PETITION FOR APPROVAL

OF

AGGREGATE REVENUE REQUIREMENT

AND

RETAIL TARIFF FOR FY 2016-17

UNDER SECTION 62 & 64

OF

THE ELECTRICITY ACT 2003

Submitted by:
Department of Power, Arunachal Pradesh

BEFORE HON'BLE ARUNACHAL PRADESH STATE ELECTRICITY REGULATORY COMMISSION

FILE No: _____

Petition No: _____

IN THE MATTER OF : Petition for Approval of Aggregate Revenue Requirement (ARR) and Retail Tariff Proposal for FY 2016-17 under Sections 62 and 64 of The Electricity Act 2003

AND

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

…… Petitioner

Petition under section 64 of the Electricity Act 2003 for determination of Aggregate Revenue Requirement (ARR) and approval and Retail Tariff in respect of Arunachal Pradesh Department of Power (herein after called "APDoP") for FY 2016-17.

The petitioner most respectfully submits as follows;

1. The Petitioner, APDoP, is a government department functions under the Ministry of Power Electrical, Government of Arunachal Pradesh, is the sole electricity distribution utility for the entire State of Arunachal Pradesh.
2. The petitioner, being a government department, is a deemed distribution licensee as per Section 14, proviso 3 of the Electricity Act 2003.
3. As per Section 64 of the Electricity Act 2003 read with 'Terms and Conditions for Determining of Tariff and Formats for Filing Regulation 2011' and 'Multi Year Tariff Regulation 2013' notified by Arunachal Pradesh State Electricity Regulatory Commission(herein after called "Hon'ble Commission"), the licensee has to file petition for determination ARR and Retail Tariff every year.
4. The petitioner though has to file petition under Multi Year Tariff Format, but because of non availability of sufficient data, the petitioner is filing for single year tariff.
5. The petitioner, being government department, is unable to function like incorporated company in the matter of profit making business plan, audits, accounts etc. Hence, data/information as required by MYT regulation is not available, as a result, petition for

single year i.e. for FY 2016-17 is hereby filed for necessary action of Hon'ble Commission as deemed fit.

Petitioner,
For Department of Power
Government of Arunachal Pradesh,
Itanagar

S/NO. 185
15/12/2015

अरूणाचल प्रदेश ARUNACHAL PRADESH

00AA 713887

AFFIDAVIT

I, Sri Rajesh Sharma, Son of Sri M K Sharma, age about 50 years, resident of Itanagar do hereby solemnly affirm and state as follows:-

1. I am working as Junior Engineer, under Department of Power, Arunachal Pradesh, and am petitioner in the above matter and is duly authorized to make this affidavit by competent authority of the Department.

2. The statements made in the petition is best on the information received from the official records of the department maintained in the ordinary course of business and believed to be true to best of my knowledge.

Deponent

Verification:

I, Sri Rajesh Sharma, do hereby verify that the facts merntioned in the para 1 and 2 above are correct to the best of my knowledge and no part of it is false or no material has been concealed.

Deponent

Executed before me on 15th December 2015

15/12/15

Executive Magistrate
Itanagar Capital Complex
Itanagar (A.P)

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CHAPTER - I :: INTRODUCTION

1.1 History

The Arunachal Pradesh Department of Power (APDoP), a government department, functioning under the Government of Arunachal Pradesh is responsible for supply of electricity in the entire Arunachal Pradesh and is only distribution utility in Arunachal Pradesh. And hence APDoP is deemed distribution licensee as per Section 14, proviso 3 of The Electricity Act, 2003. The APDoP was created in 1992 separating from the Arunachal Pradesh Public Works Department. That time, the entire power management including generations, transmissions and distributions was responsibility of the APDoP. In the year 2004, a hydropower development department (DHPD) was created by bifurcating from the APDoP and thereby separating the generation from the purview of APDoP. The APDoP has 2, 07, 305 consumers with an annual energy consumption of about 322.05 MUs for the FY 2014-15.

1.2 Source of Electrical Power

The APDoP utilises Electrical Power from three different sources

1.2.1 **Power from Diesel Generating (DG) Sets**:- APDoP has DG sets of different capacities installed at different locations with total installed capacity of about 30 MW. These DG sets are kept as standby and used as and when required. Since these sets are owned by APDoP, the power generated from it will not be included in the power purchase cost. The Expenditure on DG sets shall be included in the Fuel, Operation and Maintenance Cost.

1.2.2 **Power from DHPD**:- APDoP receives about 52 MU annually from DHPD at the rate of Rs.2.09 per unit. Hence, APDoP shall purchase power from DHPD costing at about Rs. 10.87 Cr.

1.2.3 **Power from Central Sector Allocation**: - The remaining power requirement is met by Power allocation from central Sector. Central Sector allocation and energy purchased in FY 2014-15 is given in the table 1.1. This allocation is likely to remain same for the next year as no new project is coming up in next year. Hence, central sector allocation has been kept same for previous year, current year and ensuing year.

Table 1.1 :: Central Sector Allocation for the FY 2014-15

Sl No.	Station	Capacity (MW)	Firm allocation to Arunachal Pradesh		Actual Utilised (MU)
			in %	in MW	
1	**NHPC**				
	a) LOKTOK	105	4.94	5.19	17.56
2	**NEEPCO**				
	a) RHEP	405	6.462	26.17	71.58
	b) Free Power		12	48.60	131.95
	c) KOPILI-I	200	5.191	10.38	27.80
	d) KOPILI-II	25	5.992	1.50	4.57

	e) Khandong	50	4.194	2.10	3.66
	f) AGBPP	291	5.694	16.57	97.05
	g) AGTPP	84	6.132	5.15	37.61
	h) DOYANG	75	6.852	5.14	10.74
3	**NTPC**				
	a) FARAKKA	1600	0.19	3.04	21.22
	b) KAHALGAON	840	0.19	1.60	11.71
	c) TALCHAR	1000	0.14	1.40	13.89
4	**OTPC**				
	a) PALLATNA	363.3	3.03	11.01	73.94
	Total			**137.84**	**523.28**

1.3 Necessity for Filing of Tariff petition

The Electricity Act 2003, section 62 and 64 provides for determination of tariff by appropriate commission on application by licensee. The Arunachal Pradesh State Electricity Regulatory Commission (APSERC) notified tariff regulations (terms and condition) 2011 and Multi Year Tariff Regulation 2013 which provides for filing tariff petition before 30th November every year. In pursuance of these legal provisions, APDoP is filling this tariff petition. However, because of non availability of sufficient data/information APDoP is not filing for Multi Year Tariff this year. Hon'ble commission is requested to condone it for this year. Next year APDoP shall try in multi year tariff format.

1.4 Procedure Adopted in preparation of this Tariff Petition

While preparing the tariff petition and annual revenue requirement, the APDoP adopted the principle, guidelines and procedure prescribed by Hon'ble APSERC in the Tariff Regulation(Terms and Conditions) 2011 and Multi Year Tariff Regulation 2013. They are as follows:

1.4.1 Estimation of Aggregate Revenue Requirement

Following components shall comprise for calculation of Aggregate Revenue Requirement:

a) Power Purchase Cost
b) Fuel Cost
c) Capital Cost
d) Operation and maintenance cost
e) Interest on loan
f) Return on equity
g) Working capital
h) Interest on working capital
i) Depreciation

j) Income tax
k) Provision for bad or doubtful debt.

1.4.2 Estimation of Annual Income.

a) Estimation of category wise energy sale and corresponding revenue at existing tariff.
b) Estimation of income from deviation export(UI)
c) Estimation of income from Sale of surplus power through Power Exchange.
d) Non tariff income.

1.4.3 Determination of Revenue Gap

Difference in amount between estimated Annual Revenue Requirement and Estimated Annual Income is Revenue Gap for that year.

1.4.4 Revised Tariff Proposal

To cover the revenue gap revised tariff is proposed for approval of Hon'ble Commission.

CHAPTER-II :: ESTIMATION OF AGGREGATE REVENUE REQUIREMENT

2.1 Power Purchase Cost

APDoP buys power from DHPD as well as Central Sector Generation Station. The Power purchased during FY 2014-15 shown in the following table 2.1. The power purchase cost for current year and ensuing year is estimated considering various factors like energy sale projection, likely distribution losses, surplus energy sale during high hydro, deviation import during peak hours, total energy requirement etc.

Table 2.1 :: Power Purchase Cost during FY 2014-15

(Rs. In Crores)

SL. No	Source	Energy received (MU)	Power Purchase Cost	PGCIL, NERLDC & Other Charges	Total Power Purchase Cost	Unit Cost (Rs./ KWH)
1	**NHPC**					
	a) LOKTOK	17.56	5.57	0.79	6.36	3.62
2	**NEEPCO**					
	a) RHEP	71.58	18.06	3.21	21.27	2.97
	b) Free Power	131.95	0.00	5.92	5.92	0.45
	c) KOPILI-I	27.80	1.84	1.25	3.09	1.11
	d) KOPILI-II	4.57	0.57	0.21	0.78	1.70
	e) Khandong	3.66	0.69	0.16	0.86	2.34
	f) AGBPP	97.05	44.42	4.36	48.77	5.03
	g) AGTPP	37.61	9.49	1.69	11.18	2.97
	h) DOYANG	10.74	3.01	0.48	3.49	3.25
3	**NTPC**					
	a) FARAKKA	21.22	8.05	0.95	9.00	4.24
	b) KAHALGAON	11.71	5.24	0.53	5.76	4.92
	c) TALCHAR	13.89	3.01	0.62	3.63	2.61
4	**OTPC**					
	a) PALLATNA	73.94	19.05	3.32	22.37	3.02
5	**Deviation Import**	150.12	31.40	6.74	38.13	2.54
6	**DHPD**	52.98	11.07		11.07	2.09
	Total	**726.39**	**161.46**	**30.22**	**191.68**	2.64

2.1.1 Energy Sale within the state

The category wise energy sale within the state in previous year, estimated in current year and projected in ensuing year is shown in the table 2.2. The increase in number of consumers for current year and ensuing year has been made after analysing past trends.

Table 2.2 ::Category wise number of consumers energy sale projection

SL No	Category of Consumers		Previous Year (Actuals) 2014-15		Current Year (Estimated) 2015-16		Ensuing Year (Projected) 2016-17	
			Consumers at the end of the year (Nos)	Energy Sale/ Demand (MUs)	Consumers at the end of the year (Nos)	Energy Sale/ Demand (MUs)	Consumers at the end of the year (Nos)	Energy Sale/ Demand (MUs)
1	**Non Commercial Consumers (Domestic)**							
	LT							
	a)	1-Phase, 230 Volt	131339	96.73	137906	101.57	144801	106.64
	b)	3-Phase, 400 Volt	1819	16.14	1910	16.95	2006	17.79
	HT							
	c)	3-Phase, 11KV	28	0.8	29	0.84	30	0.88
	d)	3-Phase, 33KV						
	e)	KJP & BPL connection	52971	20.63	55620	21.66	58401	22.74
2	**Commercial Consumers (Non-Industrial)**							
	LT							
	a)	1-Phase, 230 Volt	18370	17.68	19289	18.56	20253	19.49
	b)	3-Phase, 400 Volt	1024	13.1	1075	13.76	1129	14.44
	HT							
	c)	3-Phase, 11KV	88	2.79	92	2.93	97	3.08
	d)	3-Phase, 33KV	2	0.06	2	0.06	2	0.07
3	**Public Lighting and Water Supply Consumers**							
	LT							
	a)	1-Phase, 230 Volt	1019	5.09	1070	5.34	1124	5.61
	b)	3-Phase, 400 Volt	122	1.93	128	2.03	134	2.13
	HT							
	c)	3-Phase, 11KV	13	4.15	14	4.36	15	4.58
	d)	3-Phase, 33KV	3	0.01	3	0.01	3	0.01
4	**Agricultural Consumers**							
	LT							
	a)	1-Phase, 230 Volt						
	b)	3-Phase, 400 Volt	2	0.00	2	0.00	2	0.00
	HT							
	c)	3-Phase, 11KV						
	d)	3-Phase, 33KV						
5	**Industrial Consumers**							
	LT							
	a)	1-Phase, 230 Volt	142	55.19	149	57.95	156	60.85
	b)	3-Phase, 400 Volt	129	1.41	135	1.48	142	1.55
	HT							
	c)	3-Phase, 11KV	17	2.01	18	2.11	19	2.22
	d)	3-Phase, 33KV	4	9.32	4	9.79	4	10.28
6	**Bulk Mixed Consumers**							
	a)	3-Phase, 11KV	125	59.97	131	62.97	138	66.12
	b)	3-Phase, 33KV	26	2.74	27	2.88	28	3.02
	c)	3-Phase, 132 KV	11	0.92	12	0.97	13	1.01
7	**Temporary Consumer**							
	a)	LT/HT	49	0.11	51	0.12	54	0.13
		G Total:-	**207305**	**322.05**	**217669**	**338.15**	**228553**	**355.07**

2.1.2 Deviation Import/UI(import)

During peak hour APDoP has to resort for deviation import/ unscheduled interchange (import). The deviation import received during previous year i.e. 2014-15 and estimated deviation import during current Year and ensuing year is given table 2.3.

Table 2.3 :: Projection of Deviation Import

SL. No.	Month	Per unit cost (Rs./ kWH)	Previous Year 2014-15 (Actual)		Current Year 2015-16 (Estimated)		Ensuing Year 2016-17 (Projected)	
			Quantum of Energy (MU)	Cost of Energy Purchase (Rs. Crores)	Quantum of Energy (MU)	Cost of Energy Purchase (Rs. Crores)	Quantum of Energy (MU)	Cost of Energy Purchase (Rs. Crores)
1	April	3.23	16.74	5.41	11.16	3.60	11.16	3.60
2	May	2.55	11.04	2.82	7.36	1.88	7.36	1.88
3	June	4.10	10.54	4.32	7.03	2.88	7.03	2.88
4	July	3.66	5.74	2.10	3.83	1.40	3.83	1.40
5	August	2.78	4.07	1.13	2.71	0.75	2.71	0.75
6	September	2.26	4.55	1.03	3.03	0.69	3.03	0.69
7	October	2.76	11.61	3.20	7.74	2.14	7.74	2.14
8	November	2.23	15.14	3.38	10.10	2.25	10.10	2.25
9	December	2.50	19.15	4.79	12.77	3.19	12.77	3.19
10	January	2.04	18.86	3.85	12.58	2.57	12.58	2.57
11	February	1.70	15.84	2.69	10.56	1.80	10.56	1.80
12	March	2.03	16.87	3.43	11.12	2.26	11.12	2.26
13	**Total**	**2.54**	**150.12**	**38.14**	**100.00**	**25.40**	**100.00**	**25.40**

2.1.2 Distribution Loss and AT&C Loss

Due to scattered load over vast geographical area, the distribution loss is comparatively high in Arunachal Pradesh. The distribution loss and AT&C Loss in previous year, estimated in current year and projected in ensuing year is shown in the table 2.4 below.

Table 2.4 :: AT &C loss projection.

SL No	Particulars	Calculation	Unit	Previous Year 2014-15 (Actual)	Current Year 2015-16 (Estimated)	Ensuing Year 2016-17 (Projected)
1	Generation (own as well as any other connected generation net after deducting auxiliary consumption)within area of supply of DISCOM.	A	MU	52.38	52.33	52.28

2	Input energy (metered Import) received at interface points of DISCOM network.	B	MU	673.40	622.00	622.00
3	Input energy (metered Export) by the DISCOM at interface point of DISCOM network.	C	MU	36.25	45	55
4	Total energy available for sale within the licensed area to the consumers of the DISCOM	D=A+B+C	MU	689.53	629.33	619.28
5	Energy billed to metered consumers within the licensed area of the DISCOM	E	MU	322.05	338.15	355.06
6	Energy billed to unmetered consumers within the licensed area of the DISCOM	F	MU			
7	Total energy billed	G=E+F	MU	322.05	338.15	355.06
8	Amount billed to consumer within the licensed area of DISCOM	H	Rs. Cr	158.91	134.35	141.00
9	Amount realized by the DISCOM out of the amount Billed at H#	I	Rs. Cr	119.10	125.50	132.50
10	Collection efficiency (%) (= Revenue realized/ Amount billed)	J=(I/H) X 100	%	74.95	93.42	93.93
11	Energy realized by the DISCOM	K=JXG	MU	214.37	315.89	333.51
12	Distribution Loss (%)	L={(D-G)/D}x100	%	53.29	46.27	42.67
13	AT & C Loss (%)	M={(D-K)/D} x 100		65.00	49.81	46.15

2.1.4 Total Energy Requirement:-

Total Energy available during previous year i.e. 2014-15 and estimated energy requirement during current year and ensuing year including energy from DHPD and Diesel Generating Sets is given following table 2.5.

Table 2.5 :: Energy Requirement

SL No.	Item	Previous year 2014-15 (actual)	Current Year 2015-16 (estimated)	Ensuing year 2016-17 (projected)
A	**ENERGY REQUIREMENT**			
1	Energy sales within the State	322.05	338.15	355.06
2	Sales outside State (Bilateral+UI)	36.25	45.00	55.00
3	TOTAL SALES	358.30	383.15	410.06
4	Distribution Losses			

I)	MU	367.48	291.18	264.22
II)	%	53.29	46.27	42.67
5	Total energy requirement (3+4)	725.78	674.33	674.28
B	**ENERGY AVAILABILITY**			
1	Power Purchase from			
	a) DHPD	52.03	52.03	52.03
	b) Central Stations	391.33	390.00	390.00
	c) Deviation Import(UI)	150.12	100.00	100.00
2	Net Power Purchase (a+b+c)	593.48	542.03	542.03
3	Free Power from RHEP, NEEPCO	131.95	132.00	132.00
4	From D G Set	0.35	0.30	0.25
5	Total energy availability	725.78	674.33	674.28

Now, considering all the power sources and expected sales and losses, the power purchase for previous year, power purchase projection for current and ensuing year is given in the table 2.6.

Table 2.6 :: Power Purchase Cost projection

Rs. in Crores

SL. No	**Source**	**Unit Cost (Rs./ KWH)**	**Previous Year 2014-15 (Actual)**		**Current Year 2015-16 (Estimated)**		**Ensuing Year 2016-17 (Projected)**	
			Energy received (MU)	Power Purchase Cost	Energy received (MU)	Power Purchase Cost	Energy received (MU)	Power Purchase Cost
1	**NHPC**							
	a) LOKTOK	3.62	17.56	6.36	17.56	6.36	17.56	6.36
2	**NEEPCO**							
	a) RHEP	2.97	71.58	21.27	71.58	21.27	71.58	21.27
	b) KOPILI-I	1.11	27.80	3.09	27.80	3.09	27.80	3.09
	c) KOPILI-II	1.70	4.57	0.78	4.57	0.78	4.57	0.78
	e) Khandong	2.34	3.66	0.86	3.66	0.86	3.66	0.86
	d) AGBPP	5.03	97.05	48.77	97.05	48.77	97.05	48.77
	e) AGTPP	2.97	37.61	11.18	37.61	11.18	37.61	11.18
	f) DOYANG	3.25	10.74	3.49	10.74	3.49	10.74	3.49
3	**NTPC**							
	a) FARAKKA	4.24	21.22	9.00	21.22	9.00	21.22	9.00
	b) KAHALGAON	4.92	11.71	5.76	11.71	5.76	11.71	5.76
	c) TALCHAR	2.61	13.89	3.63	13.89	3.63	13.89	3.63
4	**OTPC**							
	a) PALLATNA	3.02	73.94	22.37	73.94	22.37	73.94	22.37
5	**Deviation Import**	2.54	150.12	38.13	100.00	25.40	100.00	25.40
6	**DHPD**	2.09	52.03	10.87	52.03	10.87	52.03	10.87

	Total		**593.48**	**185.56**	**543.36**	**172.83**	**543.36**	**172.83**
7	**Free Power (RHEP)**	0.45	131.95	5.92	131.95	5.92	131.95	5.92
	Grand Total		**725.43**	**191.48**	**675.31**	**178.75**	**675.31**	**178.75**

2.2 Capital Cost

All Projects/Schemes undertaken by APDoP are sponsored by the State Government or Central Government. As per clause 91.2(v) of Multi Year Tariff Regulation 2013, APDoP shall not claim this as Expenditure for the purpose of ARR.

2.3 Operation and Maintenance Cost

Operation and maintenance cost consists of following three components

2.3.1 Employee Cost.

Total number of employees including Casual, Work Charged and Regular employees in APDoP at present is 9961. This number is unlikely to increase as there has been no creation of new posts. The details of number of employees are given in table 2.7.

Table 2.7 :: Total numbers of Employees in APDoP

Sl. No	Particulars	Previous year 2014-15 (Actual)	Current year 2015-16 (Estimated)	Ensuing year 2016-17 (Projected)
1	Number of employees as on 1st April	9961	9961	9961
2	Number of employees on deputation/ foreign service as on 1st April	0	0	0
3	Total Number of employees (1+2)	9961	9961	9961
4	Number of employees retired/ retiring during the year	0	0	0
5	Number of employees at the end of the year (3-4)	9961	9961	9961

The employees cost for previous year, estimate for current year, projection for ensuing year is given in the table 2.8. Cost shown for these employees includes salary and other admissible allowances.

Table 2.8 :: Employees Cost

Rs in Crore

Sl No.	Particulars	Previous year 2014-15 (Actual)	Current year 2015-16 (Estimated)	Ensuing year 2016-17 (Projected)
1	SALARIES & ALLOWANCES of Employees	179.50	188.50	197.50

2.3.2 Repair and Maintenance Cost

Repair and maintenance cost of assets of APDoP for previous year, current year and ensuing year is shown in the table 2.9.

Table 2.9 :: Repair Maintenance Cost

Rs. in Crore

Sl No.	Particulars	Previous year 2014-15 (Actual)	Current year 2015-16 (Estimated)	Ensuing year 2016-17 (Projected)
1	Maintenance of Assets	22.00	23.10	24.26

2.3.3 Administrative and General Expense

The Administrative and General Expense for previous year, estimate for current year, projection for ensuing year is given in the table 2.10.

Table 2.10 :: Administrative and General Expense

Rs. in Crore

SL No.	Particulars	Previous year 2014-15 (Actual)	Current year 2015-16 (Estimated)	Ensuing year 2016-17 (Projected)
1	**2**	**3**	**4**	**5**
1	Administration and General Expenses	1.00	1.05	1.10

2.4 Interest on Loan

APDoP being a Government Department is not allowed to take loan; hence interest on loan does not arise. Therefore, expenses on interest on loan may be considered as Nil and APDoP shall not claim any for purpose of ARR.

2.5 Return on equity

APDoP being a Government Department, all funding comes from Government as grant. Hence, there is no loan as well as equity, as a result return on equity may also be considered as Nil.

2.6 Interest on working Capital

Working capital for APDoP used to be provided by Government of AP as grant as and when required, hence, loan for as well as interest on working capital may also be considered as Nil.

2.7 Depreciation

All Assets under the control of APDoP are created from grant of Government of Arunachal Pradesh. Therefore APDoP shall not claim any depreciation as ARR.

2.8 Income Tax

Income Tax is not applicable in case of APDoP, being Government Department.

2.9 Bad and doubtful debt

APDoP has not considered any provision for bad or doubtful debt.

2.10 Fuel Cost

Fuel cost for running DG set for the previous year i.e. 2014-15 was Rs. 4.5 Cr. It is estimated that for current year and ensuing year the cost will be 4.68 Cr. and 4.87 Cr. respectively by nominally increasing 4% annually.

2.11 Aggregate Revenue Requirement

Considering all the aspects depicted above the aggregate revenue requirements of APDoP for previous year, estimate for current year, projection for ensuing year is summarised in the table 2.11.

Table 2.11 :: Annual Revenue Requirement

Rs. In Crores

SL No.	Item of expenditure	Previous year 2014-15 (Actual)	Current year 2015-16 (Estimated)	Ensuing year 2016-17 (Projected)
1	Cost of Power Purchase	191.48	178.99	178.79
2	Fuel Cost	4.50	4.68	4.87
3	Employee costs	179.50	188.5	197.50
4	O&M expenses	22.00	23.10	24.26
5	Adm. & Gen. Expenses	1.00	1.05	1.10
6	Depreciation	0.00	0.00	0.00
7	Interest charges	0.00	0.00	0.00
8	Return on equity	0.00	0.00	0.00
9	Income Tax	0.00	0.00	0.00
10	Total revenue requirement	**398.48**	**396.12**	**406.51**

CHAPTER – III :: ANNUAL INCOME

3.1 Annual Income

APDoP earns income from different sources, like electricity energy charge from consumers within the state, meter rent, late payment surcharge, sale outside state through deviation export, energy exchange etc.

3.2 Energy Sale within State

Energy sale to the category wise retail consumers within the state for previous year, estimate for current year and projection for ensuing year at the existing tariff rate is shown in the table 3.1.

Table 3.1 :: Category wise energy sale within the State at existing tariff

Sl No.	Category		Existing Tariff Rate (Rs per Kwh)	Previous Year 2014-15 (Actual)		Current Year 2015-16 (Estimated)		Ensuing Year 2016-17 (Projected)	
				Sale in (MU)	Amount (Rs in Crore)	Sale in (MU)	Amount (Rs in Crore)	Sale in (MU)	Amount (Rs in Crore)
1	**Non Commercial Consumers (Domestic)**								
	LT								
	a)	1-Phase, 230 Volt	4.00	96.73	38.69	101.56	40.63	106.64	42.66
	b)	3-Phase, 400 Volt	4.00	16.14	6.46	16.95	6.78	17.79	7.12
	HT								
	c)	3-Phase, 11KV	3.40	0.80	0.27	0.84	0.28	0.88	0.30
	d)	3-Phase, 33KV	3.25						
	e)	KJP & BPL connection	2.65	20.63	5.47	21.66	5.74	22.74	6.03
2	**Commercial Consumers (Non-Industrial)**								
	LT								
	a)	1-Phase, 230 Volt	5.00	17.68	8.84	18.57	9.28	19.50	9.75
	b)	3-Phase, 400 Volt	5.00	13.10	6.55	13.75	6.88	14.44	7.22
	HT								
	c)	3-Phase, 11KV	4.20	2.79	1.17	2.93	1.23	3.08	1.29
	d)	3-Phase, 33KV	4.00	0.06	0.03	0.07	0.03	0.07	0.03
3	**Public Lighting and Water Supply Consumers**								
	LT								
	a)	1-Phase, 230 Volt	5.10	5.09	2.60	5.35	2.73	5.61	2.86
	b)	3-Phase, 400 Volt	5.10	1.93	0.98	2.02	1.03	2.13	1.08
	HT								
	c)	3-Phase, 11KV	4.20	4.15	1.74	4.36	1.83	4.57	1.92

	d)	3-Phase, 33KV	4.00	0.01	0.00	0.01	0.00	0.01	0.00
4	**Agricultural Consumers**								
	LT								
	a)	1-Phase, 230 Volt	3.10						
	b)	3-Phase, 400 Volt	3.10						
	HT								
	c)	3-Phase, 11KV	2.75						
	d)	3-Phase, 33KV	2.65						
5	**Industrial Consumers**								
	LT								
	a)	1-Phase, 230 Volt	4.20	55.19	23.18	57.94	24.34	60.84	25.55
	b)	3-Phase, 400 Volt	4.20	1.41	0.59	1.48	0.62	1.56	0.65
	HT								
	c)	3-Phase, 11KV	3.75	2.01	0.75	2.11	0.79	2.22	0.83
	d)	3-Phase, 33KV	3.40	9.32	3.17	9.79	3.33	10.28	3.49
	e)	3-Phase, 132 KV	3.25	11.27	3.66	11.83	3.85	12.43	4.04
6	**Bulk Mixed Consumers**								
	a)	3-Phase, 11KV	3.75	59.97	22.49	62.97	23.61	66.11	24.79
	b)	3-Phase, 33KV	3.40	2.74	0.93	2.88	0.98	3.03	1.03
	c)	3-Phase, 132 KV	3.25	0.92	0.30	0.96	0.31	1.01	0.33
7	**Temporary Consumer**								
	a)	LT/HT	6.35	0.11	0.07	0.12	0.08	0.13	0.08
		G Total:-		**322.05**	**127.95**	**338.15**	**134.35**	**355.06**	**141.06**

3.2 Non tariff income

APDoP also earns certain amounts from energy meter rent from consumers and also from penalty charge who pays the revenue bill after due date. Meter rent and late payment surcharge is tabulated for previous year, estimate for current year and projection for ensuing year in the table 3.2.

Table 3.2 :: Non Tariff Income

(Rs. In Crores)

SL No.	Source of loan	Previous year 2014-15 (Actual)	Current year 2015-16 (Estimated)	Ensuing year 2016-17 (Projected)
1	Meter/ Service rent	2.47	2.59	2.73
2	Late payment surcharge	0.40	0.50	0.60
4	Misc. receipts	0.00	0.00	0.00
5	Misc. charges	0.00	0.00	0.00
8	Income from trading	0.00	0.00	0.00
12	**Total Income**	**2.87**	**3.09**	**3.33**

3.4 Income from energy sale through Energy exchange

During high hydro season APDoP has surplus power. This surplus power is sold through energy exchange. The sale proceeds for previous year, estimate for current year and projection for ensuing year is shown in the table 3.4.

Table 3.4 :: Income from energy sale through Energy exchange

SL. No.	Month	Per unit cost (Rs./ kWH)	Previous Year 2014-15 (Actual)		Current Year 2015-16 (Estimated)		Ensuing Year 2016-17 (Projected)	
			Quantum of Energy Sold (MU)	Cost of Energy Sale (Rs. Crores)	Quantum of Energy Sale (MU)	Cost of Energy Sale (Rs. Crores)	Quantum of Energy Sale (MU)	Cost of Energy Sale (Rs. Crores)
1	April							
2	May							
3	June	4.03	1.25	0.50	1.53	0.62	1.53	0.62
4	July	2.83	8.11	2.30	9.87	2.79	9.87	2.79
5	August	4.04	10.90	4.40	13.28	5.37	13.28	5.37
6	September	4.35	4.68	2.04	5.69	2.48	5.69	2.48
7	October	4.36	1.00	0.44	1.22	0.53	1.22	0.53
8	November	1.90	0.26	0.05	0.31	0.06	0.31	0.06
9	December							
10	January							
11	February							
12	March							
13	**Total**		**26.20**	**9.72**	**31.90**	**11.84**	**31.90**	**11.84**

3.5 Income from energy sale through deviation export

During off peak hour of APDoP, the surplus power exported through unscheduled interchange. The unscheduled interchange for previous year, estimate for current year and projection for ensuing year is shown in the table 3.5.

Table 3.5 :: Income from energy sale through deviation export

SL. No.	Month	Per unit cost (Rs./ Kwh)	Previous Year 2014-15 (Actuals)		Current Year 2015-16 (Estimated)		Ensuing Year 2016-17 (Projected)	
			Quantum of Energy Sold (MU)	Cost of Energy Sold (Rs. Crores)	Quantum of Energy Sold (MU)	Cost of Energy Sold (Rs. Crores)	Quantum of Energy Sold (MU)	Cost of Energy Sold (Rs. Crores)
1	April							
2	May	2.08	0.05	0.11	1.30	0.27	1.30	0.27

3	June	2.10	1.30	0.10	1.80	0.38	1.80	0.38
4	July	2.16	1.98	0.08	2.50	0.54	2.50	0.54
5	August	2.20	1.11	0.14	3.00	0.66	3.00	0.66
6	September	2.16	3.00	0.51	2.50	0.54	2.50	0.54
7	October	2.10	2.58	0.27	2.00	0.42	2.00	0.42
8	November							
9	December							
10	January							
11	February							
12	March							
13	**Total**		**10.02**	**1.21**	**13.10**	**2.81**	**13.10**	**2.81**

3.6 Total Annual Income

Total annual income of APDoP from the various is projected for ensuing year 2016-17, estimated for current year and actual of previous year is tabulated in the following table 3.6.

Table 3.6 :: Total Annual Income

(Rs. In Crores)

SL No.	**Source**	**Previous year 2014-15**	**Current year 2015-16**	**Ensuing year 2016-17**
		(Actual)	**(Estimated)**	**(Projected)**
1	2	3	4	5
1	Non tariff income	2.87	3.09	3.33
2	Revenue from existing tariff	127.95	134.35	141.06
3	Sale through Energy Exchange	9.72	11.84	11.84
4	Deviation export	1.21	2.81	2.81
3	**Total Income**	**141.75**	**152.09**	**159.04**

CHAPTER – IV::REVENUE GAP

4.1 Aggregate Revenue Requirement and Revenue Gap

From chapter II and chapter III, annual revenue requirement, income and revenue gap is tabulated in the table 4.1.

Table 4.1 :: Aggregate Revenue Requirement, Income and Revenue Gap

(Rs. In Crores)

SL No.	Item of expenditure	Previous year 2014-15 (Actual)	Current year 2015-16 (Estimated)	Ensuing year 2016-17 (Projected)
1	Cost of Power Purchase	191.68	178.99	178.99
2	Fuel Cost	4.50	4.68	4.87
3	Employee costs	179.50	188.5	197.50
4	O&M expenses	22.00	23.10	24.26
5	Adm. & Gen. Expenses	1.00	1.05	1.10
6	Depreciation	0.00	0.00	0.00
7	Interest charges	0.00	0.00	0.00
8	Return on equity	0.00	0.00	0.00
9	Income Tax	0.00	0.00	0.00
10	**Total revenue requirement**	**398.68**	**396.32**	**406.71**
11	Non tariff income	2.87	3.09	3.33
12	Revenue from existing tariff	127.95	134.35	141.06
13	Sale through Energy Exchange	9.72	11.84	11.84
14	Deviation export	1.21	2.81	2.81
15	**Total Income**	**141.75**	**152.09**	**159.04**
16	**Revenue gap (10-15)**	**256.93**	**244.23**	**247.67**

4.2 Revenue Gap and its Recovery

There is a revenue gap of Rs. 247.67 Crore which has to be cover up revising the existing tariff. Since, APDoP is government department and is more care for welfare of its citizen as well as consumers than burdening them with high electricity tariff rate. Therefore, the revenue gap will be met up by the state government through financial grant or budgetary support.

Table 4.2 :: Revenue Gap for FY 2016-17 and its Recovery

Sl. No.	Description of Items	Rs. In Crore
1	Aggregate Revenue Requirement	**406.71**
2	Total Income	**159.04**
3	Revenue gap (1-2)	**247.67**
4	Expected Government Grant	**247.67**
5	Net Revenue Gap (3-4)	**0**

CHAPTER – V :: SCHEDULES

5.1 Schedule-I :: Category wise Tariff Schedule

5.1.1 Category-1 :: Non- Commercial Consumers (Domestic)

Sl. No.	System of Supply & Metering Point		Tariff (Rs./KWH)
1	**LT - AC 50 Hz**		
2	a)	1-Phase, 230 Volt	4.00
3	b)	3-Phase, 400 Volt	4.00
4	c)	KJP & BPL connection	2.65
5	**HT - AC 50 Hz**		
6	d)	3-Phase, 11KV	3.40
7	e)	3-Phase, 33KV	3.25

Applicability ::

Consumers using the electrical energy for domestic and non-profit purpose such as lights, fans and others appliances only for bonafied residential & non-residential but non-commercial use. This category of consumers also covers Government owned Residential and Non- Residential buildings, Government owned Educational and Research Institutions, Charitable Institutions, Government owned Hospitals and Dispensaries, farm houses, Religious premises like Churches, Temples, Mosques, community halls, Religious printing press (not engaged in commercial activity), etc. or classifications as may be amended by the competent authority from time to time.

5.1.2 Category -2 :: Commercial Consumers (Non Industrial)

Sl. No.	System of Supply & Metering Point		Tariff (Rs./KWH)
1	**LT - AC 50 Hz**		
2	a)	1-Phase, 230 Volt	5.00
3	b)	3-Phase, 400 Volt	5.00
4	**HT - AC 50 Hz**		
5	c)	3-Phase, 11KV	4.20
6	d)	3-Phase, 33KV	4.00

Applicability ::

The consumers under this category includes commercial places like Government undertaking, public sector undertaking, Commercial houses, markets, and optical houses, Restaurant, Bars, Tailoring shops, 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 (newspaper printing press only) Petrol Pumps, etc. or classifications as may be amended by the competent authority from time to time.

5.1.3 Category–3 :: Public Lighting And Water Supply Consumers

Sl. No.	System of Supply & Metering Point		Tariff (Rs./KWH)
1	**LT - AC 50 Hz**		
2	a)	1-Phase, 230 Volt	5.10
3	b)	3-Phase, 400 Volt	5.10
4	**HT - AC 50 Hz**		
5	c)	3-Phase, 11KV	4.20
6	d)	3-Phase, 33KV	4.00

Applicability::

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 machinery, etc. or classifications as may be amended by the competent authority from time to time.

5.1.4 Category – 4 :: Agricultural Consumers

Sl. No.	System of Supply & Metering Point		Tariff (Rs./KWH)
1	**LT - AC 50 Hz**		
2	a)	1-Phase, 230 Volt	3.10
3	b)	3-Phase, 400 Volt	3.10
4	**HT - AC 50 Hz**		
5	c)	3-Phase, 11KV	2.75
6	d)	3-Phase, 33KV	2.65

Applicability ::

The consumers who use electrical energy in agricultural fields /firms for the purpose of lighting, irrigation and cultivation & not connected to any attached commercial or industrial installations in the agricultural field/ farm or classifications as may be amended by the competent authority from time to time.

5.1.5 Category – 5 :: Industrial Consumers

Sl. No.	System of Supply & Metering Point		Tariff (Rs./KWH)
1	**LT - AC 50 Hz**		
2	a)	1-Phase, 230 Volt	4.30
3	b)	3-Phase, 400 Volt	4.30
4	**HT - AC 50 Hz**		
5	c)	3-Phase, 11KV	3.85
6	d)	3-Phase, 33KV	3.50
7	e)	3-Phase, 132KV	3.35

Applicability ::

The Industrial consumers cover all Government registered Industrial power consumers such as steel fabrication, motor body builders, power handloom industry, poultry farming, pisciculture, prawn culture, floriculture in green house, mushroom production, cold storage unit for storing agricultural, horticultural and piscicultural product, colour photo labs. Printing press including Government owned printing press (Primarily engaged in printing for commercial gain), government owned/ public sector industries and any other type of industry where raw material is converted into finished products with the help of electrical power etc. or classifications as may be amended by the competent authority from time to time.

5.1.6 Category – 6 :: Bulk Mixed Consumers

Sl. No.	System of Supply & Metering Point		Tariff (Rs./KWH)
1	**HT - AC 50 Hz**		
2	a)	3-Phase, 11KV	3.75
3	b)	3-Phase, 33KV	3.40
4	c)	3-Phase, 132 KV and above	3.25

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. Defence 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.

5.1.7 Category - 7 :: Temporary Consumers

Tariff :- Rs. 6.50 per Kwh

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.

Applicability ::

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, 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 competent authority from time to time.

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

Notes:

a) Temporary services connection shall require prior approval from the next higher load sanctioning authority.

b) The energy cost as per tariff above along with connection and disconnection charge will be realized in advance from the applicant before making the supply available to him.

c) Applicant at his own expenses shall arrange the complete wiring for which temporary supply of power is required. It will also be the responsibility of the applicant to ensure that the wiring conforms to the technical & safety requirement as specified by authorities.

d) Energy bill, based in actual consumption shall be served to the consumer at

reasonable interval. The amount of each bill shall be adjusted from the amount of advance & security deposit on closure of the temporary services.

5.2 Schedule- II – Miscellaneous Charges

5.2.1 Charges on Energy Meter

a) 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 labour cost of its replacement.

i) Prepaid Consumers :- As an incentive monthly rent for energy meter for prepaid consumer shall be NIL.

ii) Post-paid Consumers :- For post-paid consumers monthly rent for energy meter if provided by APDoP shall be as per following table. In case the energy meter is purchased and installed at the cost of consumers then there shall be no meter rent.

Sl.		Energy Meter Specification	Rent. Rs/ Month
a		**LT Metering- AC**	
	i.	Single Phase 220V	16.00
	ii.	Three Phase 400 V between phases (without CT)	26.00
	iii.	Three Phase 400 V between phases (with CT)	68.00
b		**HT Metering- AC** Complete Energy meter with CT/PT & other monitoring and	
	i.	11 KV system	670.00
	ii.	33 KV system	3350.00
	iii.	132 KV system	13401.00

b) Shifting Charges of Meter

i) If shifting resulted from reconstruction/modification of building and on request of the consumer :: Rs. 168/- per shifting.

ii) If shifting is in the interest of Department :: Free of Cost.

c) Testing Charges of Meter

Sl No	Charges for testing of Meters at the request of consumers	For each time
i.	For AC Single Phase LT Energy Meter	134.00
ii.	For energy meter without CT for AC three phase LT Supply	202.00
iii.	For energy meter with CT for AC three phase LT supply	336.00
iv.	For energy meter AC three phase HT supply	670.00

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

5.2.2 Other Charges

a) Testing of Consumer's Installation

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

Sl No.	Testing at Consumer Installation	Charges per Installation in Rs.
i.	1 phase service Wiring installations	202.00
ii.	3 phase service Wiring installations	320.00
iii.	HT Line installation of 11 KV system	670.00
iv.	HT Line installation of 33 KV & above system	1336.00

b) Disconnection and Reconnection of Service

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

Sl. No	Category of Work	Charges Per Connection
i.	All categories of connections	134.00
ii.	Disconnection only	134.00

c) Re-rating of Installation & revised load sanction

Fees for re-rating of the consumer's installation at the request of the consumer and for revised load sanction are as follows.

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

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

d) 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.

e) Security Deposit

All new consumers shall pay security deposit as per Section 4.114 to section 4.119 and Annexure 11.18 of Arunachal Pradesh Electricity Supply Code 2013

5.3 Schedule-III – General Conditions of Supply

5.3.1 Payment: The bill shall be paid in full inclusive of all arrears if the consumer pay 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.

5.3.4 Rebate:

For Post-paid Consumer : Rebate of 3% on the bill amount shall be available to the billed amount on current bills if the dues are cleared within due dates. The electricity bill shall show the amounts to be paid within due date (after 3% discount) and payable after due date.

For Prepaid Consumer : Rebate of 5% on recharge amount shall be made available.

5.3.3 Surcharge/Penalty for late payment of bill: If payments is not received within last date for payment, the bill will be treated as invalid and the amount outstanding will be carried over to the next month's bill as arrear. Simple interest @2% will be charged as penalty on outstanding amount each 30 days successive period or part thereof until the amount is paid in full.

5.3.5 **Billing Cycle:** Normally the billing cycle shall on monthly basis.

5.3.7 **Defaulter:** 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.

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

5.3.8 Mixed Load: Mixed domestic and commercial establishment shall be treated as commercial establishments if the load on commercial side is more than 50% of the total load.

5.3.10 Metering Point: The metering point shall be the point of delivery of energy at the declared nominal voltage.

5.3.11 Ownership meter: The energy meter and its allied instrument used for registration of energy data only shall deem to be the property of the supplier and the consumer shall have no right over it for ownership after the commencement of supply.

CHAPTER – VI :: PRAYER

The APDoP respectfully prays to the Hon'ble Commission;

1. To admit this Petition for approval of Retail Tariff for FY 2016-17 and determination of ARR for FY 2016-17
2. To approve proposed retail tariff for FY 2016-17.
3. To approve proposed ARR for FY 2016-17.
4. To grant any other relief as the Hon'ble Commission may consider appropriate.
5. To pass any other order as the Hon'ble Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice.
6. The petitioner craves leave of the Hon'ble Commission to allow further submissions, additions and alterations to this petition as may necessary from time to time.

Dated Itanagar the

Petitioner
For Department of Power
Government of AP
Itanagar