GOVERNMENT OF ARUNACHAL PRADESH
DEPARTMENT OF POWER

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Office of the Chief Engineer (Power)
Western Electrical Zone, Vidyut Bhawan
Itanagar: 791 111 (A.P.)

No: CEP/WEZ/COM-10/2019-20/7444-47 Dated Itanagar, the 29th 11 2019

To

The Secretary,
APSERC.,Niti Vihar,
Itanagar,
Arunachal Pradesh.

Sub:- Submission of Multi Year Tariff Petition 2020-21 to 2022-23.

Sir,

Enclosed please find herewith Multi Year Tariff Petition for the FY 2020-21 to FY 2022-23 submitted by Shri Hage Mima, Superintending Engineer, APEC No.IV.,Dirang who has been authorized as Petitionar for filing Tariff Petition Vide this office Letter No.CE(P)/WEZ/COM-10/19-20/7355-58 dated 28th November 2019 along with Cheque bearing No.449692 dated 28/11/2019 amounting to Rs.7.5 lakh for favour of further necessary action. A soft copy of Tariff Petition has been e-mailed to your official e-mail ID.

Enclo:- 1. Tariff Petition.
2. Cheque amounting to Rs.7.5 lakh

Yours faithfully,

Chief Engineer (Power)
Western Elect.Zone

No.CE(P)/COM-10/2019-20/ Dated Itanagar, the 29th November 2019.

Copy to:-

1. The Commissioner (Power), Govt.of A.P., Itanagar, for favour of information please.
2. Shri Hage Mima, SE(E), APEC No.IV., Dirang, for information please.
3. The Senior Finance & Accounts Office, O/o CE(P).,DoP.,Itanagar

Chief Engineer (Power)
Western Elect.Zone

RECEIPT NO. 252
Date 29/11/19
No. 252 Dtd. 29/11/19
Office of the APSERC

PETITION FOR APPROVAL
OF
AGGREGATE REVENUE REQUIREMENT

TRUE UP OF FY 2018-19

AND

MULTI YEAR TARIFF FOR
FY 2020-21 TO FY 2022-23

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 Multi Year Tariff Proposal for FY 2020-21 to FY 2022-23 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

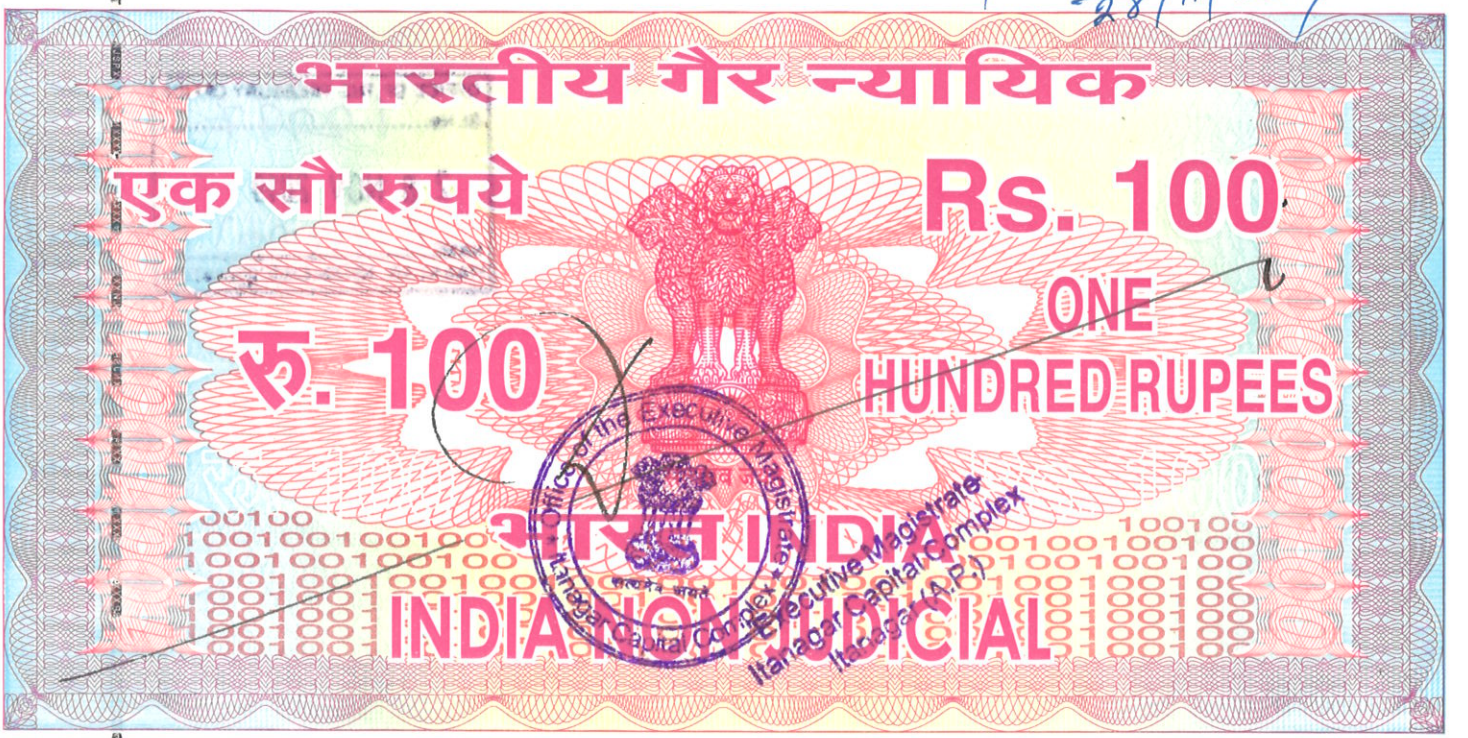
Petition under section 64 of the Electricity Act 2003 for determination of Aggregate Revenue Requirement (ARR), True up for FY 2018-19 and approval of Retail Multi Year Tariff in respect of Arunachal Pradesh Department of Power (herein after called "APDoP") for FY 2020-21 to FY 2022-23.

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 Multi Year Tariff Regulation 2018 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, being government department, is unable to function like incorporated company in the matter of profit making business plan, audits, accounts etc. However, with meagre available data/information as required by MYT regulation a tariff petition for Multi Year Control Period 2020-21, 2021-22 and 2022-23 is hereby filed for necessary action of Hon'ble Commission as deemed fit.

Hage Mima, SE(E)
For Department of Power
Government of Arunachal Pradesh,
Itanagar

S/NO.1021
28/11/2019



अरुणाचल प्रदेश ARUNACHAL PRADESH 768988

BEFORE HON'BLE ARUNACHAL PRADESH STATE ELECTRICITY REGULATORY COMMISSION

IN THE MATTER OF : **Petition for Approval of Aggregate Revenue Requirement (ARR) and Retail MultiYearTariff Proposal for FY 2020-21 to FY 2022-23 under Sections 62 and 64 of The Electricity Act 2003**

AFFIDAVIT

I, Shri Hage Mima, Son of Late Hage Tago, aged about 55 years do hereby solemnly affirm and state as follows;-

1. I am the Superintending Engineer(E), Arunachal Pradesh Electrical Circle-IV, Dirang, West Kameng District and I am petitioner in the above matter and is duly authorized to make this affidavit by the competent authority of the department.
2. The statement made in the petition is true to the information received from the official records of the department maintained in the ordinary course of business and believed to be true to the best of my Knowledge.

Deponent

Verification:-

I, Shri Hage Mima, do hereby verify that the facts mentioned in the para 1 and 2 above are correct to the best of my knowledge and no part of it is false or no materials has been concealed.

Deponent

Executed

24.11.19

Executive Magistrate
Itanagar Capital Complex
Itanagar (A.P.)

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List of Abbreviations used

AC	Alternating Current
AGBPP	Assam Gas Based Power Plant
AGTCCPP	Agartala Gas Thermal Combine Cycle Power Plant
APDoP	Arunachal Pradesh Department of Power
APSERC	Arunachal Pradesh State Electricity Regulatory Commission
ARR	Aggregate Revenue Requirement
AT&C	Aggregate Technical and Commercial
BPL	Below Poverty Line
DISCOM	Distribution Company
DG	Diesel Generating
DHPD	Department of Hydro Power Development
FY	Financial Year
HEP	Hydro Electric Project
HT	High Tension
KJP	Kutir Jyoti Program
KV	Kilo Volt
KW	Kilo Watt
LT	Low Tension
MU	Million Unit
MW	Mega Watt
NLDC	National Load Dispatch Centre
NHPC	National Hydro Power Corporation
NTPC	National Thermal Power Corporation
NEEPCO	North Eastern Electric Power Corporation
NERLDC	North Eastern Regional Load Dispatch Centre
NERPC	North Eastern Regional Power Committee
O&M	Operation and Maintenance
OTPC	ONGC Tripura Power Company
PGCIL	Power Grid Corporation of India Ltd
RLDC	Regional Load Dispatch Centre
R&M	Repair and Maintenace
RHEP	Ranganadi Hydro Electric Project
SHEP	Small Hydro Electric Project
SLDC	State Load Dispatch Centre
T&D	Transmission and Distribution

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 state of Arunachal Pradesh and is only distribution utility in Arunachal Pradesh. And hence APDoP is deemed distribution licensee as per Section 14 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 2,49,857 consumers and annual energy consumption was about 437.78 MUs in the FY 2018-19.

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 20.45 MW. These DG sets are kept as standby and used as and when required. Further, APDoP is on the way to phasing out the DG Sets slowly due to its high generation cost. 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 Operation and Maintenance Cost.

1.2.2 Power from DHPD:-

APDoP received about 61.71 MU during FY 2018-19 from DHPD at the rate of Rs. 3.04 per unit. Hence, APDoP shall purchase power from DHPD during entire control period costing at about Rs. 18.76 Cr per year.

1.2.3 Power from Central Sector Allocation: -

The major power requirement is met by Power allocation from central Sector. Central Sector allocation and energy purchased in FY 2018-19 is given in the table 1.1. This allocation is likely to increase in coming years as an IPP, Dikshi SHEP has been commissioned in the month September 2019 and Kameng HEP of NEEPCO in on the verge of commissioning.

Table 1.1 :: Central Sector Allocation and Energy Received during the FY 2018-19

Source of Power (Station wise)		Installed Capacity (MW)	Utility share (%)	Utility share (MW)	Energy Received (MU)
LOKTAK	NHPC	105	4.76	5.00	28.70
KOPILI-I	NEEPCO	200	5.00	10.00	52.26
KOPILI-II	NEEPCO	25	5.80	1.45	5.52
KHANDONG	NEEPCO	50	4.00	2.00	8.25
RHEP	NEEPCO	405	6.27	25.39	57.90
Free Energy	NEEPCO		12.00	48.60	133.18
DOYANG	NEEPCO	75	6.67	5.00	15.16
AGBPP	NEEPCO	291	5.50	16.01	76.50
AGTCCPP	NEEPCO	135	6.52	8.80	41.58
PARE	NEEPCO	110	6.68	7.35	23.35
Free Energy	NEEPCO		12.00	13.20	40.11
PALATANA	OTPCL	726	3.03	22.00	118.26
BgTPP	NTPC	500	4.94	24.70	136.25
FARAKKA	NTPC	1600	0.20	3.20	21.95
KAHALGAON	NTPC	840	0.20	1.68	11.73
TALCHAR	NTPC	1000	0.20	2.00	12.76
Total				196.38	783.45

1.3 Necessity for Filing of Tariff petition

The Electricity Act 2003 under 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 Multi Year tariff regulations- 2018 which provides for filing of tariff petition before 30th November every year. In pursuance of these legal provisions, APDoP is filling this Multi Year Tariff petition for FY 2020-21 to FY 2022-23.

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 Multi Year Tariff Regulation 2018. They are as follows:

1.4.1 Estimation of Aggregate Revenue Requirement

According to APSERC Multi year tariff regulation 2018 Chapter 10.2(1), following components shall comprise for recovery of Aggregate Revenue Requirement:

a) Return on Equity Capital
b) Interest on Loan Capital
c) Depreciation
d) Cost of own power generation/ power purchase expenses
e) Inter-state Transmission charges
f) Intra-state Transmission charges
g) Charges for intervening transmission facilities, if any
h) Fees and charges of NLDC/RLDC/SLDC etc
i) Operation and maintenance expenses
j) Interest on working capital and on consumer security deposits and
k) Provision for bad or doubtful debt.

Minus

1) Non-tariff income
2) Income from wheeling charges recovered from open access customer
3) Income from other business to the extent specified in these regulation.
4) Receipt from cross-subsidy surcharges from open access consumers, and
5) Reciept from additional surcharge on charges of wheeling from open access consumers.
6) Any revenue subsidy or grant received from state government other than subsidy under section 65 of electricity act 2003.

1.4.2 Estimation of Annual Revenue Income.

Estimation of category wise energy sale and corresponding revenue at existing tariff.

1.4.3 Determination of Revenue Gap

Difference in amount between estimated Annual Revenue Requirement and Estimated Annual Revenue 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:: TRUE UP OF FY 2018-19

Being a Government Department the audit on APDoP's accounts are performed by Auditor General of India. Audit for FY 2018-19 has not been performed till the finalisation of this tariff petition. Therefore regular true up of Tariff Order 2018-19 could not be performed. However, from the internal reports from the different sections of APDoP, the true up of Tariff Order 2018-19 is proposed for approval of Hon'ble Arunachal Pradesh State Electricity Regulatory Commission. They are as follows;

2.1 Power Purchase Cost:-

The Hon'ble commission approved vide DistributionTariff(Retail Supply) for FY 2018-19 dated 31/5/2018 for Power Purchase Cost at Rs. 186.06 Cr. The APDoP spent Rs. 317.38 Cr in excess Rs. 131.32 Cr. One of reason for this high power purchase cost was due shut down of NEEPCO's RHEP for about 4 months for maintenance and desilting. During this period, APDoP had to resort to purchase power with high cost. The Hon'ble commission is requested to approve this Rs. 317.38 Cr as power purchase cost.

2.2 Fuel Cost:-

In Tariff Order 2018-19, the Hon'ble Commission approved fuel cost for running DG Set at Rs. 2.205 Cr, whereas the APDoP spent only Rs. 0.91 Cr. As mentioned earlier, the DG Sets are kept on standby as long as the grid supply is available. These sets are operated during emergency only. Hence, DG Sets were operated minimal during this FY. Hon'ble Commission is requested to approve Rs. 0.91 Cr. as fuel cost.

2.3 Employee Cost:-

Employee cost approved was Rs. 325.84 Cr. whereas APDoP expense was only Rs. 275.70 Cr. Hon'ble Commission is requested to approve the true up of Rs. 275.70 Cr.

2.4 Repair and Maintenance Expenses:-

The APDoP spent Rs. 75.52 Cr. on R&M expenses against the Hon'ble Commssion's approval of Rs. 43.93 Cr. The Hon'ble commission is requested to approve the expenses of Rs. 75.52Cr as R&M expenses.

2.5 Administrative and General Expenses:-

APDoP spent Rs.6.66 Cr. against the approved amount of Rs. 6.48 Cr as A&G expenses. Hon'ble Commission is requested to approve Rs. 6.66 Cr. as A&G expenses.

2.6 Renewable Energy(Solar) Purchase Obligation:-

For purchase of Renewable Energy(Solar) to comply the RPO(Solar) the Hon'ble Commission approved Rs. 2.69 Cr. However, APDoP could not purchase RE(Solar) due to non availability in the vicinity and due to non finalization of power trading agreement. The Hon'ble Commission is requested to condone it. RPO shall be fulfilled in the coming years.

2.7 Total Revenue Requirement:-

Total ARR approved by Hon'ble Commission for FY 2018-19 was Rs. 568.01 Cr. The APDoP spent Rs.709.69 Cr. One of the primary reason in increase in expenditure was shut down of NEEPCO's RHEP for maintenance and desilting purpose for about four months. During this period APDoP had to purchase power at high cost.

2.8 Revenue from Existing Tariff:-

Revenue collection from different categories of consumers for FY 2018-19 was approved by Hon'ble commission at Rs. 161.47 Cr. The APDoP collected Rs.275.89 Cr. The reason for high increase in revenue collection was that the state Government cleared outstanding electricity bill against Government infrastructures amounting to about Rs. 117 Cr. The Hon'ble Commission is requested to approve the true up of Rs. 275.89 Cr.

2.9 AT&C Loss:-

AT&C Loss of 38% was approved for FY 2018-19 and APDoP achieved 37.99%.

The summery of true up of FY2018-19 Tariff Order is tabulated below in the table 2.1

Table:: 2.1 Summery True Up of FY 2018-19

SL No.	Item of Expenses	Approved in Tariff Order 2018-19 (Rs Cr)	Actual of FY 2018-19 (Rs Cr)	Deviation (Rs Cr)
1	Cost of Power Purchase	186.06	317.38	131.32
2	Fuel Cost	2.205	0.91	-1.295
3	Employee Cost	325.84	275.7	-50.14
4	R&M Expenses	43.93	75.52	31.59
5	Administration and General expenses	6.48	6.66	0.18
6	Depreciation	0	0	0
7	Interest on Working Capital	0	0	0
8	*Interest Charges Including interest on working capital)*	*0*	*0*	*0*
9	Return on NFA/Equity	0	0	0
10	Provision for Bad Debt	0	0	0
11	Renewable Energy (Solar) Purchase Obligation	2.69	0	-2.69
12	Annual License Fee for 2017-18	0.05	0	-0.05
13	Safety Harness and Skilling/Training	0.75		-0.75
14	**Total Revenue Requirement**	**568.01**	**709.69**	
15	Less Non-Tariff income	3.81	0	-3.81
16	Net Revenue Requirement	564.195	709.69	145.495
17	Revenue from Existing Tariff	161.47	275.89	114.42
18	Revenue from Sale of Surplus Power	23.07	6.73	-16.34
19	**Total Annual Income**	**188.35**	**282.62**	
20	Total Gap	379.655	427.07	47.415
21	Regulatory Assets	0	0	0
22	Energy Sale (MU)	423.61	437.78	14.17
23	Average Cost of Supply (Rs/Kwh)	13.32	16.21	2.89
24	AT&C Loss	38.00	37.99	-0.01

CHAPTER-III :: ESTIMATION OF AGGREGATE REVENUE REQUIREMENT

According to APSERC Multi year tariff regulation 2018 Chapter 10.2(1), following components shall comprise for recovery of Aggregate Revenue Requirement:

l) Return on Equity Capital
m) Interest on Loan Capital
n) Depreciation
o) Cost of own power generation/ power purchase expenses
p) Inter-state Transmission charges
q) Intra-state Transmission charges
r) Charges for intervening transmission facilities, if any
s) Fees and charges of NLDC/RLDC/SLDC etc
t) Operation and maintenance expenses
u) Interest on working capital and on consumer security deposits and
v) Provision for bad or doubtful debt.

Minus

7) Non-tariff income
8) Income from wheeling charges recovered from open access customer
9) Income from other business to the extent specified in these regulation.
10) Receipt from cross-subsidy surcharges from open access consumers, and
11) Reciept from additional surcharge on charges of wheeling from open access consumers.
12) Any revenue subsidy or grant received from state government other than subsidy under section 65 of electricity act 2003.

3.1 Return on equity Capital

APDoP being a Government Department, all funding comes from State Government/Government of India as grant without any obligation to pay back. APDoP is not incorporated/registered as company, hence there is no shareholder/equity as a result **return on equity capital** may be considered as Nil.

3.2 Interest on Loan Capital

APDoP functions under the Government of Arunachal Pradesh. All financial matters of APDoP are controlled by finance department of the Government. Taking loan and its repayment are decided by them. Hence, APDoP cannot take any kind of loan independently and does not have any access on loan and its repayment even the loan is taken for funding the projects under APDoP. Therefore, expenses on interest on loan may be considered as Nil and APDoP shall not claim any for purpose of ARR.

3.3 Depreciation

Entire Assets under the control of APDoP are created from grant of Government of Arunachal Pradesh or Government of India without any obligation. As per regulatory direction

no depreciation can be claimed on the assets created from subsidies or grants without any obligation to return. Therefore APDoP shall not claim any depreciation for ARR.

3.4 Cost of own power generation/Power Purchase expenses

APDoP does not have any generating stations except few DG Sets with install capacity of 20.45 MW, who are kept as standby and runs as and when required specially during emergency. Therefore APDoP buys power mainly from Central Sector Generating Stations as well as from DHPD and recently started purchasing from an IPP that is Dikshi SHEP(24 MW). The power purchase cost projection is calculated after analyzing the previous year energy sale, expected consumers growth, expected sale growth, expected AT&C reductions due to many ongoing projects intended to reduce AT&C loss, etc.

3.4.1 The Power purchased during FY 2018-19 is shown in the following table 2.1. The Total Power injected was 940.64 MU including 173.72 MU free power from RHEP and Pare HEP and from DG Sets and purchased power of 766.92 MU at the cost of Rs.317.38 Cr.

Table 3.1 :: Power Purchase Cost during FY 2018-19

Source of Power (Station wise)		Energy Received (MU)	Total Annual Fixed charges (Rs Crore)	Capacity Charges paid/ payable by Utility (Rs Crore)	Variable Cost per unit (Rs/kWh)	Total Variable Charges (Rs Crore)	Any Other Charges (Please specify the type of charges)	Total Cost of Energy purchased (Rs Crore)	Per Unit Cost of energy purchased (Rs/kWh)
		A	b	F	D	e	f	g	h=g/a
LOKTAK	NHPC	28.70	150.28	4.860	2.83	4.84	0.024	9.72	3.39
KOPILI-I	NEEPCO	52.26	120.28	3.96	0.582	2.99	0.00	6.94	1.33
KOPILI-II	NEEPCO	5.52	12.26	0.45	0.815	0.45	0.00	0.91	1.64
KHANDONG	NEEPCO	8.25	40.49	1.03	0.837	0.72	0.00	1.74	2.11
RHEP	NEEPCO	57.90	272.64	9.34	1.037	7.34	0.00	16.67	2.88
Free Energy	NEEPCO	133.18							
DOYANG	NEEPCO	15.16	108.41	3.24	2.738	4.36	0.00	7.61	5.02
AGBPP	NEEPCO	76.50	338.39	17.18	1.867	14.63	0.00	31.81	4.16
AGTCCPP	NEEPCO	41.58	149.67	7.10	2.014	9.57	0.00	16.67	4.01
PARE	NEEPCO	23.35	103.90	3.89	2.624	6.07	0.00	10.02	4.29
Free Energy	NEEPCO	40.11							
PALATANA	OTPCL	118.26	819.00	19.22	1.419	16.780	0.77	36.77	3.11
BgTPP	NTPC	136.25	919.56	47.19	3.030	41.28		88.47	6.49
FARAKKA	NTPC	21.95	930.04	1.78	2.337	5.13		6.91	3.15
KAHALGAON	NTPC	11.72	606.35	1.16	2.260	2.65		3.81	3.25
TALCHAR	NTPC	12.76	676.26	1.23	1.740	2.22		3.45	2.70
UNCHAHAR*	NTPC	38.60		3.71	3.075	11.87		15.58	4.04
AGBPP*	NEEPCO	7.39						2.53	3.43
AGTCCPP*	NEEPCO	3.08						1.06	3.43
Transmission Chrges*	NEEPCO							0.28	

DEVIATION		45.99						37.36	8.12
DHPD		61.70						18.76	3.04
Diesel Generation		0.43							
Reactive Energy								0.3	
Total		940.64						317.38	3.66

* Purchased during the RHEP Shutdown Period from Feb 2019 to March 2019 from NTPC and NEEPCO

3.4.2 Retail Energy Sale during 2018-19

The category wise energy sale within the state during 2018-19 is shown in the table 3.2. APDoP also sells Surplus Energy during high hydro outside the state through PTC India Ltd, a member of IEX. The PTC India Ltd. sold surplus energy of 18.23 MU through IEX and earned Rs. 6.73 Cr. Total energy, including both within state and outside state, sold during **FY 2018-19 stands at 456.11 MU.**

Table:: 3.2 Consumer category-wise energy consumption during 2018-19

Consumer Category & Consumption Slab	No of Consumers at the end of the Year (Nos)	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
HT and EHT Category														
Non Commercial Consumers (Domestic)														
AC 50Hz,3-Phase, 11KV	89	0.25	0.26	0.27	0.22	0.33	0.35	0.32	0.36	0.32	0.29	0.31	0.30	**3.58**
AC 50Hz,3-Phase, 33KV	3	0.19	0.25	0.32	0.33	0.02	0.02	0.23	0.14	0.43	0.05	0.05	0.05	**2.08**
Commercial Consumers (Non-Industrial)														
AC 50Hz,3-Phase, 11KV	166	0.75	0.77	0.87	0.87	0.85	0.84	0.81	0.88	0.71	0.93	0.67	0.65	**9.60**
AC 50Hz,3-Phase, 33KV	0	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.01	0.00	0.02	0.00	**0.15**
Public Lighting and Water Supply Consumers														
AC 50Hz,3-Phase, 11KV	21	0.31	0.34	0.31	0.34	0.32	0.31	0.31	0.27	0.32	0.3	0.31	0.31	**3.75**
AC 50Hz,3-Phase, 33KV	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Agricultural Consumers														
AC 50Hz,3-Phase, 11KV	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
AC 50Hz,3-Phase, 33KV														
Industrial Consumers														
AC 50Hz,3-Phase, 11KV	26	1.09	1.19	1.06	0.82	1.11	1.13	1.22	1.16	1.02	0.8	0.96	1.23	**12.79**
AC 50Hz,3-Phase, 33KV	22	2.09	2.33	2.25	2.05	2.51	1.97	2.15	1.61	1.20	1.31	1.09	1.78	**22.34**
AC 50Hz,3-Phase, 132 KV	3	*9.17*	*10.20*	*10.40*	*10.02*	*9.94*	*10.46*	*9.40*	*6.85*	*7.04*	*6.83*	*5.56*	*8.39*	***104.26***
Bulk Mixed Consumers														
AC 50Hz,3-Phase, 11KV	139	1.56	1.53	1.51	1.62	1.67	1.66	1.53	1.45	1.59	1.55	1.56	1.45	**18.68**
AC 50Hz,3-Phase, 33KV	16	0.62	0.58	0.47	0.47	0.42	0.44	0.53	0.58	0.67	0.74	0.69	0.61	**6.82**
AC 50Hz,3-Phase, 132 KV	1	2.99	3.06	2.79	2.49	2.99	2.75	2.35	3.01	3.50	3.50	3.18	3.45	**36.06**
Low Voltage Category														
Non Commercial Consumers (Domestic)														
AC 50Hz,1-Phase, 230 Volt	161265	9.89	10.14	10.98	10.47	10.73	10.76	10.33	10.58	10.29	10.76	10.20	10.38	**125.51**
AC 50Hz,3-Phase, 400 Volt	2511	1.37	1.41	1.55	1.51	2.64	1.64	1.62	1.57	1.56	1.61	1.60	1.55	**19.63**
KJP & BPL connection AC 50Hz,1-Phase, 230 Volt	58248	1.76	1.71	1.64	1.66	1.76	1.75	1.69	1.74	1.83	1.81	1.90	1.83	**21.08**
Commercial Consumers (Non-Industrial)														

AC 50Hz,1-Phase, 230 Volt	23710	1.9	2.11	2.06	2.21	2.18	2.16	2.11	2.11	1.97	2.01	1.97	1.95	**24.74**
AC 50Hz,3-Phase, 400 Volt	1951	1.41	1.61	1.52	1.37	1.50	1.46	1.44	1.48	1.37	1.40	1.43	1.33	**17.32**
Public Lighting and Water Supply Consumers														
AC 50Hz,1-Phase, 230 Volt	1149	0.31	0.29	0.29	0.29	0.31	0.30	0.27	0.28	0.26	0.26	0.24	0.27	**3.37**
AC 50Hz,3-Phase, 400 Volt	163	0.12	0.12	0.13	0.13	0.15	0.12	0.14	0.13	0.12	0.13	0.16	0.14	**1.59**
Agricultural Consumers														
AC 50Hz,1-Phase, 230 Volt	11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
AC 50Hz,3-Phase, 400 Volt	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
Industrial Consumers														
AC 50Hz,1-Phase, 230 Volt	74	0.14	0.21	0.21	0.09	0.24	0.23	0.26	0.24	0.13	0.11	0.15	0.16	**2.17**
AC 50Hz,3-Phase, 400 Volt	190	0.24	0.17	0.15	0.15	0.16	0.16	0.17	0.16	0.19	0.20	0.19	0.18	**2.12**
Temporary Consumer														
LT/HT	87	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.01	**0.14**
Total	**249857**	**36.19**	**38.31**	**38.81**	**37.14**	**39.87**	**38.54**	**36.89**	**34.61**	**34.54**	**34.60**	**32.26**	**36.02**	**437.88**

3.4.3 Distribution Loss and AT&C Loss

Due to scattered load over vast geographical area, the distribution loss is comparatively high in Arunachal Pradesh. However, there are many projects going on under APDoP, whose target are to reduce distribution loss and AT&C Loss as per trajectories fixed by Govt of India. AT&C loss during FY 2018-19 is shown in table 3.3

Table 3.3 :: AT &C loss projection.

S No	Particulars	Calculation	Unit	True Up- FY 2018-19 (Actual)
				2018-19
1	Generation (own as well as any other connected generation net after deducting auxiliary consumption)within area of supply of DISCOM.	A	MU	61.70
2	Input energy (metered Import) received at interface points of DISCOM network.	B	MU	940.64
3	Direct Sale outside the State (metered Export) by the DISCOM at interface point of DISCOM network.	C	MU	18.23
4	Total energy available for sale within the licensed area to the consumers of the DISCOM	D=A+B-C	MU	984.11
5	Energy wheeled to OA consumers	E	MU	
6	Energy billed to metered consumers within the licensed area of the DISCOM	F	MU	437.88
7	Energy billed to unmetered consumers within the licensed area of the DISCOM @	G	MU	
8	Total energy billed	H=E+F+G	MU	437.88
9	**Billing Efficiency**	I= (H/D*100)	%	44.49
10	Amount billed to consumer within the licensed area of DISCOM	J	Rs Lakhs	20273.94
11	Amount realized by the DISCOM out of the amount Billed at J#	K	Rs Lakhs	28262.49
12	**Collection efficiency**	L=(K/J) × 100	%	139.40
13	Energy realized by the DISCOM	M= H x L	MU	610.42
14	**AT & C Loss**	N={(D-M)/D}×100 or {1-(I*L)}	%	37.97

3.4.4 Category-wise number of consumers' projection

Number consumers in all categories of consumers during FY 2018-19 was 2,49,857. The growth in number of consumers is projected using previous three years average. The growth in numbers of consumer for entire control period is tabulated in table 3.4.

Table::3.4 Number of consumer projection for entire control period

Consumer Category	Past Year Data (in numbers)					Average Growth*	MYT Control Period (Projected)		
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19		FY 2019-20	FY 2020-21	FY 2021-22
	I	II	III	IV	V				
HT & EHT Category									
Non Commercial Consumers (Domestic)									
AC 50Hz,3-Phase, 11KV	28	34	49	80	89	15	104	119	134
AC 50Hz,3-Phase, 33KV	0	0	0	1	3	1	4	5	6
Commercial Consumers (Non-Industrial)									
AC 50Hz,3-Phase, 11KV	88	95	130	154	166	20	186	206	226
AC 50Hz,3-Phase, 33KV	2	15	15	13	0	-1	0	0	0
Public Lighting and Water Supply Consumers									
AC 50Hz,3-Phase, 11KV	13	23	27	23	21	2	23	25	27
AC 50Hz,3-Phase, 33KV	3	4	4	4	3	0	3	3	3
Agricultural Consumers									
AC 50Hz,3-Phase, 11KV	0	0	0	3	3	1	4	5	6
AC 50Hz,3-Phase, 33KV									
Industrial Consumers									
AC 50Hz,3-Phase, 11KV	17	24	22	24	26	2	28	30	32
AC 50Hz,3-Phase, 33KV	4	18	14	9	22	5	27	32	37
AC 50Hz,3-Phase, 132 KV	2	3	3	3	3	0	3	3	3
Bulk Mixed Consumers									
AC 50Hz,3-Phase, 11KV	124	135	141	129	139	4	143	147	151
AC 50Hz,3-Phase, 33KV	26	17	20	17	16	-3	13	10	7
AC 50Hz,3-Phase, 132 KV	11	1	1	1	1	-3	1	1	1
Low Voltage Category	-	-	-	-		-	-	-	-
Non Commercial Consumers (Domestic)									
AC 50Hz,1-Phase, 230 Volt	131339	137716	138765	144478	161265	7482	168747	176229	183711
AC 50Hz,3-Phase, 400 Volt	1819	2258	2192	2362	2511	173	2684	2857	3030
KJP & BPL connection AC 50Hz,1-Phase, 230 Volt	52971	54088	47591	53371	58248	1319	59567	60886	62205
Commercial Consumers (Non-Industrial)									
AC 50Hz,1-Phase, 230 Volt	18370	20889	21206	22127	23710	1335	25045	26380	27715
AC 50Hz,3-Phase, 400 Volt	1024	1500	1606	1709	1951	232	2183	2415	2647
Public Lighting and Water Supply Consumers									
AC 50Hz,1-Phase, 230 Volt	1019	1506	1426	1059	1149	33	1182	1215	1248
AC 50Hz,3-Phase, 400 Volt	122	170	180	181	163	10	173	183	193
Agricultural Consumers									
AC 50Hz,1-Phase, 230 Volt	0	2	3	2	11	3	11	11	11

AC 50Hz,3-Phase, 400 Volt	2	14	14	6	6	1	6	6	6
Industrial Consumers									
AC 50Hz,1-Phase, 230 Volt	142	82	77	80	74	-17	57	40	23
AC 50Hz,3-Phase, 400 Volt	129	187	167	189	190	15	205	220	235
Temporary Consumer									
LT/HT	49	116	96	95	87	10	97	107	117
Total	**207304**	**218897**	**213749**	**226120**	**249857**		**260496**	**271135**	**281774**

*Average Growth={(II-I)+(III-II)+(IV-III)+(V-IV)}/4

3.4.5 Category-wise energy consumption projection

The energy sale projection by using average growth is tabulated below in table 3.5.

Table:: 3.5 Energy Consumption Projection for entire control period

Consumer Category	Past Year Energy Consumption data (in MU)					Average Growth*	Consumption in MYT Control Period (in MU)		
	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19		FY 2020-21	FY 2021-22	FY 2022-23
	I	II	III	IV	V				
HT & EHT Category									
Non Commercial Consumers (Domestic)									
AC 50Hz,3-Phase, 11KV	0.80	1.67	3.43	2.71	3.58	0.70	4.28	4.97	5.67
AC 50Hz,3-Phase, 33KV	0.00	0.00	0.13	2.34	2.08	0.52	2.60	3.12	3.64
Commercial Consumers (Non-Industrial)									
AC 50Hz,3-Phase, 11KV	2.79	4.18	5.51	8.69	9.60	1.70	11.30	13.01	14.71
AC 50Hz,3-Phase, 33KV	0.06	0.31	0.35	0.21	0.15	0.02	0.17	0.19	0.21
Public Lighting and Water Supply Consumers									
AC 50Hz,3-Phase, 11KV	4.15	4.39	3.87	3.65	3.75	-0.10	3.65	3.55	3.45
AC 50Hz,3-Phase, 33KV	0.01	0.21	0.21	0.18	0.00	0.00	0.00	0.00	0.00
Industrial Consumers									
AC 50Hz,3-Phase, 11KV	2.01	1.46	2.60	5.98	12.79	2.70	15.49	18.18	20.88
AC 50Hz,3-Phase, 33KV	9.32	16.74	21.46	19.49	22.34	3.25	25.59	28.85	32.10
AC 50Hz,3-Phase, 132 KV	11.27	75.46	77.93	86.54	104.26	23.25	127.51	150.75	174.00
Bulk Mixed Consumers									
AC 50Hz,3-Phase, 11KV	59.96	18.19	19.19	18.81	18.68	-10.32	18.68	18.68	18.68
AC 50Hz,3-Phase, 33KV	2.74	5.39	6.87	6.21	6.82	1.02	7.84	8.86	9.88
AC 50Hz,3-Phase, 132 KV	0.92	36.56	34.79	41.43	36.06	8.79	44.85	53.63	62.42
Low Voltage Category									
Non Commercial Consumers (Domestic)									
AC 50Hz,1-Phase, 230 Volt	96.73	98.07	106.76	120.45	125.51	7.20	132.71	139.90	147.10
AC 50Hz,3-Phase, 400 Volt	16.14	17.39	18.25	18.67	19.63	0.87	20.50	21.38	22.25

KJP & BPL connection AC 50Hz,1-Phase, 230 Volt	20.63	21.84	19.38	21.54	21.08	0.11	21.19	21.31	21.42
Commercial Consumers (Non-Industrial)									
AC 50Hz,1-Phase, 230 Volt	17.68	19.36	21.85	24.95	24.74	1.76	26.50	28.27	30.03
AC 50Hz,3-Phase, 400 Volt	13.10	14.76	16.76	17.16	17.32	1.06	18.38	19.43	20.49
Public Lighting and Water Supply Consumers									
AC 50Hz,1-Phase, 230 Volt	5.09	4.95	4.51	4.21	3.37	-0.43	3.37	3.37	3.37
AC 50Hz,3-Phase, 400 Volt	1.93	2.34	2.34	2.08	1.59	-0.08	1.59	1.59	1.59
Agricultural Consumers									
AC 50Hz,1-Phase, 230 Volt		0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00
AC 50Hz,3-Phase, 400 Volt		0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.00
Industrial Consumers									
AC 50Hz,1-Phase, 230 Volt	55.18	0.52	0.64	3.28	2.17	-13.25	2.17	2.17	2.17
AC 50Hz,3-Phase, 400 Volt	1.41	2.85	3.71	5.57	2.12	0.18	2.30	2.47	2.65
Temporary Consumer									
LT/HT	0.11	0.23	0.22	0.34	**0.14**	0.01	0.15	0.15	0.16
Total	**322.04**	**346.89**	**370.81**	**414.52**	**437.78**		**490.80**	**543.83**	**596.85**

*** Average Growth** ={(II-I)+(III-II)+(IV-III)+(V-IV)}/4

Hon'ble Commission is requested to approve Estimated Energy Sale for FY 2020-21, 2021-22 and 2022-23 at 490.80 MU, 543.83 MU and 596.85 MU respectively.

3.4.6 Energy Sale projection in the existing tariff within the state:-

Sale in existing tariff for the year 2018-19 and for entire control period is shown in the table 3.6.

Table:: 3.6 Energy sale projection in the existing tariff within the state

Consumer Category	Existing Tariff (Per Kwh)	Previous Year FY 2018-19		Sale Projection in MYT Control Period (in MU) FY 2020-21		FY 2021-22		FY 2022-23	
		Sale (MU)	Rs in Cr.	Sale (MU)	Rs in Cr.	Sale (MU)	Rs in Cr.	Sale (MU)	Rs in Cr.
HT & EHT Category									
Non Commercial Consumers (Domestic)									
AC 50Hz,3-Phase, 11KV	3.40	3.58	1.22	4.28	1.45	4.97	1.69	5.67	1.93
AC 50Hz,3-Phase, 33KV	3.25	2.08	0.68	2.60	0.85	3.12	1.01	3.64	1.18
Commercial Consumers (Non-Industrial)									
AC 50Hz,3-Phase, 11KV	4.20	9.60	4.03	11.30	4.75	13.01	5.46	14.71	6.18
AC 50Hz,3-Phase, 33KV	4.00	0.15	0.06	0.17	0.07	0.19	0.08	0.21	0.09
Public Lighting and Water Supply Consumers									
AC 50Hz,3-Phase, 11KV	4.20	3.75	1.58	3.65	1.53	3.55	1.49	3.45	0.00
AC 50Hz,3-Phase, 33KV		0.00	0.00					0.00	0.00
Industrial Consumers									
AC 50Hz,3-Phase, 11KV	3.85	12.79	4.92	15.49	5.96	18.18	7	20.88	8.04
AC 50Hz,3-Phase, 33KV	3.50	22.34	7.82	25.59	8.96	28.85	10.1	32.10	11.24

AC 50Hz,3-Phase, 132 KV	3.35	104.26	34.93	127.51	42.71	150.75	50.5	174.00	58.29
Bulk Mixed Consumers									
AC 50Hz,3-Phase, 11KV	3.75	18.68	7.01	18.68	7.01	18.68	7.01	18.68	7.01
AC 50Hz,3-Phase, 33KV	3.4	6.82	2.32	7.84	2.67	8.86	3.01	9.88	3.36
AC 50Hz,3-Phase, 132 KV	3.25	36.06	11.72	44.85	14.57	53.63	17.43	62.42	20.29
Low Voltage Category									
Non Commercial Consumers (Domestic)									
AC 50Hz,1-Phase, 230 Volt	4	125.51	50.20	132.71	53.08	139.90	55.96	147.10	58.84
AC 50Hz,3-Phase, 400 Volt	4	19.63	7.85	20.50	8.2	21.38	8.55	22.25	8.9
KJP & BPL connection AC *50Hz,1-Phase, 230 Volt*	2.65	21.08	5.59	21.19	5.62	21.31	5.65	21.42	5.68
Commercial Consumers (Non-Industrial)									
AC 50Hz,1-Phase, 230 Volt	5	24.74	12.37	26.50	13.25	28.27	14.13	30.03	15.02
AC 50Hz,3-Phase, 400 Volt	5	17.32	8.66	18.38	9.19	19.43	9.72	20.49	10.24
Public Lighting and Water Supply Consumers									
AC 50Hz,1-Phase, 230 Volt	5.1	3.37	1.72	3.37	1.72	3.37	1.72	3.37	1.72
AC 50Hz,3-Phase, 400 Volt	5.1	1.59	0.81	1.59	0.81	1.59	0.81	1.59	0.81
Agricultural Consumers									
AC 50Hz,1-Phase, 230 Volt	3.1	0.00	0.00	0.00	0	0.00	0	0.00	0
AC 50Hz,3-Phase, 400 Volt	3.1	0.00	0.00	0.00	0	0.00	0	0.00	0
Industrial Consumers									
AC 50Hz,1-Phase, 230 Volt	4.3	2.17	0.93	2.17	0.93	2.17	0.93	2.17	0.93
AC 50Hz,3-Phase, 400 Volt	4.3	2.12	0.91	2.30	0.99	2.47	1.06	2.65	1.14
Temporary Consumer									
LT/HT	6.5	0.14	0.09	0.15	0.1	0.15	0.1	0.16	0.1
Total		**437.78**	**165.41**	**490.81**	**184.42**	**543.83**	**203.41**	**596.85**	**220.99**

3.4.7 Power Purchase cost projection:-

The power purchase cost for current year and ensuing control period years is estimated considering various factors like upcoming HEP, energy sale projection, likely distribution losses, surplus energy sale during high hydro, restricting deviation import, total energy requirement etc. and is shown in table 3.7.

Table:: 3.7 Power Purchase Cost Projection

Source of Power (Station wise)		Current Year		MYT Control Period					
		(Actual) FY 2018-19		(Projected) FY 2020-21		(Projected) FY 2021-22		(Projected) FY 2022-23	
		Energy Received (MU)	Cost of Energy (Rs in Cr)	Energy Received (MU)	Cost of Energy (Rs in Cr)	Energy Received (MU)	Cost of Energy (Rs in Cr)	Energy Received (MU)	Cost of Energy (Rs in Cr)
LOKTAK	NHPC	28.70	9.72	28.70	9.72	28.70	9.72	28.70	9.72
KOPILI-I	NEEPCO	52.26	6.94	52.26	6.94	52.26	6.94	52.26	6.94
KOPILI-II	NEEPCO	5.52	0.91	5.52	0.91	5.52	0.91	5.52	0.91

KHANDONG	NEEPCO	8.25	1.74	8.25	1.74	8.25	1.74	8.25	1.74
RHEP	NEEPCO	57.90	16.67	85.64	24.66	85.64	24.66	85.64	24.66
Free Energy	NEEPCO	133.18		157.99		157.99		157.99	
DOYANG	NEEPCO	15.16	7.61	15.16	7.61	15.16	7.61	15.16	7.61
AGBPP	NEEPCO	76.50	31.81	64.03	26.62	58.62	24.38	52.22	21.72
AGTCCPP	NEEPCO	41.58	16.67	35.34	14.17	31.81	12.75	28.27	11.34
PARE	NEEPCO	23.35	10.02	23.35	10.02	23.35	10.02	23.35	10.02
Free Energy	NEEPCO	40.11		40.11		40.11		40.11	
PALATANA	OTPCL	118.258	36.77	100.52	31.26	91.47	28.44	82.42	25.63
BgTPP	NTPC	136.246	88.47	114.81	74.55	103.33	67.10	91.85	59.64
FARAKKA	NTPC	21.947	6.91	21.95	6.91	21.95	6.91	21.95	6.91
KAHALGAON	NTPC	11.724	3.81	11.72	3.81	11.72	3.81	11.72	3.81
TALCHAR	NTPC	12.756	3.45	12.76	3.45	12.76	3.45	12.76	3.45
UNCHAHAR	NTPC	38.603	15.58						
AGBPP	NEEPCO	7.390	2.53						
AGTCCPP	NEEPCO	3.080	1.34						
DEVIATION		45.990	37.36						
Dikshi HEP	IPP			100.00	57.06	100.00	56.76	100.00	56.76
Free Energy				5.00		10.00		10.00	
DHPD		61.70	18.76	61.70	18.76	61.70	18.76	61.70	18.76
Diesel Generation		0.43	0.91	0.43	0.91	0.43	0.91	0.43	0.91
Total		940.64	317.99	945.24	299.11	920.77	284.87	890.30	270.52

Estimated Energy Requirement for FY 2020-21, 2021-22 and 2022-23 is 945.24 MU, 920.77 MU and 890.30 MU respectively. The aggregate power requirements is decreasing every year. This is because the APDoP shall endeavour to reduce the AT&C loss. Hon'ble Commission is requested to approve the above estimates.

3.4.8 AT&C loss projection:-

The Ministry of Power, Government of India, issued trajectories for reduction of AT&C losses upto 15% by 2022. However, because of slow progress of dream projects for reduction AT&C losses like IPDS, the AT&C loss reduction in Arunachal Pradesh is not upto the expectation. The AT&C loss projection for the control period is tabulated in the table 3.8.

Table 3.8 AT&C Loss Projection

S No	Particulars	Calcu-lation	Unit	FY 2018-19 (Actual)	MYT Control Period		
					FY 2020-21 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)
1	*Generation (own as well as any other* connected generation net after deducting auxiliary consumption)within area of supply of DISCOM.	A	MU	61.70	61.70	61.70	61.70
2	Input energy (metered Import) received at interface points of DISCOM network.	B	MU	940.64	945.24	920.77	890.30

3	Direct Sale outside the State (metered Export) by the DISCOM at interface point of DISCOM network.	C	MU	18.23			
4	Total energy available for sale within the licensed area to the consumers of the DISCOM	D=A+B-C	MU	984.11	1006.94	982.47	952.00
5	Energy wheeled to OA consumers	E	MU				
6	Energy billed to metered consumers within the licensed area of the DISCOM	F	MU	437.78	490.81	543.83	596.85
7	Energy billed to unmetered consumers within the licensed area of the DISCOM @	G	MU				
8	Total energy billed	H=E+F+G	MU	437.78	490.81	543.83	596.85
9	**Billing Efficiency**	I= (H/D*100)	%	44.48	48.74	55.35	62.69
10	Amount billed to consumer within the licensed area of DISCOM	J	Rs Lakhs	20273.94	1844.2	2034.1	2209.9
11	Amount realized by the DISCOM out of the amount Billed at J#	K	Rs Lakhs	28262.49	1844.2	2034.1	2209.9
12	**Collection efficiency**	L=(K/J) × 100	%	139.40	100.00	100.00	100.00
13	Energy realized by the DISCOM	M= H x L	MU	610.28	490.81	543.83	596.85
14	**AT & C Loss**	N={(D-M)/D}×100 or {1-(I*L)}	%	37.99	51.26	44.65	37.31

Note: in year 2018-19 Rs 117.72 Crore adjusted by State Govt. Department against department outstanding dues.

Hon'ble Commission is requested to approve Estimated AT&C Loss for FY 2020-21, 2021-22 and 2022-23 at 51.26%, 44.65% and 37.31 respectively.

3.4.9 Summery of Power Requirement and its cost:-

Energy available during previous year i.e. 2018-19 and estimated Power requirement and its estimated cost during control period including energy from DHPD, free power (from RHEP, Pare HEP and Dikshi HEP) and Diesel Generating Sets is shown in the table 3.9

Table 3.9 ::Summery of Energy Requirement and Sale

S.L No.	Item	Previous Year (Actual)		MYT Control Period (Projected)					
		FY 2018-19		FY 2020-21		FY 2021-22		FY 2022-23	
		MU	Rs in Cr.	*MU*	Rs in Cr.	*MU*	Rs in Cr.	*MU*	Rs in Cr.
A	**ENERGY REQUIREMENT**								
1	Energy sales within the State	437.78		490.80		543.83		596.85	
2	Sales outside State	18.23							
3	TOTAL SALES	456.01		490.80		543.83		596.85	
4	Distribution Losses								
I)	MU	484.63		454.44		376.94		293.45	
II)	%	52.54		48.08		40.94		32.96	
5	Total energy requirement (3+4)	940.64		945.24		920.77		890.30	
B	**ENERGY AVAILABILITY**								
1	Power Purchase from								
	a) DHPD	61.70	18.76	61.70	18.76	61.70	18.76	61.70	18.76

	b) Central Stations	659.23	261.27	580.01	222.38	550.54	208.45	520.07	194.10
	c) IPP (Dikshi HEP)			100.00	57.06	100.00	56.76	100.00	56.76
	d) Deviation Import(UI)	45.99	37.36						
2	Net Power Purchase (a+b+c+d)	766.92	317.38	**741.71**	**298.20**	**712.24**	**283.96**	**681.77**	**269.61**
3	Free Power RHEP, PARE & DIKSHI	173.30		203.10		208.10		208.10	
4	From D G Set	0.43	0.91	0.43	0.91	0.43	0.91	0.43	0.91
5	**Total energy availability**	**940.64**		**945.24**		**920.77**		**890.30**	

Hon'ble Commission is requested to allow APDoP to purchase power during the control period *i.e. 741.71 MU during FY 2020-21, 712.24 MU during FY 2021-22 and 681.77 MU* during FY 2022-23 with their corresponding cost at Rs. 298.20 Cr, 283.96 Cr and 269.61 Cr respectively.

3.5 Inter State Transmission Charges:-

The entire interstate power transmission in APDoP is done through PGCIL transmission infrastructure. The transmission charges incurred during 2018-19 and projected transmission charges during the control period is tabulated in the table 3.10 below. The transmission charges is made decreasing because APDoP shall try to reduce power import and also will increase consumption to reduce AT&C loss.

Table:: 3.10 Inter State Transmission Charges

Utility	Transmission Charges (Rs in Crore)			
	(Actual) FY 2018-19	(Projected) FY 2020-21	(Projected) FY 2021-22	(Projected) FY 2022-23
PGCIL	33.75	33.52	32.25	30.94

Hon'ble Commission is requested to approve the Estimated Inter State Transmission Charges for FY 2020-21, 2021-22 and 2022-23 at Rs. 33.52 Cr, Rs. 32.25 Cr and Rs. 30.94 Cr respectively.

3.6 Fees and charges of NLDC/RLDC/SLDC etc.:-

Fees and charges for NERLDC and NERPC during 2018-19 and for control period is tabulated in the table 3.11

Table:: 3.11 Fee and Charges of NERLDC during 2018-19

Utility	Transmission Charges (Rs in Crore)			
	(Actual) FY 2018-19	(Projected) FY 2020-21	(Projected) FY 2021-22	(Projected) FY 2022-23
NERLDC Fee	0.73	0.73	0.73	0.73
NERPC board fund	0.01	0.01	0.01	0.01
Total	0.74	0.74	0.74	0.74

Hon'ble Commission is requested to approve Estimated NERLDC fee and NERPC board fund for FY 2020-21, 2021-22 and 2022-23 at Rs 0.74 Cr per year.

3.7 Operation and Maintenance Cost

Operation and maintenance cost consists of three components, 1) Employee cost, 2) Repair and Maintenance cost and 3)Administrative and General cost. The APDoP has 9988 nos of total employees. Details is shown in table 3.12.

Table:: 3.12 Number of Employees

Sl. No.	Category of Employees	Numbers in FY 2018-19
1	Regular Employees	1057
2	Work Charged Employees	2786
3	Casual Employees	6148
	Total	**9988**

The past and projected cost of these three components for entire control period has been calculated as per APSERC guidelines provided in the format 5 of MYT regulation 2018. The O&M expenses of the first year of the control period i.e. 2020-21 has been computed by escalating the average of previous 3 years by 5.72% twice. And then next years of the control period are computed by increasing 5.72% every year. The details are shown in the table 3.13.

Table:: 3.13 Operation and Maintenance Cost

Sl. No.	Particulars	Past O&M Expenses			3 Years average	MYT Control period		
		FY 2016-17	FY 2017-18	FY 2018-19	e= (a+b+c)/3	FY 2020-21	FY 2021-22	FY 2022-23
		a	b	C		Projected	Projected	Projected
1	Employee Expenses	232.48	274.88	275.70	261.02	291.73	308.42	326.06
2	A&G Expenses	5.84	6.12	6.60	6.19	6.92	7.32	7.74
3	R&M Expenses	65.05	69.70	75.52	70.09	78.34	82.82	87.56
4	**Total O&M Expenses**	**303.37**	**350.70**	**357.82**		**376.99**	**398.56**	**421.36**

Hon'ble Commission is requested to approve Estimated O&M expenses for FY 2020-21, 2021-22 and 2022-23 at Rs.376.99 Cr, Rs. 398.56 Cr and Rs. 421.36 Cr respectively.

3.8 Interest on working Capital

Working capital for APDoP used to be provided by Government of AP as grant as and when required, and therefore no interest on working capital is required to be paid by APDoP. Hence, interest on working capital may also be considered as Nil.

3.9 Bad and doubtful debt

APDoP does not have any bad and doubtful debt as per records. Therefore, provision for bad and doubtful debt may be considered as nil.

All Minus components, that is, all components those are to be substracted from the components of ARR are **Nil**, namely, Non Tariff income, Income from Wheeling, Cross Subsidy, Other Business etc. as no such income was made during the FY 2018-19. .

3.10 Aggregate Revenue Requirement

Considering all the aspects depicted above the aggregate revenue requirements of APDoP for previous year and projection for ensuing year is summarised in the table 3.14.

Table 3.14 :: Aggregate Revenue Requirement

(Rs. In Crores)

S.L No.	Particulars	FY 2018-19 (Actual)	FY 2020-21 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)
1	Return on Equity Capital	0	0	0	0
2	Interest on Loan Capital	0	0	0	0
3	Depreciation	0	0	0	0
4	Power Purchase Expenses	317.38	298.20	283.96	269.61
5	Interstate Transmission Charges	33.75	33.52	32.25	30.94
6	Intrastate Transmission Charges	0	0	0	0
7	Fees and charges of NERLDC/NERPC	0.74	0.74	0.74	0.74
8	O&M expenses	357.82	376.99	398.56	421.36
9	Interest on working Capital	0	0	0	0
10	Provision for bad and doubtful debt	0	0	0	0
11	**Total revenue requirement**	709.69	**709.45**	**715.51**	**722.65**

Hon'ble Commission is requested to approve Estimated Aggregate Revenue Requirement for FY 2020-21, 2021-22 and 2022-23 at Rs.709.45 Cr, Rs. 715.51 Cr and Rs. 722.65 Cr. respectively.

CHAPTER – IV::REVENUE GAP

4.1 Aggregate Revenue Requirement and Revenue Gap in existing tariff:-

From chapter III, annual revenue requirement, income and revenue gap is tabulated in the table 4.1. The average cost of supply was Rs. 16.21 per unit during FY 2018-19. For control period average cost of supply is projected at Rs. 14.45, Rs. 13.16 and Rs. 12.11 for FY 2020-21, 2021-22 and 2022-13 respectively.

Table 4.1 :: Aggregate Revenue Requirement, Income and Revenue Gap in existing tariff

(Rs. In Cr)

S.L No.	Particulars	FY 2018-19 (Actual)	FY 2020-21 (Projected)	FY 2021-22 (Projected)	FY 2022-23 (Projected)
	ARR				
1	Return on Equity Capital	0	0	0	0
2	Interest on Loan Capital	0	0	0	0
3	Depreciation	0	0	0	0
4	Power Purchase Expenses	317.38	298.20	283.96	269.61
5	Interstate Transmission Charges	33.75	33.52	32.25	30.94
6	Intrastate Transmission Charges	0	0	0	0
7	Fees and charges of NERLDC/NERPC	0.74	0.74	0.74	0.74
8	O&M expenses	357.82	376.99	398.56	421.36
9	Interest on working Capital	0	0	0	0
10	Provision for bad and doubtful debt	0	0	0	0
11	**Total revenue requirement**	709.69	**709.45**	**715.51**	**722.65**
	Energy Sale(MU)	**437.78**	**490.81**	**543.83**	**596.85**
	Average Cost of Supply(Rs/Unit)	16.21	14.45	13.16	12.11
	Revenue Income				
12	Revenue from existing tariff	**165.41+117.21 =282.62****	**184.42**	**203.41**	**220.99**
16	**Revenue gap (11-12)**	**427.07**	**525.03**	**512.10**	**501.66**

** Rs. 117.21 Cr was received from State Govt as payment against outstanding electricity bill.

4.2 Revenue Gap and its Recovery

There is a revenue gap of Rs. 525.03 Cr, Rs. 512.10 Cr and Rs. 501.66 for the control period 2020-21, 2021-22 and 2022-23 in existing tariff 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,

proposed tariff shall be kept same as that of FY 2019-20 and the revenue gap shall be met up by the state government through financial grant.

Table 4.4 :: Revenue Gap and its Recovery

Sl. No.	Description of Items	FY 2020-21 (Rs. In Cr.)	FY 2021-22 (Rs. In Cr.)	FY 2022-23 (Rs. In Cr.)
1	Aggregate Revenue Requirement	709.45	715.51	722.65
2	Total Income from proposed tariff	184.42	203.41	220.99
3	Revenue gap (1-2)	525.03	512.10	501.66
4	Expected Government Grant	525.03	512.10	501.66
5	Net Revenue Gap (3-4)	0.00	0.00	0.00

4.3 Proposed Tariff

Existing tariff for FY 2019-20 and proposed tariff for entire control period is shown in the table 4.5. The proposed tariff is kept as same as existing tariff. The Hon'ble Commission is requested to approve the proposed tariff.

Table 4.5:: Existing and proposed tariff

Sl.No.	Category of Consumers	Existing Tariff (Rs/KWH)	Proposed Tariff (Rs/KWH)
	Non Commercial (Domestic)		
	LT - AC 50 Hz		
1	1-Phase, 230 Volt	4.00	4.00
2	3-Phase, 400 Volt	4.00	4.00
3	KJP & BPL connection	2.65	2.65
	HT - AC 50 Hz		
4	3-Phase, 11KV	3.40	3.40
5	3-Phase, 33KV	3.25	3.25
	Commercial (Non-Industrial)		
	LT - AC 50 Hz		
6	1-Phase, 230 Volt	5.00	5.00
7	3-Phase, 400 Volt	5.00	5.00
	HT - AC 50 Hz		
8	3-Phase, 11KV	4.20	4.20
9	3-Phase, 33KV	4.00	4.00
	Public Lighting And Water Supply		
	LT - AC 50 Hz		
10	1-Phase, 230 Volt	5.10	5.10
11	3-Phase, 400 Volt	5.10	5.10
	HT - AC 50 Hz		
12	3-Phase, 11KV	4.20	4.20
13	3-Phase, 33KV	4.00	4.00
	Agricultural		
	LT - AC 50 Hz		
14	1-Phase, 230 Volt	3.10	3.10

15	3-Phase, 400 Volt	3.10	3.10
	HT - AC 50 Hz		
16	3-Phase, 11KV	2.75	2.75
17	3-Phase, 33KV	2.65	2.65
	Industrial		
	LT - AC 50 Hz		
18	1-Phase, 230 Volt	4.30	4.30
19	3-Phase, 400 Volt	4.30	4.30
	HT - AC 50 Hz		
20	3-Phase, 11KV	3.85	3.85
21	3-Phase, 33KV	3.50	3.50
22	3-Phase, 132KV	3.35	3.35
23	Tea Industries(All Voltage level)		3.00
	Mix Bulk		
	HT - AC 50 Hz		
24	3-Phase, 11KV	3.75	3.75
25	3-Phase, 33KV	3.40	3.40
26	3-Phase, 132 KV and above	3.25	3.25
27	**Temporary Consumer**	6.50	6.50

CHAPTER – V :: SCHEDULES

Schedules of category wise electrical energy charges(tariff) and other charges are proposed for entire control period in this chapter for approval of Hon'ble Commission.

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 will also cover consumption of energy supplied for Government owned Residential and Non- Residential buildings, Educational and Research Institutions, Charitable Institutions, Government owned Hospitals and Dispensaries, farm houses, Religious premises like Churches, Temples, Mosques, community halls, Religious printing press (not engaged in commercial activity or private again, excluding those which are specially covered under categories of this tariff) or classifications as may be amended by the Commission 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 are defined as non-industrial commercial consumers

such as installation of commercial places, 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 Commission 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 application shall also be covered in this category or classifications as may be amended by Commission 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 in agricultural fields/farms for purpose of pumps, field lighting and other applications for farmers in their irrigation and cultivation and not connected to any attached commercial or industrial installations in the agricultural field/farms or classification as may be amended by the Commission 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
8	**Tea Industries(All Voltage level)**		3.00

Applicability ::

The Industrial consumers cover all Government registered Industrial power consumers which are not covered by Category No. 2 (Supply for Commercial Purpose), such as steel fabrication, motor body builders, power handloom industry, poultry farming, pisciculture, prawn culture, floriculture in green house, mushroom production, cold storage unit of piscicultural, agricultural, horticultural and any other type of industry where raw material is covered in to finished product with the help of electrical motive power, colour photo labs. Government owned printing press and other printing press (Primarily engaged in printing for commercial gain), government owned, public sector industries etc. or classifications as may be amended by the Commission 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 1, 2, 3 and 5 or classification as may be amended by the Commission from time to time.

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 is deemed to be under the ownership of the supplier, and 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	20.00
	ii.	Three Phase 400 V between phases (without CT)	30.00
	iii.	Three Phase 400 V between phases (with CT)	50.00
B		**HT Metering- AC** Complete Energy meter with CT/PT & other monitoring and	
	i.	11 KV system	800.00
	ii.	33 KV system	4000.00
	iii.	132 KV system	15000.00

b) Shifting Charges of Meter

i) If shifting resulted from reconstruction/modification of building and on request of the consumer :: Rs. 200/- 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	150.00
ii.	For energy meter without CT for AC three phase LT Supply	200.00
iii.	For energy meter with CT for AC three phase LT supply	350.00
iv.	For energy meter AC three phase HT supply	700.00

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 and 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	200.00
ii.	3 phase service Wiring installations	300.00
iii.	HT Line installation of 11 KV system	600.00
iv.	HT Line installation of 33 KV and above system	1500.00

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	200.00
ii.	Disconnection only	200.00

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. 200/- per case for LT supply voltage systems.

ii. Rs. 800/- 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.200.00 per sample test.

a) Security Deposit

All new consumers shall pay security deposit as per relevant provision of Arunachal Pradesh Electricity Supply Code 2013 and as amended from Time to time.

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.

5.3.2 **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.

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. An 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.

5.3.4 **Billing Cycle:**

Normally the billing cycle shall on monthly basis.

5.3.5 **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.

5.3.6 **Application for Connection:**

The Consumer shall apply for service connection to the nearest Assistant Engineer intimating details of load demand, location etc.

5.3.7 **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.

5.3.8 **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 :: COMPLIANCE OF DIRECTIVES

Hon'ble Commission issued certain directives for compliance through Tariff Order for FY 2018-19. APDoP has been putting its best effort to comply the directives issued by Hon'ble Commission through successive tariff orders, but being a government department, functioning under ministry of Power, unlike other discoms, APDoP has limited decision making independently. Hence , compliance of most of the directives takes longer time as it requires government funding , sanctions, approvals etc.

6.1 Step towards digitization

Web based online billing and payment of electricity bills is under implementation under IPDS. This project covers 9 towns of Arunachal Pradesh. Other towns called Non-RAPDRP towns consisting of 26 towns are in the pipeline. On completion of these projects, online Billing, Payment, SMS alerts system shall be fully operative in all major towns of Arunachal Pradesh.

6.2 Prepaid Metering

Many of the consumers have been provided with prepaid meters in Naharlagun and Itanagar of Capital complex. Remaining consumers of entire Arunachal Pradesh shall be taken up phase wise manner.

6.3 Maintenance of accounts and records and conducting audit

APDoP maintains accounts and records and get audited by Accountant General as per CPWD mannuals. APDoP has so far no staffing set up expert in maintaining records and accounts as per formats provided in the MYT regulations. However, APDoP shall approach the Ministry of Power for providing such set up.

6.4 Interest on Working Capital

APDoP is executing department of Government of Arunachal Pradesh and executes the projects funded by the government and then operates and maintains these from the fund provided by the state government. Even if government fund or grant is not received APDoP can not resort to borrowing of money from banks/financial institutions independently. Keeping APDoP, categorised as an essential service department, in functioning condition is a must for the government.

6.5 Interest on Loan

No projects under APDoP is implemented on loan since last many years, so, interest on loan does not arise. For the purpose of augmentation/ projects work even if government fund or grant is not received APDoP can not resort to borrowing of money from banks/financial institutions independently.

6.6 Return on Equity(ROE)

APDoP is not incorporated or registered as company or any similar body, hence it has no shareholders so no equities. Therefore ROE is Nil.

6.7 POC and Other charges

This directive have been complied and interstate transmission charges, NERLDC/NERPC charges and reactive charges are indicated in sections 3.5, section 3.6 and table 3.1 of chapter III respectively.

6.8 Energy Audit and Accounting

Proper and reliable energy accounting can be done, if every transmission and distribution lines are properly metered. As of now, many of these lines are not metered. Under IPDS, Comprehensive Schemes and many other projects where provisions of metering are in the pipelines. After completion these schemes energy accounting and auditing in every voltages shall be possible.

6.9 Sale of Power Outside the state

Agreeing with Hon'ble commission, APDoP shall stop purchasing surplus power and sell it outside state through IEX.

CHAPTER – VII :: PRAYER

The APDoP respectfully prays to the Hon'ble Commission;

1. To admit this Petition for approval of Multi Year Retail Tariff and determination of ARR for FY 2020-21 to FY 2022-23.
2. To approve proposed retail tariff for FY 2020-21 to FY 2022-23.
3. To approve proposed ARR for FY 2020-21 to FY 2022-23.
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 29th November 2019

Hage Mima, SE(E)
For Department of Power
Government of AP
Itanagar