Non Commercial Consumers (Domestic)</b>			
	<b>LT</b>			
	a) AC 50Hz,1-Phase, 230 Volt nominal Voltage	4.00	4.80	20.0
	b) AC 50Hz,3-Phase, 400 Volt nominal Voltage	4.00	4.80	20.0
	<b>HT</b>			
	c) AC 50Hz,3-Phase, 11KV nominal Voltage	3.40	4.40	29.4
	d) AC 50Hz,3-Phase, 33KV nominal Voltage	3.25	4.20	29.2
	<b>KJP &amp; BPL connection</b>			
	e) AC 50Hz,1-Phase, 230 Volt KJP & BPL connection	2.65	3.20	20.7
<b>2</b>	<b>Commercial Consumers (Non-Industrial)</b>			
	<b>LT</b>			
	a) AC 50Hz,1-Phase, 230 Volt nominal Voltage	4.75	6.10	28.4
	b) AC 50Hz,3-Phase, 400 Volt nominal Voltage	4.75	6.20	30.5
	<b>HT</b>			
	c) AC 50Hz,3-Phase, 11KV nominal Voltage	4.00	5.20	30.0
	d) AC 50Hz,3-Phase, 33KV nominal Voltage	3.80	4.95	30.3
<b>3</b>	<b>Public Lighting and Water Supply Consumers</b>			
	<b>LT</b>			
	a) AC 50Hz,1-Phase, 230 Volt nominal Voltage	4.85	5.80	19.6
	b) AC 50Hz,3-Phase, 400 Volt nominal Voltage	4.85	5.80	19.6
	<b>HT</b>			
	c) AC 50Hz,3-Phase, 11KV nominal Voltage	4.00	4.80	20.0
	d) AC 50Hz,3-Phase, 33KV nominal Voltage	3.80	4.55	19.7
<b>4</b>	<b>Agricultural Consumers</b>			
	<b>LT</b>			
	a) AC 50Hz,1-Phase, 230 Volt nominal Voltage	3.10	3.70	19.3
	b) AC 50Hz,3-Phase, 400 Volt nominal Voltage	3.10	3.70	19.3
	<b>HT</b>			
	c) AC 50Hz,3-Phase, 11KV nominal Voltage	2.75	3.30	20.0
	d) AC 50Hz,3-Phase, 33KV nominal Voltage	2.65	3.20	20.7
<b>5</b>	<b>Industrial Consumers</b>			
	<b>LT</b>			
	a) AC 50Hz,1-Phase, 230 Volt nominal Voltage	4.00	5.60	40.0
	b) AC 50Hz,3-Phase, 400 Volt nominal Voltage	4.00	5.60	40.0

	<b>HT</b>				
	c)	AC 50Hz,3-Phase, 11KV nominal Voltage	3.40	4.75	39.7
	d)	AC 50Hz,3-Phase, 33KV nominal Voltage	3.10	4.35	40.3
	e)	AC 50Hz,3-Phase, 132 KV nominal Voltage and above	2.95	4.15	40.6
	<b>6</b>	<b>Bulk Mixed Consumers</b>			
	a)	AC 50Hz,3-Phase, 11KV nominal Voltage	3.40	4.75	39.7
	b)	AC 50Hz,3-Phase, 33KV nominal Voltage	3.10	4.35	40.3
	c)	AC 50Hz,3-Phase, 132 KV nominal Voltage and above	2.95	4.15	40.6
	<b>7</b>	<b>Temporary Consumers</b>			
	a)	Metered Supply Rs./KWH	6.05	8.45	39.6

### 7.2.3 Tariff Approved by the Commission

The Commission after detailed analysis and prudent scrutiny of the aggregate revenue requirement filed by the APDOP and after consideration of Public Hearing, advise put forward by SAC and the tariff of other NE States has arrived at a more realistic revenue requirement.

The Commission considering the Petition filed with lots of data gap, observed that the cost of power purchase and employee expenses have increased over the actual expenditure of FY 2011-12. In view of the above escalations in the costs, the Commission considers it appropriate to allow the petitioner to recover the costs to certain extent through retail tariffs for supply of energy. Having approved the Annual Revenue Requirement (ARR) vide para 5.16 of chapter-5, the Commission considers revision of retail tariffs duly segregated for LT & HT categories with an overall increase in energy charges by about 5.24% as shown below:

Tariff proposed and approved by the Commission are shown in Table 7.2.

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 7.2: Comparison of Tariff Proposed by APDOP with Tariff Approved by the Commission**

**TARIFF PROPOSED & APPROVED**

<b>Sl. No.</b>	<b>Category</b>	<b>Proposed Tariff (Rs. KWH)</b>	<b>Approved Tariff for FY 2013-14 (Rs. KWh)</b>
<b>1</b>	<b>Non Commercial Consumers (Domestic)</b>		
	<b>LT</b>		
	a) AC 50Hz,1-Phase, 230 Volt nominal Voltage	4.80	4.00
	b) AC 50Hz,3-Phase, 400 Volt nominal Voltage	4.80	4.00
	<b>HT</b>		
	c) AC 50Hz,3-Phase, 11KV nominal Voltage	4.40	3.40
	d) AC 50Hz,3-Phase, 33KV nominal Voltage	4.20	3.25
	<b>KJP &amp; BPL connection</b>		
	e) AC 50Hz,1-Phase, 230 Volt KJP & BPL connection	3.20	2.65
<b>2</b>	<b>Commercial Consumers (Non-Industrial)</b>		
	<b>LT</b>		
	a) AC 50Hz,1-Phase, 230 Volt nominal Voltage	6.10	5.00
	b) AC 50Hz,3-Phase, 400 Volt nominal Voltage	6.20	5.00
	<b>HT</b>		
	c) AC 50Hz,3-Phase, 11KV nominal Voltage	5.20	4.20
	d) AC 50Hz,3-Phase, 33KV nominal Voltage	4.95	4.00
<b>3</b>	<b>Public Lighting and Water Supply Consumers</b>		
	<b>LT</b>		
	a) AC 50Hz,1-Phase, 230 Volt nominal Voltage	5.80	5.10
	b) AC 50Hz,3-Phase, 400 Volt nominal Voltage	5.80	5.10
	<b>HT</b>		
	c) AC 50Hz,3-Phase, 11KV nominal Voltage	4.80	4.20
	d) AC 50Hz,3-Phase, 33KV nominal Voltage	4.55	4.00
<b>4</b>	<b>Agricultural Consumers</b>		
	<b>LT</b>		
	a) AC 50Hz,1-Phase, 230 Volt nominal Voltage	3.70	3.10
	b) AC 50Hz,3-Phase, 400 Volt nominal Voltage	3.70	3.10
	<b>HT</b>		
	c) AC 50Hz,3-Phase, 11KV nominal Voltage	3.30	2.75
	d) AC 50Hz,3-Phase, 33KV nominal Voltage	3.20	2.65
<b>5.</b>	<b>Industrial Consumers</b>		
	<b>LT</b>		
	a) AC 50Hz,1-Phase, 230 Volt nominal Voltage	5.60	4.20
	b) AC 50Hz,3-Phase, 400 Volt nominal Voltage	5.60	4.20
	<b>HT</b>		



Sl. No.	Category	Proposed Tariff (Rs. KWH)	Approved Tariff for FY 2013-14 (Rs. KWH)
c)	AC 50Hz,3-Phase, 11KV nominal Voltage	4.75	3.75
d)	AC 50Hz,3-Phase, 33KV nominal Voltage	4.35	3.40
e)	AC 50Hz,3-Phase, 132 KV nominal Voltage and above	4.15	3.25
<b>6</b>	<b>Bulk Mixed Consumers</b>		
a)	AC 50Hz,3-Phase, 11KV nominal Voltage	4.75	3.75
b)	AC 50Hz,3-Phase, 33KV nominal Voltage	4.35	3.40
c)	AC 50Hz,3-Phase, 132 KV nominal Voltage and above	4.15	3.25
<b>7</b>	<b>Temporary Consumers</b>		
a)	Metered Supply Rs./KWH	8.45	6.35

The average cost of supply has been worked out at Rs. 13.03 per kWh against Rs. 25.73 per kWh projected by the APDOP. The minimum charges for different categories and miscellaneous charges as in force are retained for the FY 2013-14 also.

**This order shall come into force with effect from 01.04.2013 and shall remain effective till revised/amended by the Commission. The billing arrears may be adjusted in three equal installments in the electricity bills of next three months.**

***The order shall be given wide publicity by the petitioner for information of the general public.***

Sd/-  
CHAIRPERSON

Place: Naharlagun

Date: 30<sup>th</sup> May'2013

**SCHEDULE – I**  
**TARIFFS, 2013**

**CATEGORY – I**

**NON-COMMERCIAL CONSUMERS (DOMESTIC)**

**A) Definition:** The consumers under this category are defined as consumers using the electrical energy for domestic and non profit 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.

<b>System of supply &amp; Metering Point</b>	<b>Tariff (Rs. / Kwh)</b>	<b>Minimum Charges (in Rs./month)</b>
<b>LT</b>		
AC 50Hz, 1 - Phase, 230 Volt nominal Voltage	4.00	32 per KW
AC 50Hz, 3 - Phase, 400 Volt nominal Voltage	4.00	53 per KW
AC 50Hz, 1 - Phase, 230 Volt KJP & BPL connections	2.65	53 per connection
<b>HT</b>		
AC 50Hz, 3 - Phase, 11 KV nominal Voltage	3.40	168 per KW
AC 50Hz, 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.

System of supply & Metering Point	Tariff (Rs. / Kwh)	Minimum Charges (in Rs./month)
<b>LT</b>		
AC 50Hz, 1 - Phase, 230 Volt nominal Voltage	5.00	32 per KW
AC 50Hz, 3 - Phase, 400 Volt nominal Voltage	5.00	53 per KW
<b>HT</b>		
AC 50Hz, 3 - Phase, 11 KV nominal Voltage	4.20	168 per KW
AC 50Hz, 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.

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

System of supply & Metering Point	Tariff (Rs. / Kwh)	Minimum Charges (in Rs./month)
<b>LT</b>		
AC 50Hz, 1 - Phase, 230 Volt nominal Voltage	3.10	32 per KW
AC 50Hz, 3 - Phase, 400 Volt nominal Voltage	3.10	53 per KW
<b>HT</b>		
AC 50Hz, 3 - Phase, 11 KV nominal Voltage	2.75	168 per KW
AC 50Hz, 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.

<b>System of supply &amp; Metering Point</b>	<b>Tariff (Rs. / Kwh)</b>	<b>Minimum Charges (in Rs./month)</b>
<b>LT</b>		
AC 50Hz, 1 - Phase, 230 Volt nominal Voltage	4.20	32 per KW
AC 50Hz, 3 - Phase, 400 Volt nominal Voltage	4.20	32 per KW
<b>HT</b>		
AC 50Hz, 3 - Phase, 11 KV nominal Voltage	3.75	168 per KW
AC 50Hz, 3 - Phase, 33 KV nominal Voltage	3.40	134 per KW
AC 50Hz, 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.

<b>System of supply &amp; Metering Point</b>	<b>Tariff (Rs. / Kwh)</b>	<b>Minimum Charges (in Rs./month)</b>
<b>HT</b>		
AC 50Hz, 3 - Phase, 11 KV nominal Voltage	3.75	168 per KW
AC 50Hz, 3 - Phase, 33 KV nominal Voltage	3.40	134 per KW
AC 50Hz, 3 - Phase, 132 KV nominal Voltage & above	3.25	101 per 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:

- a) 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.
- b) 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 system:**

- a) Single phase, 50Hz, 230 Volts.
- b) 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.

**Note:**

- 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 replacement.

<b>a. LT Metering:</b>	<b>Rs. Per Month</b>
i. Energy meter for AC Single phase LT supply:	16.00
ii. Energy meter for AC Three supply 400 V between phases (without CT):	26.00
iii. Energy meter for AC Three Phase supply 400 V between phases (with CT)	68.00

<b>b. HT Metering:</b>	<b>Rs. Per Month</b>
i. 11 KV system Complete Energy meter with CT/PT & other monitoring and indication requirement for AC Three phase HT supply	670.00
ii. 33 KV system	3350.00
iii. 132 KV & above	13401.00

**c. Other Charges for Meter:**

- i. Rs. 168.00 per shifting if resulted from reconstruction / modification of building and on the request of the consumer.
- ii. Free of cost if the shifting is in the interest of the department.

2. **Replacement of the energy meter and its associated fittings and equipment:**

- i. The supplier shall replace the meters & the allied fitting & the equipments 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 equipments.



- 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:**

a. For AC Single Phase LT Energy Meter	Rs. 134.00
b. For energy meter without CT for AC three phase LT supply	Rs. 202.00
c. For energy meter with CT for AC three phase LT supply	Rs. 336.00
d. For energy meter AC three phase HT supply	Rs. 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.

- a. 1 phase service wiring installations Rs. 202/- per installation.
- b. 3 phase service wiring installations Rs. 320/- per installation.
- c. HT Line installation 11 KV system Rs. 670/- per installation.
  - i. 33 KV & above system Rs. 1336/- per installation.

**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.

- |                                 |                          |
|---------------------------------|--------------------------|
| a. All categories of connection | Rs. 134/- per connection |
| b. Disconnection only           | Rs. 134/- per connection |

**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 15% departmental charges. If the consumer intends to supply

the materials, then the 15% 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. Meter Security: (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.

- i. For AC single phase LT supply of connected load: Rs. 1336/-
- ii. For AC three phase LT supply of connected  
(without CT) load: Rs. 2681/-
- iii. For AC three phase LT supply CT operated Rs. 4691/-
- iv. For AC three phase HT supply, CT & PT operated Rs. 33448/-

**8. 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
1.	<b><u>Domestic Category:</u></b> LT 230 Volts LT 440 Volts HT 11KV HT 33 KV KJP	Rs. 1728.00 Rs. 1728.00 Rs. 1469.00 Rs. 1404.00 Nil as per Govt. Policy
2.	<b><u>Commercial Category:</u></b> LT 230 Volts LT 440 Volts HT 11KV HT 33 KV	Rs. 3600.00 Rs. 3600.00 Rs. 3024.00 Rs. 2880.00
3.	<b><u>Public Lighting:</u></b> LT 230 Volts LT 440 Volts 11KV 33 KV	Rs. 2938.00 Rs. 2938.00 Rs .2419.00 Rs. 2304.00
4.	<b><u>Agricultural Consumers:</u></b> LT 230 Volts LT 440 Volts 11KV HT 33 KV HT	Rs. 1473.00 Rs. 1473.00 Rs. 1307.00 Rs. 1259.00
5	<b><u>Industrial Consumers:</u></b> LT 230 Volts LT 440 Volts HT 11 KV – Single shift HT 11 KV – Double shift HT 11 KV – Continuous	Rs. 3024.00 Rs. 3024.00 Rs. 2700.00 Rs. 4050.00 Rs. 5400.00
6.	<b><u>Industrial Consumers:</u></b>	

	HT 33KV – Single shift	Rs. 2448.00
	HT 33KV – Double shift	Rs. 3672.00
	HT 33KV – Continuous	Rs. 4896.00
7.	<b><u>Industrial Consumers:</u></b> <b><u>132 KV &amp; Above</u></b> Single shift	Rs. 2340.00
	Double shift	Rs. 3510.00
	Continuous	Rs. 4680.00
8.	<b><u>Bulk Mixed Consumers:</u></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><u>Public Water Supply</u></b> LT (220 V & 400 V )	Rs. 2424.00
	HT 11 KV	Rs. 1996.00
	HT 33 KV	Rs. 1901.00

**9. 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.

**Application for Connection:** The Consumer shall apply for service connection to the nearest Assistant Engineer (Electrical) intimating details of demand, location etc.

2. **Penalty:** 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. 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.

**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.
  - i. AE (E) up to 5 KW of connected load 1,2,3,4,5 & 7
  - ii. EE up to 50 KW of connected load 1,2,3,4,5 & 7
  - iii. SE up to 500 KW of connected load 1,2,3,4,5,6 & 7
  - iv. CE Full power of connected load 1,2,3,4,5,6&7
- b. Security deposit and cost of service connection shall have to be deposited in advance on receipt of technically sanctioned estimate.

3. **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.
4. **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.

5. **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 and specific load sanction shall be made by competent authority of the supplier.
6. **Metering Point:** The metering point shall be the point of delivery of energy at the declared nominal voltage.
7. **Billing Cycle:** Normally the billing cycle shall on monthly basis.
8. **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 minimum charge shall not be payable when the energy bill is above the calculated minimum charge. 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.
9. **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

10. **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.
11. **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.
12. **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 i/c the meter box shall be as per clause 9 and 10 of this tariff notification.

13. 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.
14. All the existing connections / agreements in force 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.