

**PETITION FOR APPROVAL OF
THE ANNUAL
REVENUE REQUIREMENT AND
TARIFF PROPOSAL
FOR FY 2015-16
UNDER SECTION 61, 62 & 64
OF
THE ELECTRICITY ACT 2003**

Submitted by:
Department of Power, Arunachal Pradesh

GENERAL HEADINGS OF PROCEEDINGS

**BEFORE HON'BLE ARUNACHAL PRADESH STATE ELECTRICITY REGULATORY
COMMISSION**

FILE No: _____

CASE No: _____

IN THE MATTER OF : **Petition for Approval of Annual Revenue Requirement
(ARR) and Tariff Proposal for FY 2015-16 for The State of
Arunachal Pradesh under Sections 61, 62 and 64 of The
Electricity Act 2003**

AND

IN THE MATTER OF : **The Department of Power, Vidyut Bhawan,
THE PETITIONER Itanagar, Arunachal Pradesh**

.....Petitioner

Department of Power, Govt. of Arunachal Pradesh (hereinafter referred to as "DOP,AP"), files petition for Approval of Annual Revenue Requirement (ARR) and Tariff Proposal for FY 2015-16 under Sections 61, 62 and 64 of The Electricity Act.

A F F I D A V I T

**BEFORE HON'BLE ELECTRICITY REGULATORY COMMISSION
FOR THE STATE OF ARUNACHAL PRADESH**

FILE No: _____

CASE No: _____

IN THE MATTER OF : Petition for Approval of Annual Revenue Requirement (ARR) and Tariff Proposal for FY 2015-16 for The State of Arunachal Pradesh under Sections 61, 62 and 64 of The Electricity Act 2003

AND

**IN THE MATTER OF : The Department of Power, Vidyut Bhawan,
THE PETITIONER
Itanagar, Arunachal Pradesh**

.....Petitioner

I _____, son of _____ (aged _____ years),
(occupation) Government Service residing at (_____), the
deponent named above do hereby solemnly affirm and state on oath as under:-

1. That the deponent is the _____ of the Department of Power, Government of Arunachal Pradesh, and is acquainted with the facts deposed to below.

2. I, the deponent named above do hereby verify that the contents of the accompanying petition are based on the records of the Department of Power, Government of Arunachal Pradesh maintained in the ordinary course of business and believed by them to be true and I believe that no part of it is false and no material has been concealed there from.

Details of enclosures:

- a) Proposal for Aggregate Revenue Requirement (“ARR”) for the Financial Year 2015-16 for Determination of Tariff.
- b) Annexures-
- c) Petition Fee – Rs.5,00,000/-(Rupees Five Lacs only), vide DD No. _____ dated _____

**The Department of Power, Govt. of
Arunachal Pradesh.**

Petitioner

Place: Itanagar

Dated:

I, _____ Advocate, Itanagar, do hereby declare that the person making this affidavit is known to me through the perusal of records and I am satisfied that he is the same person alleging to be deponent himself.

Advocate

Solemnly affirmed before me on this day of 2014 at a.m./p.m. by the deponent who has been identified by the aforesaid Advocate. I have satisfied myself by examining the deponent that he understood the contents of the affidavit which has been read over and explained to him. He has also been explained about section 193 of Indian Penal Code that whoever intentionally gives false evidence in any of the proceedings of the Commission or fabricates evidence for purpose of being used in any of the proceedings shall be liable for punishment as per law.

**BEFORE HON'BLE ELECTRICITY REGULATORY COMMISSION
FOR THE STATE OF ARUNACHAL PRADESH**

FILE No: _____

CASE No: _____

IN THE MATTER OF : **Petition for Approval of Annual Revenue Requirement (ARR) and Tariff Proposal for FY 2015-16 for the State of Arunachal Pradesh under Sections 61, 62 and 64 of The Electricity Act 2003.**

AND

**IN THE MATTER OF: The Department of Power, Vidyut Bhawan,
THE PETITIONER Itanagar, Arunachal Pradesh.**

.....Petitioner

PETITIONER, UNDER SECTIONS 61, 62 AND 64 OF THE ELECTRICITY ACT, 2003 FILES FOR INITIATION OF PROCEEDINGS BY THE HON'BLE COMMISSION FOR DECIDING ON THE MATTERS CONCERNING THE APPROVAL OF THE ANNUAL REVENUE REQUIRMENT AND TARIFF PETITION OF DEPARTMENT OF POWER OF THE STATE OF ARUNACHAL PRADESH (herein after referred to as "DOP,AP") FOR FY 2015-16.

**THE DEPARTMENT OF POWER, GOVERNMENT OF ARUNACHAL PRADESH
RESPECTFULLY SUBMITS:**

1. The Petitioner, The Department of Power, Government of Arunachal Pradesh has been allowed to function as Distribution Utility for The State of Arunachal Pradesh.
2. Pursuant to the enactment of the Electricity Act, 2003, DOP,AP is required to submit its Annual Revenue Requirement (ARR) and Tariff Petitions as per procedures outlined in section 61, 62 and 64, of EA 2003, and the governing regulations thereof.
3. The Hon'ble Commission has notified the APERC (Multi Year Tariff) Regulations, 2013 but the DOP, AP has prepared the petition in accordance with the APERC ((Terms and Conditions of Determination of Tariff and Formats for Tariff Filing) Regulations,

2011 as the details/documents required under the MYT Regulations are not readily available. DOP, AP has taken steps to maintain the details as required by the MYT Regulation. The DOP, AP shall file the tariff petition as per the MYT Regulations from the next financial Year.

4. The Hon'ble Commission may kindly condone the same and accept the petition for the FY 2015-16 filed in accordance with the APSERC ((Terms and Conditions of Determination of Tariff and Formats for Tariff Filing) Regulations, 2011.
5. DOP,AP has submitted its ARR and Tariff petition for the determination of tariff for FY 2015-16 on the basis of the principles outlined in tariff regulations notified by the Arunachal Pradesh State Electricity Regulatory Commission.
6. DOP,AP prays to the Hon'ble Commission to admit the attached petition for Annual Revenue Requirement and Tariff petition for FY 2015-16 and would like to submit that:

PRAYERS TO THE HON'BLE COMMISSION:

1. The petition provides, inter-alia, DOP,AP's approach for formulating the present petition, the broad basis for projections used, summary of the proposals being made to the Hon'ble Commission, performance of DOP,AP in the recent past, and certain issues impacting the performance of DOP,AP in the Licensed Area.
2. Broadly, in formulating the ARR and Tariff Petition for the FY 2015-16, the principles specified by the Arunachal Pradesh State Electricity Regulatory Commission in the notified (Terms and Conditions of Tariff) Regulations ("Tariff Regulations") have been considered as the basis.
3. In order to align the thoughts and principles behind the ARR and Tariff Petition, DOP,AP respectfully seeks an opportunity to present their case prior to the finalization of the Tariff Order. DOP,AP believes that such an approach would go a long way towards providing a fair treatment to all the stakeholders and may eliminate the need for a review or clarification.
4. DOP,AP may also be permitted to propose suitable changes to the ARR petition and the mechanism of meeting the revenue on further analysis, prior to the final approval by the Hon'ble Commission.

In view of the above, the petitioner respectfully prays that Hon'ble Commission may:

- Accept the Annual Revenue Requirement and Tariff petition for the FY 2015-16 for DOP,AP formulated in accordance with the guidelines outlined as per the regulation of Hon'ble Arunachal Pradesh Electricity Regulatory Commission relating to Distribution Licensee and the principles contained in Tariff Regulations ;
- Approve partial recovery of ARR of FY 2015-16;
- Approve the category-wise tariff charges submitted by DOP,AP to meet revenue requirement for FY 2015-16;
- Approve the tariff philosophy suggestions requested by DOP,AP;
- Condone any inadvertent delay/ omissions/ errors/ rounding off differences/ shortcomings and DOP,AP may please be permitted to add/ change/ modify/ alter the petition;
- Permit DOP,AP to file additional data/ information as may be necessary;
- Pass such further and other orders, as the Hon'ble Commission may deem fit and proper, keeping in view the facts and circumstances of the case.

The Department of Power, Govt. of Arunachal Pradesh

Petitioner

Place: Itanagar, Arunachal Pradesh

Dated:

LIST OF CONTENT

1 INTRODUCTION	1
1.1 Historical Perspective	1
1.2 APSERC Formation.....	1
1.3 Filing of ARR and Tariff Petition for the FY 2015-16	2
2. OVERALL APPROACH FOR PRESENT FILING.....	3
2.1 Annual Revenue Requirement and Tariff Petition for FY 2015-16	3
2.2 Approach for the Filing	3
3. ANNUAL REVENUE REQUIREMENT FOR FY 2015-16.....	4
3.1 : Energy Requirement	4
3.1.1 : Approach for Sales Projection	4
3.1.2 : Category wise Sales Forecast.....	5
3.1.3 : Billed Demand & Number of Consumers	5
3.1.4 : Distribution Losses	6
3.1.5 : Energy Requirement & Sources of Power Purchase	6
3.2 : Capital Expenditure & Capitalisation	7
3.2.1: Capital Expenditure & Capitalisation of Assets	7
3.3 : Annual Revenue Requirement for DOP,AP	8
3.3.1: Power Purchase	8
3.3.1.1: Source of Power.....	8
3.3.2 : Assumption for Power Purchase Projection.....	9
3.3.3 : Power purchase from CGS Stations.....	10
3.3.4 : External Power Purchase/ Other Sources	10
3.3.5 : Transmission and Other Charges	11
3.4 : Operation and Maintenance Expenses.....	11
3.4.1 : Employee Expenses	11
3.4.2 : Administration and General Expenses	12
3.4.3 : Repairs and Maintenance Expenses	13
3.5 : Gross Fixed Assets	13
3.6 : Depreciation.....	14
3.7 : Capital Base Return.....	14
3.8 : Return on Equity	15
3.9.1: Interest and Finance Charges.....	16
3.9.2 : Interest on Working Capital	17
3.10 : Provision for Bad and Doubtful Debts.....	18
3.11 : Non-Tariff Income	18
3.12 : Annual Revenue Requirement	19
3.13 : Average Cost to Supply	19
3.14: Revenue at Existing Tariff and Gap for FY 2015-16	19
4 : TARIFF PROPOSAL FOR FY 2015-16.....	20
4.1 : Recovery of Revenue Gap for FY 2015-16.....	21
4.2 : Proposed Tariff in FY 2015-16	21
4.2.1: Tariff Proposal for FY 2015-16.....	21
4.3 : Revenue at Proposed Tariff in FY 2015-16.....	23
4.3.1: Impact of Tariff on Consumers	24
5 : TARIFF SCHEDULE – FY 2015-16.....	24

LIST OF TABLES

Table 3.1: Projected Energy Sales – FY 2015-16	5
Table 3.2: No. of Consumers – FY 2015-16.....	5
Table 3.3: Energy Requirement – FY 2015-16	6
Table 3.4: Details of Power Procurement Sources – FY 2015-16	7
Table 3.5: Summary of Proposed Capital Expenditure & Capitalisation FY 2015-16.....	8
Table 3.6: Actual & Projected Power Purchase from ISGS (FY 2013-14 to FY 2015-16)	9
Table 3.7: Summary of DOP,AP Power Purchase Expenses for FY 2015-16	10
Table 3.8: Operation & Maintenance Expenses for FY 2015-16.....	11
Table 3.9: Employee Cost for FY 2015-16.....	12
Table 3.10: Administrative & General Expenses for FY 2015-16.....	12
Table 3.11: Repair & Maintenance Expenses for FY 2015 16.....	13
Table 3.12: Gross Fixed Assets Movement	13
Table 3.13: Depreciation – FY 2015-16	14
Table 3.14: Capital Base Return.....	15
Table 3.15: Equity Detail for FY 2012-13 & FY 2015-16.....	16
Table 3.16: Return on Equity for FY 2015-16.....	16
Table 3-17: Interest & Finance Charges for FY 2015-16.....	17
Table 3.18: Information regarding Working Capital for the current and ensuing year.....	18
Table 3.19: ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2015-16.....	19
Table 3.20: Revenue at Existing Tariff – FY 2015-16.....	20
Table 3.21: Revenue GAP at Existing Tariffs – FY 2015-16.....	20
Table 4.1: Tariff Schedule –Existing v/s Proposed Tariff.....	22
Table 4.2: Revenue at Existing & Proposed Tariff.....	23
Table 4.3: Impact of Tariff Hike FY 2015-16	24

LIST OF ABBREVIATIONS

Abbreviation	Description
A&G	Administration & General
ARR	Annual Revenue Requirement
ATE	Appellate Tribunal For Electricity
CAGR	Compound Annual Growth Rate
CD	Contract Demand
CERC	Central Electricity Regulatory Commission
CGS	Central Generating Stations
CoS	Cost of Supply
CPSU	Central Power Sector Undertakings
Crs	Crore
D/E	Debt Equity
DOP,AP	Department of Power, Govt. of Arunachal Pradesh
EHT	Extra High Tension
ER	Eastern Region
FAC	Fuel Adjustment Costs
FDR	Fixed Deposits Receipts
FSTPS	Farakka Super Thermal Power Station
FY	Financial Year
GFA	Gross Fixed Assets
HP	Horse Power
HT	High Tension
APSERC	Arunachal Pradesh State Electricity Regulatory Commission
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

Abbreviation	Description
NHPC	National Hydroelectric Power Corporation
NTPC	National Thermal Power Station
O&M	Operation & Maintenance
PGCIL	Power Grid Corporation of India Limited
PLF	Plant Load Factor
PLR	Prime Lending Rate
R&M	Repairs and Maintenance
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
ONGC	Oil and Natural Gas Corporation



1. INTRODUCTION

1.1 Historical Perspective

The Department of Power of The State of Arunachal Pradesh is responsible for power supply in the state of Arunachal Pradesh. DOP,AP receives around 61.22 MUs of power from Arunachal Pradesh Hydro Power Department. Apart from this, the entire power requirement for DOP,AP is met through its share from Central Sector Power generation, which is wheeled through the PGCIL network of North Eastern region and power purchases from electricity traders/ other sources. It also has small diesel generating units with annual generation of 0.89 MUs (approx.)

The total area of the State of Arunachal Pradesh is 83573 sq. kms. The State is having a population of around 13.82 lacs as per 2011 census. The State of Arunachal Pradesh is bounded by Assam in South, Bhutan in West, China in North, and Nagaland & Myanmar in East. Its Capital Itanagar is about 380 kms from Guwahati.

The present demand for Arunachal Pradesh is being met by power from various central generating stations, and power from Arunachal Pradesh Hydro Power Department. DOP,AP has about 1,93,510 consumers with an annual energy consumption of about 309.02 MUs for the FY 2013-14. These consumers can be broadly classified into following four categories:

- Domestic (84.57 %)
- Commercial (9.08 %)
- Industrial both HT & LT (0.16 %)
- Others Public lighting, water works etc. (6.18 %)

1.2 APSERC Formation

In exercise of the powers conferred by the Electricity Act 2003 the Government Of Arunachal Pradesh constituted a Electricity Regulatory Commission to be known as “Arunachal Pradesh State Electricity Regulatory Commission ” as notified on 7th May,2010.

The Hon’ble Commission 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 Hon’ble Commission are as prescribed in the Electricity Act 2003. The Head Office of the Commission presently is located at Naharlagun, Arunachal Pradesh.



The Arunachal Pradesh State Electricity Regulatory Commission started to function with effect from 2nd March, 2011 with the objectives and purposes for which the Commission has been established. Presently, the Hon'ble Commission is framing various regulations as mandated in the Electricity Act 2003 to facilitate its functioning. The Hon'ble Commission has already issued following regulations:

- 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. Terms and Conditions for Determining of Tariff and Formats for Tariff Filing Regulations – 2011
- vii. Terms and Conditions for Tariff Determination From Renewable Energy Sources Regulations – 2012
- viii. Renewable Power Purchase Obligation And Its Compliance Regulations – 2012
- ix. Redressal of Grievances & Ombudsman Regulation (1st Amendment) – 2012
- x. Multi Year Tariff (MYT) Regulation 18th October 2013

1.3 Filing of ARR and Tariff Petition for the FY 2015-16

Under the provisions of Electricity Act, 2003, Licensee is required to submit its ARR and Tariff Petition as per procedures outlined in section 61, 62 and 64 of EA 2003, and the governing regulations of APSERC thereof.

Previously electricity tariff was determined departmentally by government notification. DOP,AP has adopted the principles of Terms and Conditions for Determination of Tariff and Formats for Tariff Filing Regulations, 2011 notified on 18th November, 2011 by the Arunachal Pradesh State Electricity Regulatory Commission from the financial year 2013-14.

Accordingly, DOP,AP in the present petition is filing to the Hon'ble Commission for approval of the Annual Revenue Requirement (ARR) and Determination of Tariff for the FY 2015-16 as the Licensee as per the Electricity Act, 2003 and Terms and Conditions for Determination of Tariff and Formats for Tariff Filing Regulations, 2011.

Further, the actual performance for FY 2013-14 & FY 2014-15 has been considered as base for computation of ARR for FY 2015-16. Further, the ARR for FY 2015-16 is also formulated accordingly.



2. OVERALL APPROACH FOR PRESENT FILING

2.1 Annual Revenue Requirement and Tariff Petition for FY 2015-16

DOP,AP is filing the petition for the determination of Annual Revenue Requirement and Tariff Petition for the FY 2015-16 based on the past performance and expected changes in each element of cost and revenue for the ensuing year. DOP,AP has studied the past trends and taken cognizance of other internal and external developments to estimate the likely performance for FY 2015-16

2.2 Approaches for the Filing

The present filing for the Annual Revenue Requirement and Tariff Petition for the FY 2015-16 is based on the principles enumerated by the Hon'ble Arunachal Pradesh State Electricity Regulatory Commission (APSERC) in the Terms and Conditions for determining of Tariff Regulations, 2011 notified by the APSERC. The subsequent sections provide projection for various expenses, the proposed investment plan for the year and the expected revenue projections with existing tariff for FY 2015-16 based on various tariff notifications in force in the area of supply of DOP,AP.

Projections of various cost components required for determination of Aggregate Revenue Requirement for FY 2015-16 along with the rationale for estimation of such cost, the philosophy adopted by DOP,AP for projecting sales, number of consumers and power purchase cost for FY 2015-16 has been covered in this section.

For the purpose of projecting the financial & technical parameters for FY 2015-16, DOP,AP has considered its actual performance during FY 2013-14 as base and has projected the figures for FY 2015-16 with supporting rationales.

This section outlines the Annual Revenue Requirement of the DOP,AP for FY 2015-16, which takes into consideration:

- i. Actual Performance in FY 2013-14;
- ii. Estimated performance in FY 2014-15;
- iii. Projection for FY 2015-16 based on the Actual performance in FY 2013-14 & Estimated performance for FY 2014-15;
- iv. Principles outlined in Tariff Regulations of APSERC;

Past trends have been taken into cognizance in case of certain elements as deemed necessary. The present section has been structured in the following manner:

- Determination of Energy Requirement
 - o Sales Projections
 - o Loss Trajectory
 - o Energy Balance



- Proposed Capital Expenditure and capitalization
 - Scheme wise details
 - Capital Expenditure
 - Asset Capitalisation

- Determination of the Annual Revenue Requirement
 - Power Purchase Costs & Fuel Cost
 - Operation and Maintenance Expenses
 - Administration & General expenses
 - Depreciation
 - Interest charges (including interest on working capital)
 - Return on NFA/Equity
 - Provision for Bad and Doubtful Debts
 - Return on Equity

3. Annual Revenue Requirement for FY 2015-16.

3.1 Energy Requirement

The energy requirement of the licensee area is determined based on the expected sales in the area during the period under consideration and the expected distribution losses in the network. Accordingly, the energy requirement projected by the DOP,AP for the FY 2015-16 is as given in the succeeding paragraphs.

3.1.1 Approach for Sales Projection

The consumer base of DOP,AP consists of mainly Domestic consumers, Commercial and Industry. Sales mix is primarily dominated by Domestic & Industrial consumers, followed by Commercial Consumers. The total consumption for Domestic consumers is approximate 35 percent and Industrial & Commercial consumers contribute around 19 percent and 10 percent respectively of total sales. Rest is contributed by other categories of consumers. Thus, the sales forecast would mainly depend on the sales expected in the Domestic, Industrial & Commercial consumer's categories.

The sales forecast is based on the trends observed in the sales pattern of various categories over the past years, new developments on account of Government Policies, Socio economic changes, industrial growth, etc. that would affect consumption across various categories of consumers. In addition to this, 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.

It is submitted that sales forecast using the CAGR as the basis for projections is a tried and tested method and is used extensively across states and accepted by the Regulators. However, the CAGR considering the sales for last 5 years presented an abnormal trend and hence normalisation has been undertaken for such categories for forecasting sales for FY 2015-16.

3.1.2 Category wise Sales Forecast

Based on the methodology outlined above, the projected energy sales to various categories of consumers for FY 2015-16 are given below:

Table 3.1: Projected Energy Sales – FY 2015-16

In MUs

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

3.1.3 Billed Demand & Number of Consumers

The actual number of consumers for the FY 2013-14, estimated for FY 2014-15 & projected numbers for FY 2015-16 are tabulated below:

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

Category	FY 2013-14 (Actual)	FY 2014-15 (Estimated)	FY 2015-16 (Projected)
Domestic	140303	142681	133405
BPL(Kutir Jyoti)	23354	23749	22205
Commercial	17579	17940	19900
Industrial Consumers	315	331	285
Public Lighting	1138	1152	2400
Public Water works & Sewage	83	138	151
Irrigation and Agriculture	0	0	0
Bulk	4617	4695	4390
General Purpose	6120	6692	7361
Outside state	1	1	1
Total	193510	197379	190098

3.1.4 Distribution Losses

DOP,AP has achieved a reduction in distribution losses during recent years. DOP,AP submits that the system improvement works executed every year under the plan schemes have contributed to the reduction of distribution losses. However, it may also be noted that reduction of distribution losses has been low as maximum consumption is in the domestic segment with low individual consumption and spread over wide geographical area. The distribution losses in the DOP,AP distribution network has been projected on the basis of estimated energy input in the system and estimated energy sales.

3.1.5 Energy Requirement & Sources of Power Purchase

Accordingly, the energy requirement for DOP,AP is estimated based on the retail sales projections, grossed up by estimated loss levels. Accordingly, the energy balance expected for the FY 2015-16 is as given below:

Table 3.3: Energy Requirement – FY2015-16

Energy Balance	FY 2013-14 (Actual) MU's	FY 2014-15 (Estimated) MU's	FY 2015-16 (Projected) MU's
ENERGY REQUIREMENT			
Energy Sales within State	233.12	300.96	331.07
Sales to other distribution licensees	52.89	64.00	70.40
Total Energy Sales	286.02	364.96	401.47
Overall T & D Losses %	59.65	47.05	57.96
Overall T & D Losses (MUs)	344.60	267.46	456.35
Total Energy Requirement	630.61	632.42	857.82
ENERGY AVAILABILITY			
Power Purchase from CGS/UI	478.79	480.65	614.22
Hydel Generation (APHDP)	51.86	51.86	91.80
Diesel Generation (own)	0.78	0.78	0.40
Free Power	117.00	117.00	175.00
Total Energy Availability	630.61	632.42	857.82
ENERGY SURPLUS/(GAP)			

The energy requirement of DOP,AP is mainly met from the allocation of power from Central Generating Stations. However, for meeting the requirement at peak demand period, it has to purchase power from other sources/ open market/ power exchanges, etc.

The expected power allocation for FY 2015-16 are provided in the table below:

Table 3.4: Details of Power Allocation – FY 2015-16

Sr. No	Source	Installed Capacity (MW)	State Share/Allocation FY 2013-14		Estimated State Share/Allocation FY 2014-15		Projected State Share/Allocation FY 2015-16	
			In%	In MW	In%	In MW	In%	In MW
	NHPC							
1	Loktak	105	4.94	5.19	4.94	5.19	4.94	5.19
	NEEPCO							
2	Khandong	50	4.19	2.10	4.19	2.10	4.19	2.10
3	Doyang	75	6.85	5.14	6.85	5.14	6.85	5.14
4	Kopili-I	200	5.19	10.38	5.19	10.38	5.19	10.38
5	Kopili-II	25	5.99	1.50	5.99	1.50	5.99	1.50
6	Ranganadi	405	18.27	73.99	18.27	73.99	18.27	73.99
7	AGTPP (Tripura)	84	6.13	5.15	5.69	5.15	5.69	5.15
8	AGBPP (Assam)	291	5.69	16.57	6.13	16.57	6.13	16.57
	NTPC							
9	Farakka	1600	0.21	3.36	0.21	3.36	0.21	3.36
10	Kahalgaoon	840	0.21	1.76	0.21	1.76	0.21	1.76
11	Talcher	1000	0.21	2.10	0.21	2.10	0.21	2.10
12	ONGC Palatana	726.6		22.00		22.00		22.00
	TOTAL			149.24		149.24		149.24

It is requested to The Hon'ble Commission to kindly approve the power purchases as outlined below. The estimated cost for such power purchases has been discussed in section 3.3.4 of the filing.

3.2 Capital Expenditure & Capitalisation

3.2.1 Capital Expenditure & Capitalisation of Assets

The objective of incurring the capital expenditure is to upgrade and strengthen the distribution network to meet the desirable standards of performance and provide better network reliability and sustainable performance to the consumers of DOP,AP.

The capital expenditure plan envisaged will also assist in reducing system losses. DOP,AP proposes to incur the capital expenditure of Rs. 103.05 Crores for FY 2015-16.

Summary of the proposed capital expenditure and capitalisation is outlined below:

Table 3.5: Summary of Proposed Capital Expenditure & Capitalisation FY 2015-16

(Rs. in Crores)

Sr. No.	Particulars	Previous year 2013-14 (Actual)	Current year 2014-15 (Estimated)	Ensuing year 2015-16 (Projected)
1	2	3	4	5
1	Opening balance	103.05	206.10	309.15
2	Add: New investments	103.05	103.05	103.05
3	Total	206.10	309.15	412.20
4	Less investment capitalized	0.00	0.00	0.00
5	Closing balance	206.10	309.15	412.20

3.3 Annual Revenue Requirement for DOP,AP

Based on the provisions of the Tariff Regulations, the estimate for the Annual Revenue Requirement (ARR) would consist of the following elements:

- o Power Purchase Costs
- o Transmission Charges
- o Operation and Maintenance Expenses
- o Administration & General expenses
- o Depreciation
- o Return on NFA/Equity
- o Interest charges (including interest on working capital)
- o Provision for Bad and Doubtful Debts

The above Annual Revenue Requirement is netted off for Non-Tariff Income for determining the net ARR for DOP,AP.

3.3.1 Power Purchase

3.3.1.1 Source of Power

DOP,AP gets 50 MUs (approx.) from Arunachal Pradesh Hydro Power Development Corporation. DOP,AP meets rest of its energy requirement from its allocation from the Central Generating Stations (CGS) and other sources. DOP,AP receives power from CGS like NEEPCO, NHPC NTPC as per allocation from time to time.

The present power purchase of DOP,AP is as listed below:

Table 3.6: Actual & Projected Power Purchase from ISGS (FY 2013-14 to FY 2015-16)

MUs				
S.N	Source	Actual Power Purchased FY 2013-14 (Mus)	Projected/Estimated Power to be Purchased FY 2014-15 (Mus)	Projected/Estimated Power to be Purchased FY 2015-16 (Mus)
	NHPC			
1	Loktak	30.39	30.39	30.39
	NEEPCO			
2	Khandong	7.48	7.48	7.48
3	Doyang	16.04	16.04	16.04
4	Kopili-I	36.66	36.66	36.66
5	Kopili-II	4.64	4.64	4.64
6	Ranganadi	63.60	63.60	63.60
7	AGTPP (Tripura)	38.53	38.53	38.53
8	AGBPP (Assam)	96.41	96.41	96.41
	NTPC			
9	Farakka	23.78	23.78	23.78
10	Kahalgaoon	12.48	12.48	12.48
11	Talcher	14.16	14.16	14.16
12	ONGC (Palatana)	18.58	20.44	154.00
	TOTAL	362.76	364.62	498.18

3.3.2 Assumption for Power Purchase Projection

The merit order dispatch principles are typically adopted when determining the power purchases from various generating stations. However, in a power deficit scenario, these principles do not play a significant role as the utilities will try and purchase all the power that is available at its disposal. Accordingly, DOP,AP has considered purchase of the entire power available from all the possible sources during FY 2015-16 to meet the demand to the extent possible.

Power Purchase cost is a function of the energy requirement and price of available power from the different sources for meeting the energy requirement. The energy requirement of DOP,AP for FY 2015-16 is proposed to be met from central generating stations and external power purchase as discussed below.

Power purchase cost for FY 2015-16, is determined on the following parameters:

- The quantum of power allocated to DOP,AP from central generating station is based on the declared allocation;
- PLF is assumed same as per FY 2013-14;
- Fixed cost, Energy charges and other charges for CGS stations have been considered with an Escalation of 5% over the previous year levels;
- Power purchase from other sources is considered for FY 2015-16 based on the current market prices.

3.3.3 Power purchase from CGS Stations

DOP,AP has projected that the quantum of power purchase from CGS stations will be based on the firm & infirm allocations. The details of the computation of power purchases from CGS stations are provided in Format-D4 of the formats submitted along with the filing.

3.3.4 External Power Purchase/ Other Sources

Based on the Energy balance and trend of energy requirement during peak demand period, it is estimated that in addition to the firm as well as infirm allocation of power from various CGS, there will be periodical shortfall of energy during FY 2015-16. This additional energy requirement has to be met from external power purchase source/other sources in order to meet the present demand of the consumers. DOP,AP has been continuously experiencing similar shortfall of power in the past which is met through Unscheduled Interchange (UI)/over-drawal as there is no alternate source of power available. This scenario is likely to continue in the period of FY 2015-16 also till DOP,AP gets additional allocation from CGS. For the purpose of estimation of power purchase cost (over-drawal), DOP,AP has considered current market rate. However, in the current high demand supply gap scenario across the country this weighted average price may further shoot up for FY 2015-16.

Considering the above facts, the Hon'ble Commission is requested to allow the power purchase costs as estimated by DOP,AP for FY 2015-16:

Table 3.7: Summary of Power Purchase Expenses for FY 2015-16

Sl. No.	Source	Purchase (MU)	Rate (Rs./ KWh)	Total Cost in Rs. Crores
1	2	3	4	5
	NHPC			
1	Loktak	30.39	4.23	12.85
	NEEPCO			
2	Khandong	7.48	3.10	2.32
3	Doyang	16.04	3.16	5.07
4	Kopili-I	36.66	1.19	4.36
5	Kopili-II	4.64	2.22	1.03
6	Ranganadi	63.60	2.39	15.20
7	AGTPP (Tripura)	38.53	4.16	16.01
8	AGBPP (Assam)	96.41	4.20	40.50
	NTPC			
9	Farakka	23.78	4.64	11.04
10	Kahalgaoon	12.48	4.41	5.50
11	Talcher	14.16	2.75	3.89
12	ONGC (Palatana)	154.00	2.67	41.12
13	U.I	116.03	1.94	22.51
	TOTAL	614.22		181.40

3.3.5 Transmission and Other Charges

The Transmission charges are estimated based on the quantum of power proposed for wheeling for FY 2015-16 based on per unit cost actually incurred in FY 2013-14. Accordingly, a Transmission charge for FY 2015-16 is estimated to Rs. 40 crores.

3.4 Operation & Maintenance Expenses

Operation & Maintenance Expenses comprises of Employee Cost, Repair & Maintenance Expenses and Administrative & General Expenses. The methodology adopted by the DOP,AP for projecting the values of these components for FY 2015-16 has been explained in following section. Table below summarises the Operation & Maintenance Expenses for FY 2015-16.

Table 3.8: Operation & Maintenance Expenses for FY 2015-16

(Rs. in Crores)				
Sr. No.	Particulars	FY 2013-14 (Actual)	FY 2014-15 (Estimated)	FY 2015-16 (Projected)
1	Employee Cost	164.48	195.09	201.13
2	Repair & Maintenance Expenses	25.70	30.15	30.80
3	Administration & General Expenses	1.75	1.91	2.00
	Total Operation & Maintenance Expenses	191.93	227.15	233.93

3.4.1 Employee Cost

The expense head of employee cost is indication of cost of man power which includes salary and allowance, bonus, LTC & Honorarium, leave salary etc. The DOP,AP has not considered pension and terminal benefits of the employees. The DOP,AP reserves the right to approach the Hon'ble commission at the appropriate stage for the above. .

The Hon'ble Commission may consider the above facts while allowing the employee cost indicated in the table below.

Table 3.9: Employee Cost for FY 2015-16

(Rs. in Crores)

Sr. No.	Particulars	FY 2013-14 (Actual)	FY 2014-15 (Estimated)	FY 2015-16 (Projected)
1	Salaries & Allowances	115.84	144.89	150.06
2	Wages	42.00	43.40	44.00
3	OTA	0.00	0.00	0.00
4	Medical Treatment	0.61	0.65	0.70
5	Other Allowances (O.E.+POL+Minor Work)	5.90	6.00	6.20
6	LTC	0.13	0.15	0.17
	Total	164.48	195.09	201.13

3.4.2 Administrative & General Expenses

The Administration & General (A&G) expenses include computerization, communication, Travelling & Conveyance, Rent, Professional and technical fees, etc. Table below provides A&G expenses incurred by the DOP,AP in FY 2013-14, estimated for FY 2014-15 along with the projections for FY 2015-16.

Table 3.10: Administrative & General Expenses for FY 2015-16

(Rs. in Crores)

Sr. No.	Particulars	FY 2013-14 (Actual)	FY 2014-15 (Estimated)	FY 2015-16 (Projected)
1	Rent, rates & taxes	0.00	0.00	0.00
2	Telephone, postage & Telegram	0.25	0.30	0.32
3	Consultancy fees	0.08	0.08	0.08
4	Technical fees	0.00	0.00	0.00
5	Other professional charges	0.00	0.00	0.00
6	Conveyance & travel expenses	0.46	0.50	0.52
7	Electricity & Water Charges	0.40	0.43	0.45
8	Others	0.56	0.60	0.63
	Total Administration & General Expenses	1.75	1.91	2.00

In line of above, the Hon'ble Commission is requested to allow the above mentioned A & G Expenses.

3.4.3 Repair and Maintenance Expenses

Repair & Maintenance (R&M) expenses include expenses on repairs and maintenance of electrical equipment's, distribution system, vehicles, furniture and fixtures, office equipment's, buildings, etc. The DOP,AP has projected Repair & Maintenance expenses for the FY 2015-16 taking into consideration actual expenses for the FY 2013-14 and estimated expenses for FY 2014-15.

Table below depicts the R&M expenses incurred by the DOP,AP in FY 2013-14, estimated for the FY 2014-15 and projected R&M Expenses for FY 2015-16.

Table 3.11: Repair & Maintenance Expenses for FY 2015-16

(Rs. in Crores)

Sr. No.	Particulars	FY 2013-14 (Actual)	FY 2014-15 (Estimated)	FY 2015-16 (Projected)
1	Plant and Machinery	0.00	0.00	0.00
2	Building	0.00	0.00	0.00
3	Hydraulic works & civil works	0.00	0.50	1.00
4	Line cable & network	22.00	25.00	25.00
5	Vehicles	3.70	4.65	4.80
6	Furniture & fixtures	0.00	0.00	0.00
7	Operating expenses	0.00	0.00	0.00
	Total Repair & Maintenance Expenses	25.70	30.15	30.80

The Hon'ble Commission is requested to allow the R&M expenses proposed by the DOP,AP in the above table to the fullest extent in order to ensure better & timely maintenance of distribution network under the operational area of DOP,AP and subsequently, to have better consumer services and higher consumer satisfaction.

3.5 Gross Fixed Assets

It is submitted in absence of fixed assets register as required by the regulations; the gross fixed assets (GFA) have been built up based on available information as on 31.3.2013. The details of assets capitalized during FY 2013-14 and estimated capitalisation during FY 2014-15 are being assimilated and shall be submitted in



future filings. The GFA movement is given in the table below:

Table 3.12: Gross Fixed Assets Movement

Financial Year	Opening Balance (Rs. Crores)	Addition during the year (Rs. Crores)	Closing Balance (Rs. Crores)
FY 2013-14	2842.54	0.00	2842.54
FY 2014-15	2842.54	0.00	2842.54
FY 2015-16	2842.54	0.00	2842.54

3.6 Depreciation

The DOP,AP has applied average rate of depreciation at 5.27% for FY 2015-16. The DOP,AP has applied this rate on opening GFA of FY 2015-16. The table below indicates the methodology adopted by the DOP,AP for projecting depreciation for FY 2015-16.

Table 3.13: Depreciation for FY 2015-16

(Rs. in Crores)		
Sr. No.	Particulars	FY 2015-16 (Projected)
1	Gross Block in Beginning of the year	2842.54
2	Additions during the Year	0.00
3	Cumulative Depreciation at the Beginning of the Year	634.24
4	Average Rate of Depreciation	5.27%
5	Depreciation for the Year	149.71
6	Cumulative Depreciation at the End of the Year	783.95
7	Net Block in the Beginning of the Year	2208.30
8	Net Block in the End of the Year	2058.59

In absence of Asset register, the asset wise detail is not available. The Hon'ble Commission is requested to approve the above depreciation. The DOP, AP submits that the block wise details are being assimilated and will be made available on completion of the exercise.

3.7 Capital Based Return

Reasonable return on investment on the basis of the capital base return has been computed as outlined below.

Table 3.14: Capital Base and Return

(Rs. in Crores)

Sr. No.	Particulars	Previous Year (Actual) 2013-14	Current Year (Estimated) 2014-15	Ensuing Year (Projected) 2015-16
1	2	3	4	5
1	Gross block at beginning of the year	2842.54	2842.54	2842.54
2	Less accumulated depreciation	449.12	598.82	748.53
3	Net block at beginning of the year	2393.42	2243.72	2094.01
4	Less accumulated consumer contribution	0.00	0.00	0.00
5	Net fixed assets at beginning of the year	2393.42	2243.72	2094.01
6	Reasonable return @3% of NFA	71.80	67.31	62.82

3.8 Return on Equity

The DOP,AP would like to submit that Distribution Business has always been perceived to be a business having a greater inherent risk than the Generation or Transmission Business due to various factors amongst which the direct interface with the retail consumers is the biggest risk. The same has been recognized by many Commissions across the country and they have proposed a higher rate of return on the equity invested in distribution business as compared to generation and transmission business. This has been demonstrated by the various Commissions by offering rate of return @16% for distribution business as compared to 14% offered to other business areas.

The DOP,AP being a Government Department, the entire capital employed till date has been funded through equity infusion by the Government of Arunachal Pradesh through Budgetary support without any external borrowings.

In a similar case where the funding has been through budgetary support of the Government (Damodar Valley Corporation vs CERC) before Hon'ble Appellate Tribunal, Damodar Valley Corporation was allowed normative debt equity of 50:50 for the purpose of tariff determination. The relevant portion of said order is reproduced below:

“A-5. Further, the Tariff Regulations provides that in case of generating stations or transmission projects where the tariff for the period ending March 31, 2004 has not been determined by the Central Commission, Debt Equity ratio shall be as may be decided by the Commission (para 52 of the impugned order). In the past, the Commission has also dealt with determination of applicable Debt Equity Ratio in the case of Central Power Sector Undertakings (CPSUs) such as NTPC, NHPC, PGCIL etc. where the actual equity deployed in the assets created prior to formulation of Tariff Regulations, was much higher than the equity calculated considering a normative DE ratio of 70:30. These CPSUs were allowed a normative DE ratio of 50:50 for the purpose of determination of tariff, in respect of their old assets.”

Similar approach has been adopted in the case of number of Central Government companies such as NTPC, PGCIL etc.

Accordingly the entire capital expenditure till 31.3.2011 has been considered as funded by equity.

The detailed working for equity for FY 2014-15 & FY 2015-16 has been indicating below.

Table 3.15: Equity Detail for FY 2014-15 & FY 2015-16

(Rs. in Crores)

Sr. No.	Particulars	FY 2013-14 (Actual)
1	Opening Equity	852.76
2	Add: Capex for the FY (Considered as 100% Equity)	0.00
3	Closing Equity	852.76
4	Average Equity	852.76

For FY 2011-12, based on above precedence, the DOP,AP has considered a normative Debt Equity Ratio of 50:50 and accordingly the Opening Equity for FY 2011-12 has been considered as equivalent to 50% of Gross Fixed Assets as on 1/4/2011.

The DOP,AP has computed the Return on Equity considering a rate of return at 14% on the Average equity for the fiscal year.

The computation methodology adopted by the DOP,AP for determination of Return on Equity for FY 2015-16 is indicated below.

Table 3.16: Return on Equity for FY 2015-16

(Rs. in Crores)

Sr. No.	Particulars	FY 2013-14 (Actual)	FY 2014-15 (Estimated)	FY 2015-16 (Projected)
1	Opening Equity	852.76	852.76	852.76
2	Equity Addition (30% Capex for the FY)	0.00	0.00	0.00
3	Closing Equity	852.76	852.76	852.76
4	Average Equity	852.76	852.76	852.76
5	Rate of Return on Equity	14%	14%	14%
6	Return on Equity	119.39	119.39	119.39

3.9.1 Interest & Finance Charges

Based on the philosophy adopted in the above section, the DOP,AP has treated the balance 50% of Gross Fixed Asset as on 1/4/2013 as notional debt. The Capital Addition in FY 2013-14, FY2014-15 & FY 2015-16 has not been considered. The details of assets created/proposed during the period are being worked out and shall be submitted in future filings. Further, it is assumed that these notional loans will be repaid in next 10 years.

The DOP,AP has considered an Interest on loan at the rate of 14.75% which is SBI PLR as on 1st April 2014. The Interest on Loan computed on the above methodology has been indicated in the Table below.

Table 3.17: Interest & Finance Charges for FY 2015-16

(Rs. in Crores)

Sr. No.	Particulars	FY 2013-14 (Actual)	FY 2014-15 (Estimated)	FY 2015-16 (Projected)
1	Opening Loan	1989.78	1790.80	1591.82
2	Loan Additions	0.00	0.00	0.00
3	Repayment	198.98	198.98	198.98
4	Closing Loan	1790.80	1591.82	1392.84
5	Average Loan	1890.29	1691.31	1492.33
7	Interest on Loan	273.15	249.47	220.12
8	Total Interest & Finance Charges	273.15	249.47	220.12

The Hon'ble Commission is requested to allow the above interest on loan for FY 2015-16.

It may be noted that various SERC's Tariff Regulation provides recovery of finance charges such as Guarantee Fees, Processing fees etc along with the Interest on Loan. However, till FY 2013-14, whole capital Expenditure has been funded through 100% equity as budgetary support and does not involve any external borrowings, the DOP,AP has not claimed any Finance Charges for FY 2015-16. In future, in case of funding of CAPEX through external borrowing, the DOP,AP would be claiming finance charges for those fiscal years.

3.9.2 Interest on Working Capital

The DOP,AP has computed the Interest on Working Capital for FY 2015-16 on normative basis. As per the APSERC Tariff Regulations, for the purpose of computation of normative working and Interest on working capital, the components of working capital are as follows:

- One month's Power Purchase Cost
- One month's employee costs
- One month's Administration & General Expenses
- One month's R&M Cost
- One month Fuel cost
- Two month's receivables

The rate of interest on working capital has been considered as per SBI Prime lending rate as on 1st April of the respective year, which is 14.75% as on 1st April 2014.

The interest on normative working capital for FY 2015-16 is given in the table below:

Table 3.18: Information regarding Working Capital for the current and ensuing year
(Rs. in Crores)

Sr. No.	Particulars	Current Year 2013-14 (Actual)	Current Year 2014-15 (Estimated)	Ensuing Year 2015-16 (Projected)
1	2	3	4	5
1	Fuel Cost	0.40	0.45	0.45
2	Power Purchase Cost	14.16	14.37	18.45
3	One month's employee costs	13.71	16.26	16.76
4	One month's A&G Exp.	0.15	0.16	0.17
5	One month's R&M Cost	2.14	2.51	2.57
6	Two month's receivables	18.64	20.15	22.77
	Total	49.20	53.89	61.16
	Interest on working capital	7.11	7.95	9.02

The Hon'ble Commission is kindly requested to approve the interest on working capital as above on normative basis for FY 2015-16.

3.10 Provision for Bad and Doubtful Debts

DOP,AP has not considered any provision for bad debts. DOP,AP is preparing the records relating to the arrears and Bad & Doubtful debts and same shall be claimed in the future.

3.11 Non-Tariff Income

Based on the FY 2013-14 & 2014-15, it is assumed that non-tariff Income in form of meter rent, late payment charges & miscellaneous charges for the year 2015-16 will be Rs. 0.50 Crores from various categories of consumers.

3.12 Annual Revenue Requirement

Based on the above estimates and projections, the ARR for DOP,AP for FY 2015-16 works out as under:

Table 3.19: ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2015-16
(Rs. in Crores)

Sr. No.	Item of expense	Current Year 2013-14 (Actual)	Current Year 2014-15 (Estimated)	Ensuing Year 2015-16 (Projected)
1	2	3	4	5
1	Cost of power Purchase	169.98	172.45	221.40
2	Fuel Cost	4.75	5.39	5.39
3	Employee costs	164.48	195.09	201.13
4	R&M expenses	25.70	30.15	30.80
5	Administration and general expenses	1.75	1.91	2.00
6	Depreciation	149.71	149.71	149.71
7	Interest charges (including interest on working capital)	273.15	249.47	220.12
8	Return on NFA /Equity	119.39	119.39	119.39
9	Provision for Bad Debit	0.00	0.00	0.00
10	Total revenue Requirement	908.90	923.55	949.93
11	Less: non tariff income	0.40	0.45	0.50
12	Net revenue requirement (10-11)	908.50	923.10	949.43
13	Revenue Billed	94.36	132.25	150.74
14	Revenue from surplus sale of Power	7.32	16.96	19.71
15	Gap (12-13-14)	806.82	773.89	778.98
16	Gap for	0.00	0.00	0.00
17	Total gap (15+16)	806.82	773.89	778.98
18	Revenue surplus carried over	0.00	0.00	0.00
19	Additional revenue from proposed tariff	0.00	0.00	0.00
20	Regulatory asset	0.00	0.00	0.00
21	Energy sales (MU)	286.02	364.96	401.47

3.13 Average Cost of Supply

Based on the above computed Net ARR & energy sales projection , the Average Cost to Supply within the state works out to Rs. 28.08 per unit for FY 2015-16.

3.14 Revenue at Existing Tariff and Gap for FY 2015-16

The estimated revenue at Existing Tariff for FY 2015-16 for each of the consumer category including outside state sale is given in the table below:

Table 3.20: Revenue at Existing Tariff – FY 2015-16

(Rs. in Crores)

Sr. No.	Particulars	Ensuing year (Projected) FY 2015-16
1	2	3
1	Domestic	45.62
2	Kutir Jyoti (BPL)	2.93
3	Commercial	16.59
4	Industrial Consumers	38.65
5	Public Lighting	3.82
6	Public Water works & Sewage	2.46
7	Irrigation and Agriculture	0.00
8	Bulk Supply	5.59
9	General Purpose	20.96
10	Outside state	19.71
	TOTAL	156.33

Based on the Aggregate Revenue Requirement and net revenue from existing tariffs for FY 2015-16, the resultant GAP is depicted in the table below:

Table 3.21: Revenue GAP at Existing Tariffs – FY 2015-16

(Rs. in Crores)

Sr. No.	Particulars	FY 2015-13 (Proposed)
1	Revenue from Sale of Power	136.62
2	Revenue from Surplus power sales	19.71
3	Total Revenue at Existing Tariff	156.33
4	Net Annual Revenue Requirement	949.43
5	Gap	793.10
6	Previous year's surplus carried over	0.00
7	Additional Revenue at proposed Tariff	0.00
8	Net GAP	793.10

4. TARIFF PROPOSAL FOR FY 2015-16

DOP,AP in the previous sections has discussed the estimated performance for the FY 2015-16 based on the past years performances and certain assumptions explained at appropriate places to determine the Aggregate Revenue Required for FY 2015-16.



4.1 Recovery of Revenue Gap for FY 2015-16

The estimated gap in the FY 2015-16 has been computed by deducting the ARR from Revenue at Existing Tariff. The huge revenue gap as calculated in the table above cannot be recovered through tariff increase as tariff is a sensitive subject having substantial impact on social, economic and financial well-being of the public at large. Accordingly, DOP,AP does not propose to increase the tariff for the FY 2015-16 as these would result in huge burden on the consumers.

4.2 Proposed Tariff in FY 2015-16

4.2.1 Tariff Proposal for FY 2015-16

The basic requirement of any Tariff proposal is that it has to be transparent and justifiable against various policy guidelines and the framework evolved by the APSERC and various SERCs. In the light of the experience gained by other utilities in implementation of the tariff orders and regulatory requirements specified under various states and policy guidelines an attempt has been made to improve upon the present tariff design. DOP,AP has not proposed any increase in tariff for various categories of consumers for FY 2015-16. Tariff proposal for individual categories is given below along with the comparison of existing and proposed energy charges.

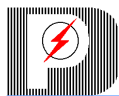


Table 4.1: Comparison of Existing Tariff with Proposed Tariff

TARIFF SCHEDULE – EXISTING & PROPOSED

Sl. No.	Category		Existing Tarif (Rs.KWh)	Proposed Tarif (Rs.KWh)
1	Non Commercial Consumers (Domestic)			
	LT			
	a)	AC 50Hz,1- Phase,230 Volt nominal Voltage	4.00	4.00
	b)	AC 50Hz,3- Phase,400 Volt nominal Voltage	4.00	4.00
	HT			
	c)	AC 50Hz,3- Phase,11KV nominal Voltage	3.40	3.40
	d)	AC 50Hz,3- Phase,33 KV nominal Voltage	3.25	3.25
	KJP & BPL connection			
	e)	AC 50Hz,1- Phase,230 Volt KJP & BPL connection	2.65	2.65
2	Commercial Consumres (Non-Industrial)			
	LT			
	a)	AC 50Hz,1- Phase,230 Volt nominal Voltage	5.00	5.00
	b)	AC 50Hz,3- Phase,400 Volt nominal Voltage	5.00	5.00
	HT			
	c)	AC 50Hz,3- Phase,11KV nominal Voltage	4.20	4.20
	d)	AC 50Hz,3- Phase,33 KV nominal Voltage	4.00	4.00
3	Public Lighting and Water Supply Consumers			
	LT			
	a)	AC 50Hz,1- Phase,230 Volt nominal Voltage	5.10	5.10
	b)	AC 50Hz,3- Phase,400 Volt nominal Voltage	5.10	5.10
	HT			
	c)	AC 50Hz,3- Phase,11KV nominal Voltage	4.20	4.20
	d)	AC 50Hz,3- Phase,33 KV nominal Voltage	4.00	4.00
4	Agricultural Consumers			
	LT			
	a)	AC 50Hz,1- Phase,230 Volt nominal Voltage	3.10	3.10
	b)	AC 50Hz,3- Phase,400 Volt nominal Voltage	3.10	3.10
	HT			
	c)	AC 50Hz,3- Phase,11KV nominal Voltage	2.75	2.75
	d)	AC 50Hz,3- Phase,33 KV nominal Voltage	2.65	2.65

Sl. No.	Category	Existing Tarif (Rs.KWh)	Proposed Tarif (Rs.KWh)
5	Industrial Consumers		
	LT		
a)	AC 50Hz,1- Phase,230 Volt nominal Voltage	4.20	4.20
b)	AC 50Hz,3- Phase,400 Volt nominal Voltage	4.20	4.20
	HT		
c)	AC 50Hz,3- Phase,11KV nominal Voltage	3.75	3.75
d)	AC 50Hz,3- Phase,33 KV nominal Voltage	3.40	3.40
e)	AC 50Hz,3- Phase,132 KV nominal Voltage and above	3.25	3.25
6	Bulk Mixed Consumers		
a)	AC 50Hz,3- Phase,11KV nominal Voltage	3.75	3.75
b)	AC 50Hz,3- Phase,33 KV nominal Voltage	3.40	3.40
c)	AC 50Hz,3- Phase,132 KV nominal Voltage and above		
7	Temporary Consumers		
a)	Metered Supply Rs./KWH	6.35	6.35

4.3 Revenue at Proposed Tariff in FY 2015-16

Based on the tariff proposed above, following is the summary of the revenue from various consumer categories at the proposed tariff rates which is being compared with the consumer category-wise revenue at existing tariff:

Table 4.2: Revenue at Existing & Proposed Tariff – FY 2015-16

(Rs. in Crores)

Sr. No.	Particulars	Revenue at Existing Tariff FY 2015-16	Revenue at Proposed Tariff FY 2015-16
1	2	3	4
1	Domestic	45.62	45.62
2	Kutir Jyoti (BPL)	2.93	2.93
2	Commercial	16.59	16.59
3	Industrial Consumers	38.65	38.65
4	Public Lighting	3.82	3.82
5	Public Water works & Sewage	2.46	2.46
6	Irrigation and Agriculture	0.00	0.00
7	Bulk Supply	5.59	5.59
8	General Purpose	20.96	20.96
	TOTAL	136.62	136.62

4.3.1 Impact of Tariff on Consumers

The revenue gap and the average tariff proposed are presented in the table below:

Table 4.3: Impact of Tariff for FY 2015-16

Sr. No.	Particulars	Units	FY 2015-16	
			Existing	Proposed
1	ARR for FY 2015-16	Rs. Crores	949.43	949.43
2	Revenue from tariff for FY 2015-16		150.74	150.74
3	Revenue from sale of surplus power for FY 2015-16	Rs. Crores	19.71	19.71
4	Total Revenue		170.45	170.45
5	Gap (1 – 2 - 3)	Rs. Crores	778.98	778.98
6	Sales within State		331.07	331.07
7	Sale of Surplus power through Trading/UI	MU's	70.40	70.40
8	Total Sales		401.47	401.47
9	Average Cost of Supply {(1-3)/6}	Rs. per kWh	28.08	28.08
10	Average Revenue (2/6 x 10)	Rs. per kWh	4.55	4.55
11	Pure Gap (9-10)	Rs. per kWh	23.53	23.53
12	Average Hike in Tariff			0.00
13	Hike in Tariff %			0.00

It is submitted that the average tariff required to recover the gap attributable to FY 2015-16 is Rs.28.08 but keeping in view the resultant burden on the consumers, increase in tariff has not been proposed.

The Hon'ble Commission is requested that considering ARR & submission made above the proposed tariff may kindly be approved.

5. TARIFF SCHEDULE – FY 2015-16

Tariff schedule approved by the Hon'ble Commission for the FY 2014-15 is attached as Annexure -A