

**PETITION FOR APPROVAL OF PROVISIONAL TRUE-UP OF FY
2017-18, ANNUAL PERFORMANCE REVIEW OF FY 2018-19
AND AGGREGATE REVENUE REQUIREMENT (ARR) FOR MYT
CONTROL PERIOD FROM FY 2019-20 TO FY 2021-22 AND
DETERMINATION OF TARIFF FOR FY 2019-20**

OF

ELECTRICITY DEPARTMENT, GOVERNMENT OF PUDUCHERRY

SUBMITTED TO

**THE HON'BLE JOINT ELECTRICITY REGULATORY COMMISSION
GURGAON**

By

ELECTRICITY DEPARTMENT, GOVERNMENT OF PUDUCHERRY

DECEMBER 2018

Rs.100/-

Provisional True-up for FY 2017-18, Review for FY 2018-19 and ARR & MYT Petition for
FY 2019-20 to FY 2021-22

**BEFORE THE JOINT ELECTRICITY REGULATORY COMMISSION FOR THE STATE OF GOA, &
UNION TERRITORIES, GURGAON**

Filing No.....

Case No.....

BEFORE THE HONOURABLE
JOINT ELECTRICITY REGULATORY COMMISSION
FOR STATE OF GOA AND UNION TERRITORIES

IN THE MATTER OF:

PETITION FOR FILING OF PROVISIONAL TRUE-UP OF FY 2017-18, ANNUAL PERFORMANCE REVIEW OF FY 2018-19, AGGREGATE REVENUE REQUIREMENT (ARR) FOR MYT CONTROL PERIOD FROM FY 2019-20 TO FY 2021-22 AND DETERMINATION OF RETAIL TARIFF FOR FY 2019-20

AND

IN THE MATTER OF:

ELECTRICITY DEPARTMENT, GOVERNMENT OF PUDUCHERRY

- PETITIONER

THE PETITIONER ABOVE NAMED RESPECTFULLY SUBMITS

**BEFORE THE HON'BLE JOINT ELECTRICITY REGULATORY
COMMISSION
FOR THE STATE OF GOA AND UNION TERRITORIES**

IN THE MATTER OF:

**PETITION FOR FILING OF PROVISIONAL TRUE-UP OF FY 2017-18,
ANNUAL PERFORMANCE REVIEW OF FY 2018-19, AGGREGATE
REVENUE REQUIREMENT (ARR) FOR MYT CONTROL PERIOD FROM FY
2019-20 TO FY 2021-22 AND DETERMINATION OF RETAIL TARIFF
FOR FY 2019-20**

AND

IN THE MATTER OF:

ELECTRICITY DEPARTMENT, GOVERNMENT OF PUDUCHERRY

- PETITIONER

AFFIDAVIT

I, D.RAVI, Son of Shri G.Dharmalingam aged about 59 years, residing at No 31, 4th Cross, Kurinji Nagar, Puducherry 605 008, the deponent named above do hereby solemnly affirm and state on oath as under:-

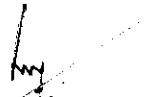
1. That the deponent is the Superintending Engineer cum Head of the Department, Electricity Department, Government of Puducherry duly authorised by the Government of Puducherry to make this affidavit on its behalf and the deponent is acquainted with the facts deposed below.

2. I, the deponent named above do hereby verify that the contents of the affidavit and those of the accompanying Petition are true to the best of my

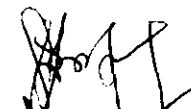
personal knowledge and verify that no part of this affidavit is false and no material information has been concealed in the Petition.

Enclosure:

(i) Six copies of Petition regarding filing of Provisional True-up for FY2017-18, Annual performance review of FY 2018-19, ARR for MYT Control Period FY 2019-20 to FY 2021-22 and Determination of Tariff for FY 2019-20.


(Deponent)
SUPERINTENDING ENGINEER
-cum-HOD
Electricity Department

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


Advocate, S. SRINIVASAPERUMAL, B.A.L.L.
ADVOCATE & NOTARY PUBLIC
(30 T. OF INDIA)
18, ANNAL VELAKKANNI STREET
K. KUMARAJ NAGAR, PUDUCHERRY

Solemnly affirmed before me on this 3rd day of December 2018, by the deponent who has been identified by the aforesaid Advocate. I have satisfied myself by examining the deponent that he understood the contents of the affidavit which has been read over and explained to him. He has also been explained about section 193 of Indian Penal Code that whoever intentionally gives false evidence in any of the proceedings of the Commission or fabricates evidence for purpose of being used in any of the proceedings shall be liable for punishment as per law.



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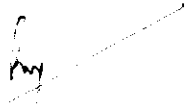
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SUPERINTENDING ENGINEER
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Electricity Department
Puducherry

LIST OF ABBREVIATIONS

S. No	Abbreviations	Descriptions
1	A&G	Administrative and General
2	ABT	Availability Based Tariff
3	ACoS	Average Cost of Supply/ Service
4	AMI	Automated Metering Infrastructure
5	AMR	Automatic Meter Reading
6	APR	Annual Performance review
7	ARR	Aggregate Revenue Requirement
8	CAGR	Compound Annual Growth Rate
9	CAPEX	Capital Expenditure
10	CEA	Central Electricity Authority
11	CERC	Central Electricity Regulatory Commission
12	CGS	Central Generating Station
13	CWIP	Capital work in progress
14	DELP	DSM based Efficient Lighting Programme
15	Discom	Distribution Companies
16	DSM	Demand Side Management
17	EA/The Act	The Electricity Act 2003
18	EDP/ PED	Electricity Department, Government of Puducherry
19	EC	Energy Charges
20	EHT	Extra High Tension
21	FC	Fixed Charges
22	FOR	Forum of Regulators
23	FY	Financial Year
24	GFA	Gross Fixed Assets
25	GoI	Government of India
26	HT	High Tension
27	JERC	Joint Electricity Regulatory Commission
28	JICA	Japan International Cooperation Agency
29	JNNSM	Jawaharlal National Solar Mission
30	KSEB	Kerala State Electricity Board
31	KV	Kilo Volt
32	kVA	Kilo Volt Ampere
33	kVAh	Kilo Volt Ampere Hour
34	kW	Kilo Watt
35	kWh	Kilo Watt Hour
36	LT	Low Tension
37	MNRE	Ministry of New and Renewable Energy
38	MOD	Merit Order Despatch
39	MoP	Ministry of Power
40	MOU	Memorandum of Understanding

S. No	Abbreviations	Descriptions
41	MU	Million Units (Million kWh)
42	MVA	Mega Volt Ampere
43	MW	Mega Watt
44	MYT	Multi Year Tariff
45	NFA	Net Fixed Assets
46	NLC	Neyveli Lignite Corporation
47	NPCIL	Nuclear Power Corporation of India Limited
48	NTP	National Tariff Policy
49	NTPC	National Thermal Power Corporation
50	O&M	Operation & Maintenance
51	PLR	Prime Lending Rate
52	POC	Point of Connection
53	PPA	Power Purchase Agreement
54	PPCL	Puducherry Power Corporation Limited
55	PV	Photo voltaic
56	R&M	Repair and Maintenance
57	R-APDRP	Restructured Accelerated Power Development and Reforms Programme
58	REC	Renewable Energy Certificate
59	ROE	Return on Equity
60	RPO	Renewable Purchase Obligation
61	Rs	Rupees
62	SBI	State Bank of India
63	SECI	Solar Energy Corporation of India
64	SLDC	State Load Dispatch Centre
65	SWOT	Strength, Weakness, Opportunity and Threats
66	TANGEDCO	Tamil Nadu Generation and Distribution Company
67	T&D	Transmission and Distribution
68	TOD	Time of Day
69	UI Charges	Unscheduled Interchange Charges
70	w.e.f	With effect from
71	WPI	Wholesale Price Index


 JOINT CHIEF ENGINEER
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 Electricity Department
 Puducherry

CHAPTER 1. INTRODUCTION

1.1.1 The Union Territory of Puducherry comprises of four regions namely Puducherry, Karaikal, Mahe and Yanam, which are not geographically contiguous and is spread over an area of 492 Sq. km with the total population of 12.45 Lakhs as per provisional results of Census 2011. The basic profiles of four regions are as follows:

- Puducherry is the largest among the four regions and consists of 12 scattered areas interspersed with enclaves of Villupuram and Cuddalore Districts of Tamil Nadu.
- Karaikal is about 150 kms South of Puducherry and is bounded by Nagapattinam and Thiruvarur Districts of Tamil Nadu State.
- Mahe lies almost parallel to Puducherry 653 kms away on the west coast near Kannur District of Kerala State.
- Yanam is located about 840 kms north-east of Puducherry and it is located in the East Godhavari District of Andhra Pradesh State.

1.1.2 The Territory of Puducherry was merged with the Indian Union on 1st November 1954 and is administered under the provisions of Government of Union Territories Act, 1963.

1.2 Electricity Department of Puducherry

1.2.1 Puducherry Electricity Department being a deemed distribution licensee as per section 14 of the Electricity Act 2003, performs the functions of transmission and distribution of electric power to the Union Territory. The sole generating station in Puducherry is a 32.5 MW combined cycle gas power plant in Karaikal owned by the Puducherry Power Corporation Limited. The entire power requirement of Puducherry is met from the power allocated from the Central Generating Stations, Tamil Nadu Electricity Board and from the Puducherry Power Corporation Limited

1.2.2 The Union Territory of Puducherry has an extensive network of Power Transmission and Distribution Systems spread along the breadth and width of all the four regions of the Union Territory. PED operates a transmission network of 230 kV, 110 kV & 132 kV and distribution network at 33 kV, 22 kV, 11 kV and at LT levels. It supplies power to consumer through its 18 EHV substations, 489 km of EHT line, 2294 km of HT line, 2876 nos of distribution transformers and 3845 km of LT line. PED has also gone for 90 km of HT and 535 km of LT underground cabling of certain urban areas.

Table 1-1: Network Configuration (as on August 2018)

	Line Details	Sub-Station Details		
Voltage	Lines	Capacity MVA	Substations	Transformation Capacity
	(Km)	(MVA)	(Nos)	(MVA)
Transmission				
230 kV/110kV	171	4x100+2x80	3	560
132 kV/33-11 kV	42	1x16+2x10	1	36
110 kV/22-11 kV	269	3x16+1x25+2x31.5+2x16+2x25+16x16+7x10+5x16+2x10	14	644
110 kV/22-11 kV (UG Cable)	7			
Distribution				
33/11kV	19	2x5	1	10
22 kV & 11 kV (Overhead)	2185			
22 kV & 11 kV (Underground)	90			
LT (Overhead)	3310			
LT (Underground)	535			
Distribution Transformer capacity	11kV Transformers	Total Transformation Capacity	22kV Transformers	Total Transformation Capacity
kVA	Nos.	MVA	Nos.	MVA
100	116	12	144	14
200	280	56	1030	206
315	229	72	937	295
500	2	1	43	22
630	95	60	0	0
Total	722	201	2154	537
Total Number of Transformers			Nos.	2876
Capacity			MVA	738

1.3 Filing under Tariff Regulations

1.3.1 PED has been filing its ARR and Tariff petitions for the past years with the Hon'ble Commission based on the principles outlined by the Hon'ble Commission vide their Regulations on applicable terms and conditions of Tariff for Distribution Licensees as notified in 2009 and 2014.

1.3.2 PED has filed its petition for determination of Aggregate Revenue Requirement (ARR) & Retail Tariff for distribution and retail sale of electricity for FY 2018-19 under section 61, 62 & 64 of the Electricity Act, 2003 and JERC (Multi Year Distribution Tariff) Regulations, 2014 against which Tariff Order was issued by the Hon'ble Commission on 28th March, 2018.

1.3.3 PED already has filed a true-up Petitions till FY 2016-17 against which the Tariff

Orders had already been issued by the Hon'ble Commission. Provisional True-up for FY 2017-18 based on actual figures is being submitted in the current petition since the accounts for FY 2017-18 are not ready yet.

- 1.3.4 The Hon'ble Joint Electricity Regulatory Commission (hereinafter referred to as Hon'ble Commission / JERC) issued the JERC (Multi Year Distribution Tariff) Regulations, 2018 (hereinafter referred to as "MYT Regulations") in exercise of powers conferred by Section 61, 62, 63 and 86 read with Section 181 of Electricity Act 2003 on 10th August, 2018. These regulations were made applicable to all distribution licensee in the State of Goa & Union Territories of Andaman & Nicobar Island, Dadra & Nagar Haveli, Daman & Diu, Chandigarh, Lakshadweep and Puducherry. As per clause 2.1 of the JERC (Multi Year Distribution Tariff) Regulations, 2018, the Control Period was defined as a three year period from FY 2019-20 to FY 2021-22.
- 1.3.5 As per provisions in clause 8.1 of MYT Regulations, PED had filed its Business Plan for three years control period i.e. from FY 2019-20 to FY 2021-22 before the Commission on 31st August 2018 for approval.
- 1.3.6 The Hon'ble Commission admitted the business plan petition as Petition No. 261/2018 on 04th September, 2018. PED has subsequently submitted clarifications to queries from JERC. The Public hearing session was held on 4th October, 2018 at PMSSS Hall, Laporte Street, Puducherry. The order on the business plan petition was issued on 31st October, 2018.

1.4 Filing of ARR and Multi Year Tariff Petition

- 1.4.1 Under the provisions of Electricity Act, 2003, Licensee is required to submit its ARR and Tariff Petition as per procedures outlined in section 61, 62 and 64 of EA 2003, and the governing regulations of JERC of the relevant years thereof.
- 1.4.2 The Hon'ble Commission notified in JERC (MYT Distribution Tariff) Regulations, 2018 that
- "These Regulations shall come into force from the date of their publication in the Official Gazette and shall remain in force till March 31, 2022, unless otherwise reviewed/extended."*
- 1.4.3 The Commission repealed MYT Regulations, 2014 and states as follows in JERC MYT Regulations 2018:

“74.1. The Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Multi Year Distribution Tariff) Regulations, 2014 and JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 shall stand repealed from the date of coming into force of these Regulations and any reference to these Regulations in any of the Regulations, standards, codes or procedures of the Joint Electricity Regulatory Commission shall be deemed to be replaced by the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2018.

74.2 Notwithstanding such repeal, anything done or purported to have been done under the repealed Regulations so far as it is not inconsistent with these Regulations shall be deemed to have been done or purported to have been done under these Regulations.

74.3 These Regulations are in addition to and not in derogation of the other Regulations / Codes issued by the Commission.”

1.4.4 In line with the above clause, PED has adopted the principles of MYT Regulations, 2018 for determination of ARR for the control period FY 2019-20 to FY 2021-22 and tariff for FY 2019-20. However, PED is also submitting the said petition for Provisional True-up of FY 2017-18 as per provisional actuals and Annual Performance Review of FY 2018-19 in line with MYT Regulations, 2014 for the approval of the Hon'ble Commission. The tariff formats as outlined in Regulations and as applicable to PED are provided at the end of this petition.

1.4.5 As per the MYT Regulations 2018, PED was required to file the ARR and the MYT Petition for the Financial Year 2019-20 by 30th November, 2018.

1.4.6 PED is now filing this petition for approval of Hon'ble Commission whereby the Tariff Formats are enclosed as per Annexure 1 of this petition. The details are provided in subsequent chapters.


SUPERINTENDING ENGINEER
-cum-HOD
Electricity Department
Puducherry

CHAPTER 2. OVERALL APPROACH FOR PRESENT FILING

In this petition, Puducherry Electricity Department is filing the Provisional True-up for FY 2017-18 and Annual Performance Review for FY 2018-19 along with MYT ARR for the control period of FY 2019-20 to FY 2021-22.

2.1 Provisional True-up for FY 2017-18

- 2.1.1 As specified in the MYT Regulations, the Hon'ble Commission shall undertake the truing-up exercise for the previous year based on audited accounts. In the current petition, provisional actual figures of FY 2017-18 are made available for Provisional True-up with provisional actual numbers with the details of ARR specified in the relevant chapter of this petition.

2.2 Annual Performance Review for FY 2018-19

- 2.2.1 As specified in the MYT Regulations, the Hon'ble Commission shall undertake the Annual Performance Review by considering variations between the approved and revised estimates/pre-actual of sale of electricity, income and expenditure for the relevant year.
- 2.2.2 Accordingly, PED is filing this Annual Performance Review petition for the year FY 2018-19 based on the actual performance during the 1st half of the year and the revised estimates for the second half of the year of purchase and sales based on the approved figures in the Business Plan with modifications in certain components based on the present status.

2.3 Multi – Year Tariff Petition and Tariff determination for FY 2019-20

- 2.3.1 The Joint Electricity Regulatory Commission had notified the JERC (Multi Year Distribution Tariff) Regulations 2018, which came into effect from 10th August 2018.
- 2.3.2 As per Clause 9 of the MYT Regulations, PED is filing the petition for the approval of Annual Revenue Requirement for the control period FY 2019-20 to FY 2021-22 in line with the MYT Regulations and Tariff determination for FY 2019-20. The projections are based on the norms specified in the Regulations, MYT Business plan approved by the Commission and on the past performance, wherever required and considering expected changes in each element of cost and revenue for the ensuing control period. PED has studied the previous trends and taken cognisance of other

internal and external developments to estimate the likely performance for second control period of FY 2019-20 to FY 2021-22.

2.3.3 The subsequent sections of the petition for MYT control period provides projection for various expenses, the proposed investment plan for the control period and the expected revenue projections with existing tariff based on the tariff notifications in force in the area of supply of PED.

2.3.4 Projections of various cost components required for determination of Aggregate Revenue Requirement for the control period along with the rationale for estimation of such cost is covered in the subsequent section. Further, the philosophy adopted by PED for projecting power purchase cost has also been elucidated in the respective section.

2.3.5 However, in line with the MYT Regulations, 2018, the sales projection, Capital Investment plan and Power Purchase Plan are considered in line with the MYT Business plan order as approved by the Hon'ble Commission vide order dated 31st October 2018.

2.4 Norms for Projection

2.4.1 The Second MYT Control Period as directed by the Hon'ble Commission in the Regulations will commence from 1st April 2019 onwards. PED is filing this petition in line with the norms and principles enumerated by Hon'ble Commission in the MYT Regulations and the business plan order.

2.4.2 For FY 2017-18, the petition has been prepared in line with the provisional figures available with the department. The projections for the control period FY 2019-20 to FY 2021-22 have been adopted based on the MYT business plan order.

2.4.3 Provisional True-Up for FY 2017-18, APR for FY 2018-19 and ARR for the Control Period i.e. FY 2019-20 to FY 2021-22 have been carried out separately and details of the same are presented separately.


SUPERINTENDING ENGINEER
-cum-HOD
Electricity Department
Puducherry

CHAPTER 3. PROVISIONAL TRUE UP OF FY 2017-18

3.1 Preamble

3.1.1 This section outlines the performance of Puducherry Electricity Department (PED) for FY 2017-18. PED submits that the preparation of the accounts are in the process and therefore the provisional actual numbers for FY 2017-18 have been considered in this petition for provisional truing up along with the comparison of the approved figures by Hon'ble Commission vide tariff order dated 28th March 2018.

3.1.2 This chapter summarizes each of the components of ARR for FY 2017-18 and thereby working out the revenue gap for that year.

3.2 Approved ARR for FY 2017-18

3.2.1 The summary of the charges for FY 2017-18 claimed by the petitioner in the last petition and as approved by the Hon'ble Commission in the last Tariff Order dated 28th March 2018 is tabulated below:

Table 3-1: ARR Approved in APR of FY 2017-18

(Rs. Crs)			
S. No.	Particulars	Claimed in APR	Approved by Commission
1	Cost of power purchase	1245.01	1134.92
2	Employee Costs	94.17	97.22
3	Administration and General Expenses	9.25	9.41
4	R&M expenses	18.78	22.02
5	Depreciation	26.51	40.04
6	Interest & Finance Charges	21.59	18.46
7	Interest on Working Capital + Interest on CSD	3.5	10.46
8	Return on NFA/ Equity	34	34
9	Provision for Bad Debt	-	-
10	Total Revenue Requirement	1452.81	1366.53
11	Less: Non- Tariff Income	9.26	4.51
12	Net Aggregate Revenue Requirement	1443.55	1362.02

3.3 Number of Consumers

3.3.1 Based on the unaudited provisional actual numbers, PED submits before the Hon'ble Commission the actual consumer numbers for FY 2017-18 in comparison of the approved numbers as highlighted below:

Table 3-2: Details of No. of Consumers for FY 2017-18

S. No.	Particulars	Approved	Provisional Actuals
1	Domestic	321112	325845
2	OHOB	35539	35537
3	Commercial	51460	53962
4	Agriculture	6836	6940
5	Public Lighting	51297	50434
6	LT Industrial	6815	6668
7	Total LT	473059	479386
8	HT 1 Industrial & Commercial	457	453
9	HT 2 Government & Water Tank	60	61
10	HT 3 EHT	8	7
11	Total HT	525	521
12	Total LT and HT	473584	479907

3.3.2 It is requested to Hon'ble Commission to consider the number of consumers as submitted in the above table for FY 2017-18.

3.4 Energy Sales

3.4.1 The total sales of PED for FY 2017-18 are **2,548.76** MU's. The category wise actual and approved sales for FY 2017-18 are shown in the table below.

Table 3-3: Sales (MUs) for FY 2017-18

Sales(MU)	Approved	Provisional actuals
Domestic	744.75	723.28
OHOB	10.22	10.24
Commercial	233.57	216.41
Agriculture	57.28	57.61
Street lighting	27.52	24.48
LT Industries + Water tank	184.79	185.61
Temp LT	8.00	8.48
HT-I	930.18	897.34
HT-II	65.53	98.41
HT-III	273.75	326.90
Total	2535.58	2548.76

3.4.2 Based on the above submission PED requests the Hon'ble Commission to approve the actual sales for FY 2017-18 as stated in the table above.

3.5 Distribution Loss & Energy Requirement

3.5.1 PED submits that the actual energy distribution losses for FY 2017-18 is 13.75% as compared to that approved by Hon'ble Commission at 11.25%. The comparison of Energy balance statement and the loss levels based on unaudited accounts and

approved figures are shown in the table below:

Table 3-4: Distribution Loss and Energy Balance for FY 2017-18

S. No.	Particulars	Approved	Provisional Actuals
A	ENERGY REQUIREMENT		
1	Energy Sales within the UT	2535.58	2548.76
2	Energy Drawal by TANGEDCO*	0.00	17.46
3	Distribution Losses (%)	11.25%	13.75%
4	Energy Required for the Territories	2856.99	2955.08
5	Sale to OA Consumers	36.13	39.00
6	Add: Sales to Common Pool Consumers/UI	47.22	114.20
7	Energy Requirement at periphery	2904.21	3125.75
B	ENERGY AVAILABILITY		
1	Gross Energy Purchase	3128.39	3147.48
2	Purchase from Common Pool/UI		29.14
3	Open Access Power at periphery (MUs)		39.58
4	External Losses (MU)		90.45
5	Net Energy Availability	3128.39	3125.75
C	Deficit/(Surplus)	(224.18)	0.00

3.5.2 The petitioner submits that the department has not made significant capex specifically towards reduction of transmission and distribution loss. Given the consumer sale mix, wherein the growth of LT consumers is higher than HT consumers, it was difficult for the utility to maintain the commission approved T&D loss levels.

3.5.3 PED submits that in comparison with the approved figures, actual T&D losses are higher due to above mentioned reasons and therefore request the Hon'ble Commission to approve the Distribution Loss of 13.75% for FY 2017-18.

3.5.4 Further, the Transmission/PGCIL Losses of 2.92% for FY 2017-18 may be approved by the Hon'ble Commission.

3.6 Power Purchase Quantum & Cost for FY 2017-18

3.6.1 PED meets its total energy requirement from its allocation from the Central Generating Stations (CGS) and state utilities like TANGEDCO, KSEB and PPCL. PPCL is a generating company within the UT of Puducherry catering to the partial requirement of Karaikal region. KSEB supplies for Mahe region under the UT of Puducherry.

3.6.2 The table below shows the summary of actual (provisional) Power Purchase from various sources along with their costs for FY 2017-18 including Transmission Charges, UI charges and purchase from traders.

Table 3-5: Power Purchase Quantum & Cost for FY 2017-18

S. No.	Particulars	Approved (FY 2017-18)			Provisional Actuals (FY 2017-18)		
		Purchase (MUs)	Cost (Rs. Cr.)	Rate (Rs./unit)	Purchase (MUs)	Cost (Rs. Cr.)	Rate (Rs./unit)
1	NTPC	1232.61	351.87	2.85	1212.91	356.93	2.94
2	NLC and NTPL	855.14	346.04	4.05	800.87	341.72	4.27
3	NPCIL	571.10	185.31	3.24	604.33	215.20	3.56
4	KSEB	30.13	22.37	7.42	30.13	22.42	7.44
5	TANGEDCO	177.37	67.83	3.82	181.34	75.61	4.17
6	PPCL	215.56	68.63	3.18	214.69	77.22	3.60
7	Vallur	113.17	56.18	4.96	102.60	56.98	5.55
	Solar Generation				0.62	0.37	5.97
8	Over drawal	(47.23)	(4.55)	0.96	(85.06)	(12.72)	1.49
9	Open market	(224.17)	(71.06)	3.17			
10	OA Power purchase				39.58		
10	Transmission Charges		62.11				
11	Rebate					(15.99)	
12	RPO Obligations		50.19			14.59	
13	Credit from NTPC					(31.73)	
14	Power purchase arrears					136.59	
13	Total	2923.68	1134.92	3.88	3101.99	1237.19	3.99

* Revenue of 0.37 cr is adjusted with the Revenue Bills of Consumers from Rooftop Solar

3.6.3 The Power Purchase arrears of NTPC & NPCIL due to tariff revision for the plants, have been paid and claimed in FY 2017-18 and FY 2018-19 for amount Rs. 136.59 Crs and Rs. 15.26 Crs respectively. Details of the Arrears are provided as Annexure-2.

3.6.4 Rs. 14.59 Crs of Non-Solar RECs were purchased corresponding to 97.26 MU in FY 2017-18. The petitioner has also received 0.62 MUs of physical solar power on account of net metering in Puducherry.

3.6.5 Accordingly, Hon'ble Commission is requested to approve **Rs. 1,237.19 Crs** for FY 2017-18 as power purchase cost (provisional actual) incurred during the year.

3.7 Operation & Maintenance Expenses

3.7.1 As per Regulation 21 of JERC MYT Regulations, 2014, the Hon'ble Commission shall stipulate separate trajectory of norms for each component of O&M expenses.

" 21. Operation & Maintenance Expenses

(a) The Commission shall stipulate a separate trajectory of norms for each of the components of O&M expenses viz., Employee cost, R&M expense and A&G expense.

Provided that such norms may be specified for a specific Distribution Licensee or a class of Distribution Licensees.

....

(c) One-time expenses such as expense due to change in accounting policy, arrears paid due to pay commissions etc., shall be excluded from the norms in the trajectory.

(d) The expenses beyond the control of the Distribution Licensee such as dearness allowance, terminal benefits in Employee cost etc., shall be excluded from the norms in the trajectory.

(e) The One-time expenses and the expenses beyond the control of the Distribution Licensee shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check."

3.7.2 Employee Expenses: PED has computed the O&M (Employee) expense for FY 2017-18 based on the actual employee expenses incurred during the entire year.

3.7.2.1 The employee cost incurred during the year for FY 2017-18 is Rs. 93.33 Crores.

Table 3-6: Employee Expenses for FY 2017-18

(Rs. Crs)

Particulars	Approved	Actuals (Provisional)
	2017-18	FY 2017-18
Total Employee Expenses		112.67
Less: Employee Cost towards maintenance of other Govt Department		4.47
Less: Amount capitalized		14.86
Net amount	97.22	93.33
Add : prior period expenses		
Total Employee Expenses for PED	97.22	93.33

3.7.2.2 PED submits that it has been able to identify the cost of employees involved towards maintenance of other Govt. Departments and has accordingly deducted the cost of Rs. 4.47 Crs from the employee Expenses. Further, an amount of Rs.14.86 Crs has been capitalized from the employee expenses during the year FY 2017-18.

3.7.2.3 Accordingly, PED requests the Hon'ble Commission to kindly approve the actual cost of Rs. 93.33 Crs towards employee expenses during the year for FY 2017-18.

3.7.3 **Repairs & Maintenance Expenses:** The repairs and maintenance cost has been claimed as per expenses actually incurred during FY 2017-18.

Table 3-7: R&M Expenses for FY 2017-18

Rs. Crs			
S. No.	Particulars	Approved	Provisional Actuals
1	R&M Expenses	22.02	10.11

3.7.3.1 As seen from the table above R&M expenses incurred actually for FY 2017-18 were much less than the approved level.

3.7.3.2 PED submits that the R&M expense is being met from budgetary provision and therefore is limited to the amount allocated under such budgetary provision only.

3.7.3.3 PED submits that R&M expenses are necessary for maintenance of infrastructure and for ensuring proper Standard of Performance of the utility. PED therefore requests the Hon'ble Commission to approve Rs. 10.11 Crs for FY 2017-18 as R&M expenses.

3.7.4 **Administration & General expenses:** The administrative expense mainly comprise of rents, professional charges, office expenses, etc. The expenses incurred by the petitioner for FY 2017-18 are shown in the table below.

Table 3-8 A&G Expenses for FY 2017-18

Rs. Crs			
S. No.	Particulars	Approved	Provisional Actuals
1	A & G Expenses	9.41	10.53

3.7.4.1 An amount of Rs. 1.29 Crs has been incurred by PED towards payment of EESL charges related to DELP scheme approved by the Commission.

3.7.4.2 The Hon'ble Commission is therefore requested to approve the A&G expenses of Rs. 10.53 Crs for FY 2017-18.

3.7.5 **O&M Expenses Summary:** Based on the foregoing paragraphs, the O&M expenses for the year FY 2017-18 are summarised below:

Table 3-9: O&M Expenses for FY 2017-18

Rs. Crs

S. No.	Particulars	Approved	Provisional Actuals
1	Total Employee Expenses	97.22	93.33
2	Total R&M Expenses	22.02	10.11
3	Total A&G Expenses	9.41	10.53
	Total O&M Expenses	128.65	113.98

3.7.6 The Hon'ble Commission is requested to approve the O&M Expenses of Rs. 113.98 Crs for FY 2017-18 as shown in the table above. The details of O&M expense for FY 2017-18 are provided in the Formats 13, 15 & 16 of the Tariff Filing Formats.

3.8 Capital Work in Progress, GFA and Depreciation

3.8.1 **GFA:** The Opening Balance of GFA for FY 2017-18 comes to around Rs. 676.16 Crs as per provisional accounts. The following table shows the opening balance, additions and closing balance of GFA for FY 2017-18.

Table 3-10: GFA for FY 2017-18

(Rs. Crs)

S. No.	Particulars	Approved	Provisional Actuals
1	Opening value of the assets at the beginning of the year	676.17	676.16
2	Additions during the year	64.49	33.64*
3	Value of assets sold/disposed off		-
4	Gross Fixed Assets at the end of the year	740.66	709.81

3.8.2 PED submits that GFA addition during FY 2017-18 is Rs. 35.64 Crs. However, Rs. 2.00 Crs is through Consumer Contribution. For the purpose of ARR, GFA, ROE, Interest on Loan and Depreciation calculation in this petition, the consumer contribution/grant has not been considered. Accordingly, GFA considered and claimed is Rs. 33.64 Crs.

3.8.3 PED hereby requests the Hon'ble Commission to approve the actual Gross Fixed Assets opening and additions as submitted above for FY 2017-18

3.8.4 **Depreciation:** As per Regulation 23 of JERC MYT Regulations 2014, depreciation shall be calculated for each year of the Control Period on the original cost of the fixed assets of the corresponding year. Accordingly, the depreciation rates as specified by CERC have been adopted for calculation of depreciation on different

asset categories.

The rates of depreciation for various assets as used are tabulated below:

Table 3-11: Rate of Depreciation applicable for various assets

Description of Assets	Rate of Depreciation
Land and Land Rights	0.00%
Building	3.34%
Plant and Machinery	5.28%
Lines and Cables	5.28%
Office Equipment	9.50%
IT Equipment	6.33%
Vehicles	6.33%
Furniture and Fixtures	15.00%
Testing and measuring equipment	5.28%
SCADA center	6.33%

3.8.5 The following table shows the depreciation arrived by PED for FY 2017-18 based on the approved depreciation rates specified by the Hon'ble Commission for different asset class. The same is reflecting in the annual audited accounts for respective years.

Table 3-12: Depreciation for FY 2017-18

Rs. Crs

S. No.	Particulars	Approved	Provisional Actuals
1	Opening value of the assets at the beginning of the year	676.17	676.16
2	Additions during the year	64.49	33.64
3	Value of assets sold /disposed off		-
4	Gross Fixed Assets at the end of the year	740.66	709.81
5	Net Depreciation for the year	40.04	36.43

3.8.6 The Hon'ble Commission is requested to approve Rs. 36.43 Crs for FY 2017-18 as submitted in the table above.

3.9 Interest & Finance Charge

3.9.1 As per regulation 24 (b) of MYT Regulations, 2014,

"(b) If the equity deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loans.

...

(e) The repayment for the control period shall be deemed to be equal to the depreciation allowed for the year."

3.9.2 The Regulation 24(b) provides for Interest and Finance Charges on Loan. PED has submitted that the majority of capital assets are created out of the equity contribution from Government of Puducherry and the actual borrowing of loan is only to the extent of the R-APDRP schemes. However PED has been claiming interest charges based on normative loan calculation. The Interest and Finance Charges arrived is based on normative loan considered to the extent of capitalization during the year. The table below shows the Interest and Finance Charges vis-a-vis approved by the Hon'ble Commission for FY 2017-18.

Table 3-13: Interest & Finance Charges for FY 2017-18

(Rs. Crs)

S. No.	Particulars	Approved	Provisional Actuals
1	Opening Normative Loan	112.45	112.45
2	Add: Normative Loan during the Year	45.14	23.55
3	Less: Normative Repayment	40.04	36.43
4	Closing Normative Loan	117.55	99.57
5	Average Normative Loan	115.00	106.01
6	Rate of Interest(@SBAR)	13.85%	13.85%
7	Interest on Normative Loan	15.93	14.68
8	Other Finance Charges	2.54	2.54
9	Total Interest and Finance Charges	18.47	17.22

3.9.3 It is submitted that PED has considered an addition of Rs. 33.64 Crs in the Gross Fixed Assets for FY 2017-18 out of which Rs. 2.00 Crs is consumer contribution. 70% of balance asset addition is considered through normative debt. The rate of interest considered is prevailing Prime Lending Rate of the State Bank of India as on 1st April of that relevant year.

3.9.4 Along with the normative interest calculated and claimed in the table highlighted above, it is submitted that certain financial charges are also incurred by the department which are related to charges claimed by the bank charges, finance charges, L/C., etc. which are claimed along with the interest.

3.9.5 The Hon'ble Commission is requested to approve the Interest & Finance Charges at **Rs. 17.22 Crs** for FY 2017-18 as shown in the table above. The details of Interest & Finance charges are provided in Format 10A of the Tariff Filing Formats.

3.10 Interest on Working Capital

3.10.1 As per Regulation 25 of JERC MYT Regulations, 2014, interest on Working Capital

for retail supply activity of the licensee shall consist of:

- Receivables for two months of billing
- Less power purchase cost of one month
- Less consumer security deposit but excluding bank guarantee/ fixed deposit receipt
- Inventory for two months based on annual requirement for previous year.

3.10.2 The petitioner hereby submits that it has adopted the same methodology adopted by the Hon'ble Commission in its tariff order for FY 2017-18 for arriving at the working capital requirement whereby it has excluded the available security deposits available with the petitioner from the working capital requirement though the same has not been specified in the Regulations.

3.10.3 The Interest on Working Capital approved by the Hon'ble Commission and claimed for FY 2017-18 is Nil since the opening Security Deposit was much higher than the working capital requirement.

Table 3-14: Interest on Working Capital for FY 2017-18

(Rs. Crs)

S. No.	Particulars	Approved	Provisional Actuals
1	Receivable - 2 months	227.00	239.03
2	Less :Power Purchase - 1 months	94.58	103.10
3	Less : Inventory for two months	6.78	7.77
4	Less: Security Deposit Opening Bal.	160.86	177.70
5	Total	(35.22)	(34.01)
6	Interest Rate	9.3%	8.88%
7	Interest on working capital	-	-

3.10.4 The Interest on Working Capital approved by the Hon'ble Commission for the FY 2017-18 was Nil. On the basis of the revised estimates for FY 2017-18, the interest on working capital comes to Nil.

3.11 Security Deposits

3.11.1 As per the Regulation 6.10 (8) of Electricity Supply Code Regulations, 2010:

"The distribution licensee shall pay interest, at the bank rate notified by the Reserve Bank of India from time to time on such security deposits taken from the consumer. In this regard it shall be the responsibility of the licensee to keep a watch on the bank rate from time to time.

The interest amount of previous financial year shall be adjusted in the energy

bill issued in May/ June of each financial year depending on billing cycle."

Table 3-15: Interest on Security Deposit for FY 2017-18

(Rs. Crs)

S. No.	Particulars	Approved	Provisional Actuals
1	Opening Security Deposit	152.8	177.70
2	Add: Deposits during the year	16.13	20.66
3	Less: Deposits refunded		
4	Less: Deposits in the form of BG/FDR		
5	Closing Security Deposit	168.93	198.36
6	Bank Rate	6.50%	6.50%
7	Interest on Security Deposit	10.46	12.22
8	Interest on Security Paid to Consumers		3.50

3.11.2 The normative Interest on Security Deposit of Rs. 12.22 Crs payable for FY 2017-18 as showcased in the table above. However, it is submitted that the actual interest paid to the consumers in FY 2017-18 is Rs. 3.50 Crs. and the balance is proposed to be paid in the subsequent years. The Hon'ble Commission is requested to approve the Interest on Security Deposit of Rs. 3.50 Crs actually paid as shown in the table above.

3.12 Provision for Bad Debts

3.12.1 The petitioner is not claiming any provision for bad debts in for the FY 2017-18 i.e. NIL and requests the Hon'ble Commission to consider the same. As provision for bad debt is allowable in ARR on the basis of actual written off of provision for bad debt.

3.13 Return on Equity

3.13.1 The proviso of Regulation 27 of MYT Regulations 2014 provides for entitlement for Return on Equity. As per the regulations, RoE is allowed @16% on 30% of the capital base or actual equity, whichever is lower. However, assets funded by consumer contribution, capital subsidies/grants and corresponding depreciation shall not form part of the capital base.

3.13.2 The capital base for closing of the FY 2016-17 as approve in true up for FY 2016-17 is considered. Further, an equity addition in FY 2017-18 equal to 30% of asset capitalized in FY 2017-18 has been considered.

3.13.3 In line with the MYT regulation and the methodology adopted in the previous tariff order, PED has calculated the Return on Equity as outlined in the following table

for FY 2017-18.

Table 3-16: Return on Equity for FY 2017-18

(Rs. Crs)

S. No.	Particulars	Approved	Provisional Actuals
1	Opening Equity Amount	202.85	202.85
2	Equity Addition during year (30% of Capitalization)	19.35	10.09
3	Closing Equity Amount	222.20	212.94
4	Average Equity Amount	212.53	207.90
5	Rate of Return on Equity	16%	16%
6	Return on Equity	34.00	33.26

3.13.4 In view of above, the Hon'ble Commission is requested to kindly allow the above Return on Equity of **Rs. 33.26 Crs** for FY 2017-18.

3.14 Non-Tariff Income

3.14.1 The Non-Tariff Income comprises metering, late payment charges, interest on staff loans, income from trading, reconnection fee, UI sales/ Sales to Exchanges and miscellaneous income among others. The Non-Tariff Income approved by the Hon'ble Commission in the APR for FY 2017-18 was Rs. 4.51 Crs.

3.14.2 The Non-Tariff Income for FY 2017-18 are as per provisional actuals is Rs. 7.42 Crs. The details of non-tariff income (excluding revenue from UI power and other income) for FY 2017-18 are provided in Format 20 of the Tariff Filing Formats

3.14.3 In view of above, the Hon'ble Commission is requested to kindly allow Non-Tariff Income of **Rs. 7.42 Crs** for FY 2017-18.

3.15 Revenue from Sale of Power at Existing Tariff

3.15.1 The Revenue from Tariff for FY 2017-18 was Rs. 1,264.96 Crs including revenue of Rs. 0.37 Crs from rooftop solar consumers net-metering and Rs. 48.54 Crs from Regulatory Surcharge @ 4%. The actual revenue earned from tariffs for FY 2017-18 is shown in the table below:

Table 3-17: Revenue from Tariff for FY 2017-18

S. No.	Particulars	Sales (MUs)	Revenue (Rs.Crs)
LT Category			
1	Domestic	723.28	179.94
2	OHOB	10.24	1.15
3	Commercial	216.41	129.72
4	Agriculture	57.61	1.45
5	Public Lighting	24.48	21.06

S. No.	Particulars	Sales (MUs)	Revenue
6	LT Industrial	148.02	76.16
7	Water Tank	37.59	22.20
8	Temporary Supply-LT&HT	8.48	8.27
	Total LT	1226.11	439.95
HT Category			
9	HT 1 Industrial / Commercial	897.34	548.98
10	HT 2 - Government & Water Tank	98.41	51.06
11	HT 3 - EHT	326.9	176.06
12	Total HT	1322.65	776.10
13	Total LT and HT	2548.76	1216.05
14	Net Metering Revenue from Solar Rooftop		0.37
15	10% Surcharge		48.54
17	Total	2548.76	1264.96

3.15.2 In view of above, the Hon'ble Commission is requested to kindly allow Revenue of Rs. 1264.96 Crs.

3.16 Revenue from Sale of surplus Power

3.16.1 Revenue through RRAS, Reactive Energy & URS is Rs.563551, Rs 2289154 & Rs 17134000 respectively i.e a total revenue of Rs. 2.00 Crs. The Hon'ble Commission is requested to kindly allow the same.

3.17 Revenue from Open access

3.17.1 PED submits that revenue from Open access for FY 2017-18 is Rs. **11.41** Crs against an approved revenue of Rs. 8.19 Crs in APR for FY 2017-18. The Hon'ble Commission is requested to kindly allow the same.

3.18 Aggregate Revenue Requirement for FY 2017-18

3.18.1 The Aggregate Revenue Requirement for FY 2017-18 as approved by the Hon'ble Commission in the APR for FY 2017-18 was Rs. 1.362.03 Crs against which the ARR for FY 2017-18 on basis of provisional actuals is **Rs. 1434.16 Crs**. The calculation for Aggregate Revenue Requirement on the basis of actuals (provisional) for FY 2017-18 is shown below:


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Table 3-18: Calculation of ARR for FY 2017-18

Rs. Crs

S. No.	Particulars	Claimed in APR	Approved by Commission	Claimed in True-up
1	Cost of power purchase	1245.01	1134.92	1237.19
2	Employee Costs	94.17	97.22	93.33
3	Administration and General Expenses	9.25	9.41	10.53
4	R&M expenses	18.78	22.02	10.11
5	Depreciation	26.51	40.04	36.43
6	Interest & Finance Charges	21.59	18.46	17.22
7	Interest on Working Capital + Interest on CSD	3.5	10.46	3.50
8	Return on NFA/ Equity	34	34	33.26
9	Provision for Bad Debt	-	-	0.00
10	Total Revenue Requirement	1452.81	1366.53	1441.58
11	Less: Non- Tariff Income	9.26	4.51	7.42
12	Net Aggregate Revenue Requirement	1443.55	1362.02	1434.16

3.18.2 The Petitioner hereby requests the Commission to approve the ARR of **Rs. 1,434.16 Crs** for FY 2017-18 as submitted above.

3.19 Revenue Gap for FY 2017-18

3.19.1 The Revenue Gap approved by the Hon'ble Commission for FY 2017-18 was Rs. 93.52 Crs.

3.19.2 The Revenue Gap as approved by the Hon'ble Commission and as calculated on the basis of provisional actuals, for provisional True up of FY 2017-18 is shown in the table below:

Table 3-19: Revenue Gap for FY 2017-18

(Rs. Crs)

S. No.	Particulars	Approved	Provisional Actuals
1	Aggregate Revenue Requirement	1362.02	1434.16
2	Revenue from Sale of Power (including Regulatory Surcharge and Revenue from OA)	1268.50	1267.37
3	Revenue Gap/ (Surplus)	93.52	157.79

3.19.1 PED hereby requests Hon'ble Commission to approve the net (provisional actual) Revenue Gap of **Rs. 157.79 Crs** for FY 2017-18.

CHAPTER 4. ANNUAL PERFORMANCE REVIEW FOR FY 2018-19

4.1 Background to FY 2018-19 Petition

4.1.1 PED had filed a petition for review of FY 2017-18 and ARR for FY 2018-19, before the Hon'ble Commission on 29th November 2017. The Hon'ble Commission after undertaking a thorough analysis had issued the Tariff Order for Financial Year 2018-19 along with the Annual Review for FY 2017-18 on 28th March 2018.

4.1.2 This chapter summarizes each of the components of ARR for FY 2018-19 and requests the Hon'ble Commission to review the performance for FY 2018-19. The Annual Performance Review for FY 2018-19 is based on actual data/ information for previous years, first 6 months (First Half – H1), as per the performance of PED, estimation/projections for remaining 6 months (Second Half – H2) and Business plan order given by the Commission for MYT period 2019-22 where the Commission approved revised estimates for FY 2018-19, wherever applicable.

4.2 Approved ARR for FY 2018-19

4.2.1 The summary of the charges for FY 2018-19 as claimed by the petitioner in the ARR petition and as approved by the Hon'ble Commission in the previous Tariff Order dated 28.3.2018 is tabulated below:

Table 4-1: Approved ARR of FY 2018-19

(Rs. Crs)		
Particulars	Claimed by Petitioner	Approved by Commission
Cost of power purchase including RPO provision to meet obligation of the previous years	1131.85	1125.64
O&M Expenses	130.89	144.38
Depreciation	29.65	43.39
Interest and Finance Charges	23.63	17.93
Interest on Working Capital +Interest on CSD	13.63	11.06
Return on NFA / Equity	36.86	36.86
Provision for Bad Debt	-	-
Total Revenue Requirement	1366.49	1379.26
Less: Non- Tariff Income	4.51	4.51
Net Aggregate Revenue Requirement	1361.98	1374.75

4.3 Number of Consumers

4.3.1 The Commission had earlier approved 4.92 lakh consumers for FY 2018-19. Based on the methodology followed by the Commission in the Business plan order for MYT 2019-22, the Commission approved the revised estimates for the base year FY 2018-19. PED has considered the same in the current APR petition for FY 2018-19

as approved by the Commission in the Business Plan. A comparison of the revised estimates with earlier approved numbers is shown below:

Table 4-2: Details of Number of Consumers for FY 2018-19

S. No.	Particulars	Approved in T.O	Revised estimates
1	Domestic	344979	336044
2	OHOB	35539	35537
3	Commercial	56801	55144
4	Agriculture	6929	6973
5	Public Lighting	51016	50666
6	LT Industrial	6840	6725
7	Total LT	502104	491089
8	HT 1 Industrial & Commercial	456	463
9	HT 2 Government & Water Tank	69	64
10	HT 3 EHT	7	7
11	Total HT	532	534
12	Total LT and HT	502636	491623

4.3.2 It is requested to the Hon'ble Commission to consider the revised number of consumers as submitted in the above table for FY 2018-19.

4.4 Energy Sales

4.4.1 The Commission approved sales of 2,606.31 MUs in ARR order for FY 2018-19. In the current APR petition for FY 2018-19, PED has considered the sales as approved by the Commission in the Business Plan order dated 31.10.2018. The revised sales for FY 2018-19 are 2,597.73 MUs. PED submits the same revised figure for FY 2018-19

Table 4-3: Sales (MUs) for FY 2018-19

S. No.	Particulars	Approved by Commission	Revised Estimates
1	Domestic	785.14	748.67
2	OHOB	10.22	10.36
3	Commercial	245.79	226.26
4	Agriculture	57.43	57.77
5	Public Lighting	27.58	24.48
6	LT Industrial & Water Tank	184.79	185.61
7	Temporary Supply - LT&HT	8	9.33
8	Total LT	1318.95	1262.48
9	HT 1 Industrial & Commercial	930.18	900.03
10	HT 2 Government & Water Tank	68.98	108.25
11	HT 3 EHT	288.2	326.97
12	Total HT	1287.36	1335.25
13	Total LT and HT	2606.31	2597.73

4.4.2 It is requested to Hon'ble Commission to approve the revised sales of 2,597.73

MUs for FY 2018-19.

4.5 Distribution Loss & Energy Requirement

4.5.1 The Hon'ble Commission had approved energy loss of 11.00% in FY 2018-19 tariff order. PED is submitting revised estimate of 13.00% as the energy loss for FY 2018-19. PED has considered the same loss as approved by the Commission in the Business Plan order dated 31.10 2018. Energy balance based on revised estimate of sales, power purchase and distribution losses are given in the table below –

Table 4-4: Distribution Loss and Energy Balance for FY 2018-19

S. No.	Particulars	Approved by Commission	Revised Estimates
A	ENERGY REQUIREMENT		
1	Energy Sales within the UT	2606.31	2597.73
2	Energy Drawal by TANGEDCo		0.00
	Sales to Electricity traders/power exchanges		181.41
3	Distribution Losses (%)	11.00%	13.00%
4	Energy Required for the Territories	2928.43	3167.31
	Energy required for OA	36.13	
5	Add: Sales to Commom Pool Consumers/UI	0	0.00
6	Energy Requirement at periphery	2928.43	3167.31
B	ENERGY AVAILABILITY		
1	Energy scheduled from tied-up sources	2928.43	3258.50
2	Transmission losses		91.19
4	Energy available	3055.15	3167.31
4	Deficit/(Surplus)	(126.72)	0.00

4.5.2 PED submits that it has been achieving significant reduction in distribution losses and is having one of the lower T&D losses in India. These efforts shall be continued and will be enhanced. However, the loss reduction is a slow process and as the loss levels come down further reduction in loss becomes difficult.

4.5.3 PED submits that in comparison with the approved figures, actual T&D losses are marginally higher and therefore request the Hon'ble Commission to approve the Distribution Loss of 13.00% for FY 2018-19.

4.6 Power Purchase Quantum

4.6.1 PED meets its total energy requirement from its allocation from the Central Generating Stations (CGS) and state utilities like TANGEDCO. PPCL is a generating company within the UT of Puducherry catering to Karaikal region of PED. PED also has an additional allocation of power from Kudunkulam Nuclear Power Plant and Vallur Thermal Power Project to meet the demand of the Union Territory.

4.6.2 The actual power purchase quantum for H1 of FY 2018-19 is 1680.06 MUs

(including 2.40 MUs from Solar Rooftop Net Metering Consumers) and power purchase cost of Rs.647.89 Crs. However, for the purpose of the APR for FY 2018-19, PED has considered the revised estimates power purchase quantum as approved by Hon'ble Commission in Business Plan order dated 31.10.2018.

4.6.3 PED further submits that the provisional actual transmission/PGCIL losses for FY 2017-18 are 2.92%. PED in the Business Plan petition had submitted a transmission loss of 4.07% based on the provisional numbers. However for the purpose of APR for FY 2018-19, PED has revised the transmission loss percentage to 3.00%. PED requests the Hon'ble Commission to approve the same.

4.6.4 Accordingly, the net revised power purchase quantum for FY 2018-19 is 3077.09 MUs (after considering and reducing sale of surplus power of 179.56 MUs)

4.7 Cost of Power Purchase for FY 2018-19

4.7.1 **Power Purchase quantum for FY 2018-19:** For the year FY 2018-19, PED has projected the power purchase as per the revised estimates approved by the Commission in the Business plan order for base year FY 2018-19. The net revised power purchase quantum for FY 2018-19 is 3077.09 MUs (after considering and reducing sale of surplus power of 181.41 MUs).

4.7.2 Following assumptions have been considered for projecting the quantum and cost of power purchase:

4.7.2.1 Fixed Charges:

PED has considered the same Fixed Charges as approved by the Commission in tariff order for FY 2018-19.

4.7.2.2 Variable Charges:

The petitioner has considered the per unit variable costs of FY 2018-19, as approved by the Commission in tariff order for FY 2018-19 and has calculated the revised projections of base year FY 2018-19 w.r.t to power purchase projections for respective Central Generating Stations.

4.7.2.3 Sale of Surplus Power: PED has considered sale of surplus power of 181.41 MUs at the rate of Rs.3.17/unit as approved by the Hon'ble Commission in in tariff order for FY 2018-19 amounting to revenue of Rs.57.51 Crore, which has been deducted from the net power purchase cost.

- 4.7.2.4 PGCIL losses: PED submits that the provisional actual transmission/PGCIL losses for FY 2017-18 are 2.92%. PED in the Business Plan petition had submitted a transmission loss of 4.07% based on provisional numbers. However for the purpose of APR for FY 2018-19, PED has revised the transmission loss percentage to 3.00%. PED requests the Hon'ble Commission to approve the same. Loss for PPCL and KSEB the external losses have been considered as nil as they are within the periphery of the licensee area.
- 4.7.2.5 Transmission Charges: The petitioner has considered the transmission charges approved by the commission for FY2018-19 in tariff order and has accordingly calculated the transmission charges per unit for PGCIL and has calculated the transmission charges for FY 2018-19.
- 4.7.2.6 Apart from the regular power purchase costs, Rs. 15.26 Crs has been considered as arrears paid to NPCIL for Kaiga & MAPS plants. Details of the Arrears are provided as Annexure-4.
- 4.7.2.7 Further, additional revenue of Rs.43.10 Crs has been considered towards sale of power to TANGEDCO for June 2013 to March 2018 received in FY 2018-19, the same has been deducted from the net power purchase cost.

4.7.3 Renewable Purchase Obligations

As per JERC (Procurement of Renewable Energy) Regulations, 2010 clause 1 sub clause (1):

"Each distribution licensee shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year."

- 4.7.3.1 The RPO requirements as per the JERC (Procurement of Renewable Energy) third Amendment Regulations dated 22nd August 2016 has been considered for the control period.
- 4.7.3.2 The Petitioner has to purchase a certain percentage of total energy purchase for sale to the consumers in its area from renewable energy sources with specific solar and non-solar RPO content.
- 4.7.3.3 The cumulative RPO obligation pending as on 1.4.2018 is 237.64 Mus (103.29 MUs Solar & 134.35 MUs Non-Solar). The Total RPO Obligation for FY 2018-19 is 9% (i.e.

3.60% Solar & 5.40% Non-Solar) amounting to stand along obligation of 233.80 MUs for FY 2018-19 (93.52 MU Solar & 140.28 MUs Non-Solar).

4.7.3.4 The RPO compliance cost is also included in the PP cost which was arrived upon as follows:

Table 4-5: RPO Compliance Cost for FY 2018-19

S.No	Description	Unit	Base Year	
			FY 2018-19	
			Physical	REC
1	Sales Within State	MUs	2548.76	
2	RPO Obligation	%	9%	
	- Solar	%	3.60%	
	- Non Solar	%	5.40%	
3	RPO Obligation	MUs	229.39	
	- Solar	MUs	91.76	
	- Non Solar	MUs	137.63	
4	RPO Purchase	MUs		
	- Solar	MUs	2.4	98.40
	- Non Solar	MUs		137.31
5	Cumulative RPO Obligation LEFT			
	- Solar	MUs		96.00
	- Non Solar	MUs		137.31
6	Floor Price of REC Certificates /MWh			
	- Solar	Rs./MWh		1000.00
	- Non Solar	Rs./MWh		1000.00
7	Amount for RPO Compliance			
	- Solar	Rs. Crs		11.02
	- Non Solar	Rs. Crs		15.38
8	Total (Rs Crores)	Rs. Crs		26.40

4.7.3.5 As outlined in the above table, PED envisages to comply to 50% of the cumulative RPO obligation pending as on FY 2018-19 (including the RPO obligation of FY 2018-19) i.e. 235.722 MUs by buying RECs (98.40 MUs Solar & 137.31 MUs Non-Solar) and 2.40 MUs from Solar Rooftop Net-metering, the cost (Rs.1.44 Crs) of which is netted off by adding in power purchase as well as Revenue. The estimated cost towards RPO compliance is Rs. 26.40 Crs for FY 2018-19. The balance 233.32 MUs is to be met in the subsequent years.

4.7.4 Estimated Power Purchase Cost Summary for FY 2018-19 is outlined as below:

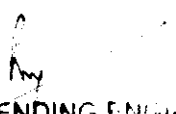

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Table 4-6: Power Purchase Cost for FY 2018-19

S. No.	Particulars	FY 2018-19		
		Purchase (MUs)	Cost (Rs. Cr.)	Rate (Rs./unit)
1	NTPC	1171.17	348.32	2.97
2	NLC	961.46	372.28	3.87
3	NPCIL	595.67	189.49	3.18
4	KSEB	0.00	0.00	
5	TANGEDCO	150.00	52.21	3.48
6	PPCL	216.37	87.04	4.02
7	Vallur	161.43	105.47	6.53
8	Renewable power (Solar Rooftop Net metering)	2.40	1.44	6.00
9	Sales of Surplus power	(181.41)	(57.51)	3.17
10	Transmission Charges		69.11	
11	RPO Obligations		26.40	
12	Total	3077.09	1194.26	3.88
14	Arrears of NPCIL		15.26	
15	Revenue from Sale to TANGEDCO (for FY 14 to FY 19)		(43.10)	
16	Net Power Purchase	3077.09	1166.42	3.79

4.7.5 The Petitioner hereby requests the Commission to approve the revised estimate of power purchase cost of **Rs. 1166.42 Crs** for FY 2018-19 as submitted above.

4.8 Operation & Maintenance Expenses

4.8.1 PED has considered FY 2018-19 as base year for the control period FY 2019-22. To estimate the Operation and Maintenance Expenses for FY 2018-19, PED has considered FY 2017-18 provisional actuals and used the methodology given in MYT Regulations 2018.

4.8.2 Operation & Maintenance Expenses consists of three elements viz Employee Expenses, A&G Expense and R&M Expense:

- Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses
- Administrative expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances and other debits.
- Repairs and Maintenance Expenses go towards the day to day upkeep of the distribution network of the Company and form an integral part of the Company's efforts towards reliable and quality power supply as well as in the reduction of losses in the system.

4.8.3 Regulation 51 and Regulation 60 of JERC for the State of Goa and Union Territories (Multi Year Tariff) Regulations, 2018 provides for O&M Expense for a distribution licensee for Distribution wire business and Retail supply respectively. The relevant regulation is re-produced hereunder:

"The Licensee shall submit the required O&M expenses for the Control Period as a part of Multi Year Tariff Petition. O&M expenses for the base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the transmission Licensee, estimates of the actuals for the Base Year, prudence check and any other factors considered appropriate by the Commission.

O&M expenses for the nth Year of the Control Period shall be approved based on the formula given below:

$$O\&M_n = (R\&M_n + EMP_n + A\&G_n) \times (1 - X_n) + \text{Terminal Liabilities}$$

Where,

$$R\&M_n = K \times GFA_{n-1} \times (\text{WPI inflation})$$

$$EMP_n = (EMP_{n-1}) \times (1 + G_n) \times (\text{CPI inflation})$$

$$A\&G_n = (A\&G_{n-1}) \times (\text{CPI inflation})$$

'K' is a constant (expressed in %). Value of K for each Year of the Control Period shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

CPI inflation – is the average increase in Consumer Price Index (CPI) for immediately preceding three (3) Years before the base Year;

WPI inflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three (3) Years before the base Year;

EMP_n – Employee expenses of the Distribution Licensee for the nth Year;

A&G_n – Administrative and General expenses of the Distribution Licensee for the nth Year;

R&M_n – Repair and Maintenance expenses of the Distribution Licensee for the nth Year;

GFA_{n-1} – Gross Fixed Asset of the transmission Licensee for the n-1th Year;

X_n is an efficiency factor for nth Year. Value of X_n shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate;

G_n is a growth factor for the nth Year. Value of G_n shall be determined by the Commission for each Year in the Multi Year Tariff Order for meeting the additional manpower requirement based on Licensee's filings, benchmarking, and approved cost by the Commission in past and any other factor that the Commission feels appropriate:

Provided that in case the Licensee has been in operation for less than three (3) Years as on the date of effectiveness of these Regulations, the O&M Expenses shall be determined on a case to case basis."

Employee Expenses for FY 2018-19

- 4.8.4 PED has analyzed the actual employee expense, number of employees and has considered the employee expense per employee for the last four years actual numbers (i.e. FY 2014-15 to FY 2017-18) while estimating the growth factor (G_n) norm for the control period. Accordingly, the Growth factor (G_n) works out to be 4.41%.

Table 4-7: Growth Rate (G_n)

Particulars	Actuals			(Provisional Actuals)
	2014-15	2015-16	2016-17	FY 2017-18
Number of employees	2097	2179	2179	2265
Projected Employee Cost (Rs. Crs)	75.93	78.21	93.69	93.33
Employee Expense per Employee (Rs Cr)	0.0362	0.0359	0.0430	0.0412
GN (4 yr. CAGR)				4.41%
GN (3 yr. CAGR)				7.15%

- 4.8.5 Based on the MYT Regulations, the employee expenses projected for the Control Period should take CPI escalation into account along with Growth factor. The average WPI Index of last three years i.e. 4.28% has been considered for escalating employee expense per employee of FY 2017-18 (provisional actuals) for the Control period.

Table 4-8: CPI index of last three years

Sr. No.	Period	CPI	Increase over previous year
1	Financial Year 2014-15	250.83	
2	Financial Year 2015-16	265.00	5.65%
3	Financial Year 2016-17	275.92	4.12%
4	Financial Year 2017-18	284.42	3.08%
5	Average CPI of last three years		4.28%

- 4.8.6 Accordingly Employee Expenses have been calculated for the MYT Control period as per formula $EMP_n = (EMP_{n-1}) \times (1+G_n) \times (CPI \text{ inflation})$. Calculation are as

under:

Table 4-9: Employee Expenses for FY 2018-19 (Rs. Crs)

Particulars	Claimed	Approved	Revised Estimates
Employee Expenses	97.3	104.42	101.62

4.8.6.1 The employee cost capitalized has not been taken into consideration, as its adjustment shall be covered under the normative employee costs (calculated the employee cost after reducing employee cost capitalized) and the same shall be adjusted in true-up for FY 2018-19 based on actuals. Accordingly, PED has revised the employee cost for the current year to Rs. 101.62 Crs and requests the Hon'ble Commission to approve the same.

Repairs & Maintenance Expenses for FY 2018-19:

- 4.8.7 R&M Expenses have been calculated based on the formula and methodology provided in the Regulations, $R\&M_n = K \times GFA_{n-1} \times (WPI \text{ inflation})$. For the purpose of R&M expenses GFA inclusive of assets created from Consumer Contribution & Grant has been considered.
- 4.8.8 Based on the past trend of R&M expenses in % to GFA, PED estimated k-factor of 1.61% for the control period as under:

Table 4-10: K-Factor computation

	2013-14	2014-15	2015-16	2016-17	2017-18
Opening GFA	555.3	563.6	634.0	660.9	676.2
Closing GFA	563.6	634.0	660.9	676.2	711.8
Avg. GFA	559.4	598.8	647.4	668.5	694.0
R&M	13.46	7.71	9.62	9.38	10.11
K-factor (%) (R&M/GFA)	2.41%	1.29%	1.49%	1.40%	1.46%
CAGR 5 Year (K factor)	1.61%				

4.8.9 The growth of R&M expense for the control period is based on opening GFA, k-factor and WPI of 0.33% is as follows.

Table 4-11: WPI index of last 3 years

Sr. No.	Period	WPI	Increase over previous year
1	Financial Year 2014-15	113.90	
2	Financial Year 2015-16	109.70	-3.69%
3	Financial Year 2016-17	111.60	1.73%
4	Financial Year 2017-18	114.90	2.96%
5	Average WPI of last three years		0.33%

- 4.8.1 R&M Expenses have been calculated based on the formula and methodology provided in the Regulations, $R\&M_n = K \times GFAn-1 \times (WPI \text{ inflation})$ as under:

Table 4-12: R&M Expenses for FY 2018-19 (Rs. Crs)

Particulars	Claimed	Approved	Revised Estimates
R&M Expenses	20.57	26.51	11.19

- 4.8.1.1 In view of the above, the Hon'ble Commission is requested to kindly allow the above Repair and Maintenance Expenses of Rs. 11.19 Crs for FY 2018-19.

Administration & General expenses for FY 2018-19:

- 4.8.2 The A&G Expenses are estimated based on the methodology specified by the Commission in MYT Regulations i.e. $A\&G_n = (A\&G_{n-1}) \times (CPI \text{ inflation})$. Accordingly, A&G Expenses for the MYT Control period are calculated as per the formula, based on actual A&G Expenses for FY 2017-18 (excluding EESL Charges) and revised estimates for FY 2018-19. EESL Charges are then added separately to the calculated expenses as they are not regular expenses. EESL charges of Rs.9.56 Crs is considered in FY 2018-19 under A&G expenses head.

- 4.8.3 Average increase in CPI for past 3 years of 4.28% has been considered for estimating A&G expenses for the control period. The calculation of A&G expenses are per the formula for the control period $A\&G_n = (A\&G_{n-1}) \times (CPI \text{ inflation})$. (i.e. $A\&G(18-19) = 9.24 \times (1+4.28\%)$). There total A&G Expenses are as under:

Table 4-13: A&G Expenses Computation for FY 2018-19 (RS. Crs)

Particulars	FY2017-18	FY 2018-19
A&Gn	9.24	9.64
EESL/DSM Expenses	1.29	9.56
Payments towards Smart Grid Works		
Total A&G Expenses	10.53	19.20

Table 4-14: Revised estimates of A&G expenses for FY 2018-19 (Rs. Crs)

Particulars	Claimed	Approved	Revised Estimates
A & G Expenses	13.02	13.45	19.20

- 4.8.4 The Petitioner submits the revised estimate of Rs. 19.20 Crs as A&G Expense for FY 2018-19 as below and requests Hon'ble Commission to approve the same.

4.8.5 O&M Expenses Summary FY 2018-19: Based on the foregoing paragraphs, the revised O&M expenses for the year FY 2018-19 vis-a-vis the approved level by the Hon'ble Commission is shown in the table below:

Table 4-15: O&M Expenses for FY 2018-19 (Rs.Crs)

S. No.	Particulars	Claimed by Petitioner	Approved by Commission	Revised Estimates
1	Total Employee Expenses	97.3	104.42	101.62
2	Total R&M Expenses	20.57	26.51	11.19
3	Total A&G Expenses	13.02	13.45	19.20
	Total O&M Expenses	130.89	144.38	132.01

4.8.6 The Hon'ble Commission is requested to approve the O&M Expenses of Rs. 132.01 Crs as shown in the table above. The details of O&M expense for FY 2018-19 are provided in the Formats 13, 15 & 16 of the Tariff Filing Formats.

4.9 Capital Work in Progress, GFA and Depreciation

4.9.1 GFA: The Opening Balance of GFA for FY 2018-19 comes to around Rs. 709.80 Crs. The Commission, in the last tariff order had allowed a Capital expenditure of Rs.68.31 Crs and Capitalization of 54.31 Crs, out of which Rs. 5 Cr. Capital expenditure and Rs. 16.67 Cr Capitalization was towards, RAPDRP (Part A & Part B) works. The petitioner submits that all the funding regarding R-APDRP (Part A & Part B) shall have to be completed by December 2018 as per notification from Ministry of Power and all the capital expenditure and capitalization of R-APDRP(Part A & Part B) works shall be completed in FY 2018-19. In this regard, the petitioner in the Business Plan petition, had proposed the Capital Expenditure works of Rs. 36.31 Crs in FY 2018-19 and Rs. 9.73 Crs in FY 2019-20 and capitalization of Rs 57.77 Crs in FY 2018-19 and Rs. 9.83 Crs in FY 2019 for R-APDRP works. However, Business Plan Order dated 31.10.2018, Commission has approved a capital expenditure of Rs.5.00 Crs, Rs. 41.04 in FY 2018-19 & FY 2019-20 respectively and capitalization of Rs. 16.67 Crs, Rs.42.61 Crs and Rs 8.32 Crs in FY 2018-19, FY 2019-20 and FY 2020-21 respectively. PED submits that in line with notification from MoP all the R-APDRP (Part A & Part B) works are to be completed in FY 2018-19 itself and any delay will not be allowed and secondly, PED also envisages that all the RAPDRP works shall be completed in FY 2018-19 and any work spilling over shall not be taken up. Accordingly, in the current petition, PED has shifted all the Capital expenditure and Capitalization of RADPRP (Part A & part B) works to FY 2018-19 (i.e. Capital Expenditure of Rs. 24.96 Crs and capitalization of Rs. 30.66 Crs in FY 2018-19) and the capital expenditure and capitalization w.r.t RAPDRP works in FY 2019-20 and FY 2020-21 have been considered NIL and

amount reduced from total capital expenditure and capitalization of respective years.

Accordingly, the additions to GFA for FY 2018-19 is Rs. 95.57 Crs out of which Rs. 14.34 Crs is from Grant towards IPDS & DDUGJY works and Rs. 2.00 Crs is from consumers contribution, which have not been considered. Accordingly, net GFA addition for FY 2018-19 is Rs. 79.23 Crs; the details of which are provided in the table below:

Table 4-16: Capital Expenditure & Capitalization for FY 2018-19 (Revised Estimates)

(Rs. Crs)

Sr. No.	Particulars	CAPEX	CAPITALIZATION
		FY 2018-19	FY 2018-19
A	Transmission Schemes		
1	Establishment of New Substations	11.33	51.50
2	Augmentation of System Capacity	6.87	
	Total Transmission	18.20	51.50
B	Distribution Schemes		
1	R-APDRP Part-A Works	4.16	4.16
2	R-APDRP Part-B Works	20.80	26.50
4	Normal Development Schemes	22.42	3.17
8	Reliable communication	1.77	0.24
9	IPDS	8.73	4.00
10	DDUGJY	7.94	4.00
11	PSDF	0.50	-
	Total Distribution	66.32	42.07
C	Consumer Contribution		
1	Asset from Consumer Contribution	2.00	2.00
A+B+C	Total	86.52	95.57

Table 4-17: GFA Revised Estimates

Rs. Crs

S. No.	Particulars	Approved by Commission	Revised Estimates
1	Opening value of the assets at the beginning of the year	740.66	709.80
2	Additions during the year	54.31	79.23
3	Value of assets sold/disposed off		-
4	Gross Fixed Assets at the end of the year	794.97	789.03

4.9.2 PED hereby requests the Hon'ble Commission to approve the revised estimates for Gross Fixed Assets as submitted above.

4.9.3 **Depreciation:** As per Regulation 23 of JERC MYT Regulations 2014, depreciation shall be calculated for each year of the Control Period on the original cost of the

fixed assets of the corresponding year. Accordingly, the depreciation rates as specified by CERC have been adopted for calculation of depreciation on different asset categories.

- 4.9.4 As per the GFA and the applicable depreciation rates, PED has calculated the depreciation for the year FY 2018-19 as Rs. 39.39 Crs. The table shows the working of depreciation.

Table 4-18: Depreciation for FY 2018-19

Rs. Crs			
S. No.	Particulars	Approved by Commission	Revised Estimates
1	Opening value of the assets at the beginning of the year	740.66	709.80
2	Additions during the year	54.31	79.23
3	Value of assets sold /disposed off		-
4	Gross Fixed Assets at the end of the year	794.97	789.03
5	Net Depreciation for the year	43.39	39.39
6	Average Depreciation Rate	5.65%	5.26%

- 4.9.5 PED hereby requests the Commission to approve the revised estimates of depreciation as submitted above.

4.10 Interest & Finance Charge

- 4.10.1 As per regulation 24 (b) of MYT Regulations, 2014,

“(b) If the equity deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual loan shall be considered for determination of interest on loans.

...

(e) The repayment for the control period shall be deemed to be equal to the depreciation allowed for the year.”

- 4.10.2 The Regulation 24(b) provides for Interest and Finance Charges on Loan. PED has submitted that the majority of capital assets are created out of the equity contribution from Government of Puducherry and the actual borrowing of loan is only to the extent of the R-APDRP schemes. The table below shows the Interest and Finance Charges vis-a-vis approved by the Hon'ble Commission. The Interest and Finance Charges as per the revised estimates for FY 2018-19 is Rs. 17.09 Crs. The summary of Interest and Finance Charges as claimed by the petitioner and as

approved by the Commission for FY 2018-19 along with revised estimates is tabulated below:

Table 4-19: Interest & Finance Charges for FY 2018-19

Rs. Crs			
S. No.	Particulars	Approved by Commission	Revised Estimates
1	Opening Normative Loan	117.56	99.57
2	Add: Normative Loan during the Year	38.02	55.46
3	Less: Normative Repayment	43.39	39.39
4	Closing Normative Loan	112.19	115.64
5	Average Normative Loan	114.88	107.61
6	Rate of Interest(@SBAR)	13.40%	13.40%
7	Interest on Normative Loan	15.39	14.42
8	Other Finance Charges	2.54	2.67
9	Total Interest and Finance Charges	17.93	17.09

4.10.3 It is submitted that PED has considered a net addition of Rs. 79.23 Crs in the Gross Fixed Assets for FY 2018-19, which are considered to be funded through normative debt to the tune of 70%. The rate of interest considered is prevailing Prime Lending Rate of the State Bank of India as on 1st April of that relevant year.

4.10.4 Along with the normative interest calculated and claimed in the table highlighted above, it is submitted that certain financial charges are also incurred by the department which are related to charges claimed by the bank charges, finance charges, etc. which are claimed along with the interest in Table above.

4.10.5 The Hon'ble Commission is requested to approve the Interest & Finance Charges at Rs. 17.09 Crs as shown in the table for FY 2018-19. The details of Interest & Finance charges are provided in Format 10A of the Tariff Filing Formats.

4.11 Interest on Working Capital

4.11.1 As per Regulation 25 of JERC MYT Regulations, 2014, interest on Working Capital for retail supply activity of the licensee shall consist of:

- Receivables for two months of billing
- Less power purchase cost of one month
- Less consumer security deposit but excluding bank guarantee/ fixed deposit receipt
- Inventory for two months based on annual requirement for previous year.

4.11.2 PED hereby submits that it has adopted the same methodology adopted by the Hon'ble Commission in the last tariff order for arriving at the working capital requirement whereby it has also taken into consideration the available security deposits available with the Petitioner from the working capital requirement though the same has not been specified in the Regulations.

4.11.3 The Interest on Working Capital approved by the Hon'ble Commission for the FY 2018-19 was Nil. On the basis of the revised estimates for FY 2018-19, the interest on working capital comes to Nil.

Table 4-20: Interest on Working Capital for FY 2018-19 (Rs. Crs)

S. No.	Particulars	Approved by Commission	Revised Estimates
1	Receivable - 2 months	229.12	231.35
2	Less :Power Purchase - 1 months	93.8	97.20
3	Less : Inventory for two months	6.78	7.77
4	Less: Security Deposit Opening Bal.	176.99	198.36
5	Total	(48.45)	(56.45)
6	Interest Rate *	8.65%	8.70%
7	Interest on working capital	-	-

4.12 Security Deposits

4.12.1 As per the Regulation 6.10 (8) of Electricity Supply Code Regulations, 2010:

"The distribution licensee shall pay interest, at the bank rate notified by the Reserve Bank of India from time to time on such security deposits taken from the consumer. In this regard it shall be the responsibility of the licensee to keep a watch on the bank rate from time to time.

The interest amount of previous financial year shall be adjusted in the energy bill issued in May/ June of each financial year depending on billing cycle."

4.12.2 The prevailing Bank rate is considered at 8.70% as notified by Reserve Bank of India with effect from 1st March 2018.

Table 4-21: Interest on Security Deposit for FY 2018-19 (Rs. Crs)

S. No.	Particulars	Approved by Commission	Revised Estimates
1	Opening Security Deposit	168.92	198.36
2	Add: Deposits during the year	16.13	21.69
3	Less: Deposits refunded		
4	Less: Deposits in the form of BG/FDR		
5	Closing Security Deposit	185.05	220.06
6	Bank Rate	6.25%	8.70%
7	Interest on Security Deposit	11.06	18.20

4.12.3 The Hon'ble Commission is requested to approve the Interest on Security Deposit

of Rs. 18.20 Crs as shown in the table above.

4.13 Provision for bad debts

4.13.1 PED is not claiming any provision for bad & doubtful debts in the ARR of FY 2018-19, for pass through in tariff to consumers and may consider during true-up of the FY 2018-19 as per audited financial statements.

Table 4-22: Bad and doubtful debts for FY 2018-19

Particulars	Approved by Commission	Revised estimate
Bad and Doubtful Debts	NIL	NIL

4.13.2 The Hon'ble Commission is requested to kindly approve the same

4.14 Return on Equity

4.14.1 The proviso of Regulation 27 of MYT Regulations 2014 provides for entitlement for Return on Equity. As per the regulations, RoE is allowed @16% on 30% of the capital base or actual equity, whichever is lower. However, assets funded by consumer contribution, capital subsidies/grants and corresponding depreciation shall not form part of the capital base.

4.14.2 In line with the methodology adopted by the Hon'ble Commission in previous tariff orders, the capital base for closing of the FY 2017-18 as per the last chapter is considered. Further, an equity addition in FY 2018-19 equal to 30% of asset capitalized in FY 2018-19 has been considered.

4.14.3 In line with the MYT regulation and the methodology adopted in the previous tariff order, PED has calculated the Return on Equity as outlined in the following table for FY 2018-19.

Table 4-23: Return on Equity for FY 2018-19

Rs. Crs

S. No.	Particulars	Approved by Commission	Revised Estimates
1	Opening Equity Amount	222.2	212.94
2	Equity Addition during year (30% of Capital)	16.29	23.77
3	Closing Equity Amount	238.49	236.71
4	Average Equity Amount	230.35	224.83
5	Rate of Return on Equity	16%	16%
6	Return on Equity	36.86	35.97

4.14.4 In view of above, the Hon'ble Commission is requested to kindly allow the above Return on Equity of Rs. 35.97 Crs.

4.15 Non-Tariff Income

4.15.1 The Non-Tariff Income comprises metering, late payment charges, interest on staff loans, income from trading, reconnection fee, UI sales/ Sales to Exchanges and miscellaneous income among others. The Non-Tariff Income approved by the Hon'ble Commission in the ARR for FY 2018-19 was Rs. 4.51 Crs.

4.15.2 The Non-Tariff Income for FY 2018-19 was estimated considering FY 2017-18 as base year and an escalation of 5% is considered to estimate Non-tariff income for FY 2018-19. The Non-Tariff Income approved as per ARR and the revised estimate is tabulated below:

Table 4-24: Non-Tariff Income for FY 2018-19

(Rs. Crs)			
S. No.	Particulars	Approved by Commission	Revised Estimates
1	Non-Tariff Income	4.51	7.79

4.15.3 In view of above, the Hon'ble Commission is requested to kindly allow Non-Tariff Income of Rs. 7.79 Crs.

4.16 Revenue from Sale of Power at Existing Tariff

4.16.1 The Revenue from Tariff for FY 2018-19 approved by the Hon'ble Commission was Rs. 1,244.26 Crs. The Revenue from Tariff for FY 2018-19 as per revised estimates comes to Rs. 1,447.48 Crs. The summary of Revenue from Tariff as claimed by PED in the ARR for FY 2018-19, as approved by the Commission and as per revised estimates for FY 2018-19, is tabulated below:


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Puducherry

Table 4-25: Revenue from Tariff for 2018-19

S. No.	Particulars	Sales (MUs)	Revenue (Rs.Crs)
LT Category			
1	Domestic	748.67	215.94
2	OHOB	10.36	1.15
3	Commercial	226.26	149.22
4	Agriculture	57.77	2.29
5	Public Lighting	24.48	21.08
6	LT Industrial	148.02	83.68
7	Water Tank	37.59	24.08
8	Temporary Supply-LT&HT	9.33	9.10
	Total LT	1262.48	506.54
HT Category			
9	HT 1 Industrial / Commercial	900.03	602.49
10	HT 2 - Government & Water Tank	108.25	78.98
11	HT 3 - EHT	326.97	202.54
12	Total HT	1335.25	884.01
13	Total LT and HT	2597.73	1390.56
14	Solar Rooftop Net Metering		1.44
15	Regulatory Surcharge @4%		55.48
17	Total	2597.73	1447.48

4.16.2 In view of above, the Hon'ble Commission is requested to kindly allow Revenue of Rs. 1447.48 Crs (including Regulatory Surcharge) for FY 2018-19.

4.17 Revenue from Open Access

4.17.1 The Commission approved a revenue of Rs. 11.57 Crs for FY 2018-19 as revenue from open access. However, PED submits that there shall be no revenue from Open access for the year FY 2018-19 as per revised estimates.

4.18 Aggregate Revenue Requirement for FY 2018-19

4.18.1 The Aggregate Revenue Requirement for FY 2018-19 approved by the Hon'ble Commission in the Tariff order for FY 2018-19 was Rs. 1374.75 Cr. The calculation for Aggregate Revenue Requirement on the basis of revised estimates for FY 2018-19 is shown below:

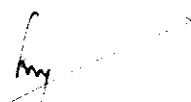

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 -cum-HOD
 Electricity Department
 Puducherry

Table 4-26: Calculation of ARR for FY 2018-19

Rs. Crs			
S. No.	Particulars	Approved by Commission	Revised Estimates
1	Cost of power purchase	1125.64	1166.42
2	Employee Costs	104.42	101.62
3	Administration and General Expenses	13.45	19.20
4	R&M expenses	26.51	11.19
5	Depreciation	43.39	39.39
6	Interest & Finance Charges	17.93	17.09
7	Interest on Working Capital	-	0.00
8	Interest on Security Deposit	11.06	5.00
9	Return on Equity	36.86	35.97
10	Total Revenue Requirement	1379.26	1395.88
11	Less: Non- Tariff Income	4.51	7.79
12	Net Aggregate Revenue Requirement	1374.75	1388.09

4.18.2 PED hereby requests the Hon'ble Commission to approve the revised ARR of Rs. 1388.09 Crs for FY 2018-19 as submitted above.

4.19 Revenue Gap for FY 2018-19

4.19.1 The Revenue Gap as claimed by PED, approved by the Hon'ble Commission for FY 2018-19 and as calculated on the basis of revised estimates is shown in the table below:

Table 4-27: Revenue Gap for FY 2018-19 (Rs. Crs)

S. No.	Particulars	Approved by Commission	Revised Estimates
1	Aggregate Revenue Requirement	1374.75	1388.09
2	Revenue from Sale of Power (including Regulatory Surcharge)	1224.26	1447.48
3	Revenue from Open Access	11.57	
4	Revenue Gap/ (Surplus)	138.92	(59.39)

4.19.2 In view of above, the Hon'ble Commission is requested to kindly allow adjusting the revenue gap of FY 2018-19 with the cumulative gap upto 2017-18 as under:

Table 4-28: Cumulative Gap till FY 2018-19 (Rs. Crs)

Particulars	Previous Year (Provisional Actuals)	APR
	FY 2017-18	FY 2018-19
Opening Balance of Gap (previous years)	94.05	251.84
Revenue Gap for the year (including surcharge)	157.79	(59.39)
Closing Gap	251.84	192.44
Total Cumulative Gap for years (Rs. Crs)	251.84	192.44

CHAPTER 5. ANNUAL REVENUE REQUIREMENT FOR MYT CONTROL PERIOD

5.1 Preamble

5.1.1 The Joint Electricity Regulatory Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Multi Year Distribution Tariff) Regulations, 2018. As per the same, the Hon'ble Commission shall determine the tariff for the distribution business of electricity under a Multi-Year Tariff framework with effect from April, 2019.

5.1.2 As per JERC MYT Regulations, 2018, MYT petition for a licensee shall be on the basis of the business plan approved by the Hon'ble Commission. The control period is defined as:

"17. "Control Period" shall mean the period of three years from April 1, 2019 to March 31, 2022."

5.1.3 The said MYT Regulations directs the Distribution license to submit their Multi-Year Business Plan for the Control Period FY 2019-20 to FY 2021-22, which Electricity Department, Puducherry had submitted in August, 2018 which was in line with the MYT Regulations and the Commission approved at same vide order dated 31st October 2018.

5.1.4 Based on the MYT regulations and the Business plan order dated 31st October 2018, this MYT petition is being filed by the petitioner for the Control Period i.e. FY 2019-20 to FY 2021-22. This chapter provides the details of the expenditure estimates of PED which are the components of the ARR for the entire Control Period from FY 2019-20 to FY 2021-22 which are proposed to be approved by the Hon'ble Commission. Accordingly, the revenue from the existing tariff with the Revenue gap / (surplus) is determined so as to propose the tariff design / proposal for recovery from the consumers during the MYT control period.

5.2 Principles for determination of ARR for MYT period

5.2.1 This Chapter summarises the Aggregate Revenue Requirement (ARR) for the MYT control period FY 2019-20 to FY 2021-22. The projections for the control period have been made based on the figures and norms approved by the Hon'ble Commission in its Business plan order. The various components of ARR are determined in the following chapters in line with the MYT Regulations 2018.

5.2.2 PED would like to submit that the Business Plan was prepared keeping in mind the growth plan for the MYT Control Period after considering the strengths and weaknesses of the department and evaluating its business environment.

5.2.3 However, as mentioned above and in the MYT Business Plan, there are number of internal and external factors which affect the planning of the department and thus, it makes this a very dynamic document and which calls for regular reviews of the plan with a view to introduce any corrections commensurate to the actual implementation of the schemes and other factors.

5.2.4 The Annual Revenue Requirement for the MYT Control Period is projected based on the methodology followed by the Commission in the Business plan order dated 31.10.2018 and the figures approved by the Commission in the same have been considered for determining ARR for the control period FY 2019-22.

5.3 Sales for the Control Period

5.3.1 Based on the projections and analysis of the past sales and number of consumers, the category wise growth rate of the sales and the number of consumers proposed by PED and approved by the Commission in Business plan order is mentioned below.

Table 5-1: Category-wise growth rate approved for Sales and Number of Consumers for the Control Period

S. No.	Particulars	Consumers	Sales (MUs)
		Approved	Approved
1	Domestic	3.13%	3.51%
2	OHOB	0%	1.19%
3	Commercial	2.19%	4.55%
4	Agriculture	0.47%	0.27%
5	Public Lighting	0.46%	0.00%
6	LT Industrial+Water tank	0.85%	0.00%
7	HT-I	2.28%	0.30%
8	HT-II	5.63%	10.00%
9	HT-III	0.00%	0.02%

5.3.2 Based on the above approved growth rates, the Commission had projected the sales for the Control period considering FY 2018-19 as the base year as per the MYT regulations. The sales and number of consumers and connected load approved by the Commission for the Control period is given below.

Table 5-2: Sales approved for MYT Control Period (in MUs)

S. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
		Approved	Approved	Approved
1	Domestic	774.95	802.15	830.30
2	OHOB	10.49	10.61	10.74
3	Commercial	236.55	247.31	258.57
4	Agriculture	57.92	58.08	58.23
5	Public Lighting	24.48	24.48	24.48
6	LT Industrial	185.61	185.61	185.61
7	Temp	10.27	11.31	12.44
8	HT I	902.73	905.44	908.16
9	HT II	119.08	130.98	144.08
10	HT III	327.03	327.10	327.16
	Total	2649.11	2703.07	2759.77

Table 5-3: Number of Consumers approved for MYT Control Period

S. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
		Approved	Approved	Approved
1	Domestic	346562	357410	368596
2	OHOB	35537	35537	35537
3	Commercial	56351	57586	58847
4	Agriculture	7005	7038	7071
5	Public Lighting	50899	51133	51368
6	LT Industrial	6782	6839	6898
8	HT I	474	485	496
9	HT II	68	72	76
10	HT III	7	7	7
	Total	503685	516107	528896

Table 5-4: Connected Load (kW/KVA/HP) approved for MYT Control Period

S. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
		Approved	Approved	Approved
1	Domestic	5,80,218	6,06,966	6,34,947
2	OHOB	2,843	2,843	2,843
3	Commercial	1,38,600	1,49,522	1,61,304
4	Agriculture	44,654	44,654	44,654
5	Public lighting	6,242	6,304	6,367
6	LT Industrial & water tank	1,30,242	1,32,821	1,35,451
7	HT I	3,66,965	3,78,964	3,91,356
8	HT II	36,910	40,601	44,661
9	HT III	1,33,280	1,39,931	1,46,913
10	Total	14,39,954	15,02,606	15,68,496

5.4 Distribution Loss

5.4.1 PED is taking utmost efforts to reduce the distribution losses, during recent years. These efforts shall be continued and will be enhanced. However, the loss reduction is a slow process and as the loss levels come down further reduction in loss becomes difficult to a large extent. The loss reduction trajectory approved by the Hon'ble Commission in the business plan order is mentioned below and the same has been considered for projecting Energy requirement at the periphery.

Table 5-5: Loss reduction trajectory for the MYT Control Period

FY 2019-20	FY 2020-21	FY 2021-22
Approved	Approved	Approved
12.50%	11.75%	11.00%

5.5 Energy Balance

5.5.1 While calculating energy balance of PED, the UI sale has not been projected for the control period. Only the sales to its own consumers and the estimated Distribution Loss envisaged during the MYT Control period is considered to determine the power requirement to meet the demand of own consumers.

5.5.2 Based on the approved Sales and distribution loss trajectory during MYT Control period, the Energy requirement approved by the Commission is shown in the following table:

Table 5-6: Energy Requirement & Energy Balance proposed for the MYT Control Period

S.No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
A	ENERGY REQUIREMENT			
1	Sales within UT (MUs)	2649.11	2703.07	2759.77
2	Sales to Electricity Traders / Power Exchange (MUs)	172.90	244.81	336.10
3	Loss (%)	12.50%	11.75%	11.00%
4	Loss(MUs)	378	360	341
5	Sales to common pool consumer/UI(MUs)	-	-	-
6	Energy requirement at periphery(MUs)	3200.45	3307.78	3436.97
B	ENERGY AVAILABILITY			
1	Gross Energy Purchase(MUs)	3290.53	3401.24	3530.43
2	External Loss (MUs)	90.08	93.46	93.46
	Loss (%)	3.00%	3.00%	3.00%
3	Net Energy Availability(MUs)	3200.45	3307.78	3436.97

5.5.3 PED request the Hon'ble Commission to approve the Energy Balance for the MYT Control period as submitted in this petition.

5.6 Power Purchase Quantum

- 5.6.1 PED meets its total energy requirement from its allocation from the Central Generating Stations (CGS) and PPCL. PPCL is a generating company within the UT of Puducherry catering to the partial requirement of Karaikal region of PED. PED also has an additional allocation of power from New Neyveli Thermal Power Station to meet the demand of the Union Territory from the year 2019-20.
- 5.6.2 The power purchase quantum for the Control period has been considered as the quantum approved by Hon`ble Commission in Business Plan order dated 31.10.2018
- 5.6.3 PED further submits that the provisional actual transmission/PGCIL losses for FY 2017-18 are 2.92%. PED in the Business Plan petition had submitted a transmission loss of 4.07%. However for the purpose of the MYT control period, PED has revised the transmission loss percentage to 3.00%. PED requests the Hon`ble Commission to approve the same.
- 5.6.4 Accordingly, the net power purchase quantum for the MYT Control period, as approved by the Hon`ble Commission in Business Plan order is 3117.63 MUs, 3156.43 MUs, 3194.33 MUs (after considering and reducing sale of surplus power of 172.90 MUs, 244.81 MUs, 336.10 MUs) for FY 2019-20, FY 2020-21, FY 2021-22 respectively.

5.7 Cost of Power Purchase for the MYT Control Period

- 5.7.1 PED has projected the net power purchase quantum for the MYT Control period, as approved by the Hon`ble Commission in Business Plan order as 3117.63 MUs, 3156.43 MUs, 3194.33 MUs (after considering and reducing sale of surplus power of 172.90 MUs, 244.81 MUs, 336.10 MUs) for FY 2019-20, FY 2020-21, FY 2021-22 respectively.
- 5.7.2 Following assumptions have been considered for projecting the quantum and cost of power purchase:
- 5.7.2.1 Fixed Charges:
The draft Tariff Regulations for the tariff period FY 2019-23 have recently been notified by CERC and comments invited. However, CERC regulations and Tariff orders for the period FY 2020-24 for the Central Generating Stations will be ready only in the year 2019-20. is not present. In absence of the tariff orders for FY 2020-24 of the Central Generating Stations, PED has considered an escalation of 4% on the Fixed Charges of FY 2018-19. Fixed charges for each year of the control period has been considered same for the generating stations

For PPCL, the fixed charges for FY 2018-19 has been considered and escalated by 4% during the Control Period.

5.7.2.2 Variable Charges:

PED has considered 4% escalation on FY 2018-19 per unit variable charges from each sources to arrive at variable charges of FY 2019-20. For next 2 years of control period PED has considered an escalation of 2% Y-O-Y to arrive at variable charges of FY 2020-21 and FY 2021-22.

5.7.2.3 Sale of Surplus Power: PED has considered sale of surplus power of 172.90 MUs, 244.81 MUs, 336.10 MUs for FY 2019-20, FY 2020-21, FY 2021-22 respectively (as approved by Commission in Business Plan Order) at the rate of Rs.3.17/unit (as approved by the Hon`ble Commission in in tariff order for FY 2018-19), which has been deducted from the net power purchase cost.

5.7.2.4 PGCIL losses: PED submits that the provisional actual transmission/PGCIL losses for FY 2017-18 are 2.92%. PED in the Business Plan petition had submitted a transmission loss of 4.07%. However for the purpose of APR for FY 2018-19, PED has revised the transmission loss percentage to 3.00%. PED has further considered the same percentage of losses i.e 3.00% for each year of the MYT Control period. PED requests the Hon`ble Commission to approve the same. Loss for PPCL have been considered as nil as they are within the periphery of the licensee area.

5.7.2.5 Transmission Charges: The petitioner has considered the per-unit transmission charges for FY2018-19 in tariff order and has accordingly calculated the transmission charges for the MYT Control period.

5.7.3 Renewable Purchase Obligation and Cost for the Control Period:

5.7.3.1 As per Joint Electricity Regulatory Commission for State of Goa & Union Territories (Procurement of Renewable Energy) Regulations, 2010 and as amended on 19th February 2013, quantum of Renewable Purchase Obligations has been specified for each year whereby each distribution licensee needs to purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of the total consumption of all the consumers in its area during a year.

5.7.3.2 PED submits that it is obliged to comply with the Renewable Purchase Obligation and therefore has projected the RPO cost for MYT Control Period. The cumulative RPO obligation pending as on 1.4.2019 is 233.32 MUs (96.00 MUs Solar & 137.31 MUs Non-Solar). The total RPO Obligation for FY 2019-20 is 11.50% (i.e. 4.70% Solar & 6.80% Non-Solar) amounting to stand alone obligation of 304.65 MUs for

FY 2019-20 (124.51 MU Solar & 180.14 MUs Non-Solar). PED submits that it plans to comply and fulfil its total cumulative RPO for FY 2019-20 i.e. 537.97 MUs, 381.13 MUs in FY 2020-21 and 469.16 MUs in FY 2021-22.

5.7.3.3 PED further submits that the RPO obligations can be met either through the purchase of energy from renewable sources or through REC certificates. However, considering the availability of the Renewable Power, PED has proposed to procure REC to comply majority of its RPO and has envisaged to by a specific amount of physical power also each year at the maximum rate of Rs 3.00/unit each year from renewable sources. The EDP submits that request has already been made to MNRE / SECI to allocate 100 MW Wind Power and signing of the PPA is in process for the same. Similarly, request has also been made to NTPC and MNRE / SECI for allocation of 100 MW and 50 MW of Solar Power respectively and the same is in process.

5.7.3.4 The RPO cost for the control period based on the percentage of solar and non-solar RPO specified by JERC is tabulated below considering the floor price of solar and non-solar RECs. Prevailing floor price of solar RECs is Rs. 1000/REC (plus GST) and for non-solar Rs. 1000/REC (plus GST).

5.7.3.5 Accordingly, the RPO plan and Cost to fulfill RPO obligation is as under:

Table 5-7: RPO Cost for the Control Period

S.No	Description	Unit	Projections					
			FY 2019-20		FY 2020-21		FY 2021-22	
			Physical	REC	Physical	REC	Physical	REC
1	Sales Within State	MUs	2,649.11		2,703.07		2,759.78	
2	RPO Obligation	%	11.50%		14.10%		17.00%	
	- Solar	%	4.70%		6.10%		8.00%	
	- Non Solar	%	6.80%		8.00%		9.00%	
3	RPO Obligation	MUs	304.65		381.13		469.16	
	- Solar	MUs	124.51		164.89		220.78	
	- Non Solar	MUs	180.14		216.25		248.38	
4	RPO Purchase	MUs						
	- Solar	MUs	71.61	148.91	69.50		100.00	
	- Non Solar	MUs		317.45	0.00	311.64	98.69	270.48
5	Cumulative RPO Obligation LEFT							
	- Solar	MUs		-				
	- Non Solar	MUs		-				
6	Floor Price of REC Certificates /MWh							
	- Solar	Rs./MWh		1000		1000		1000
	- Non Solar	Rs./MWh		1000		1000		1000
7	Amount for RPO Compliance							
	- Solar	Rs. Crs	21.48	16.88	20.85	-	30.00	-
	- Non Solar	Rs. Crs	-	35.55	-	34.90	29.61	30.29
8	Total (Rs Crores)	Rs. Crs	21.48	52.23	20.85	34.90	59.61	30.29

5.7.3.6 PED requests Hon'ble Commission to kindly approve the above mentioned Renewable energy quantum and renewable energy cost of physical power and RECs to meet the RPO obligation for the MYT Control period i.e. FY 2019-20 to FY 2021-22.

5.7.4 The total power purchase quantum and cost for each year of the MYT control period is as under:


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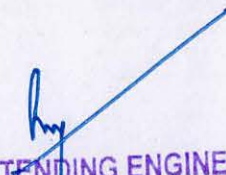
Provisional True-up for FY 2017-18, Review for FY 2018-19 and ARR & MYT Petition for FY 2019-20 to FY 2021-22

Table 5-8: Power Procurement Cost for Control Period

Sr. No.	Source	Power Purchase (MUs)				Power Purchase Cost - Variable Cost (VC) (Rs.Cr)				Power Purchase Cost - Fixed Cost Cost (FC) (Rs.Cr)				Total Power Purchase Cost (Rs Cr)			
		Base Year Projections	Projections			Base Year Projections	Projections			Base Year Projections	Projections			Base Year Projections	Projections		
		2018-19	2019-20	2020-21	2021-22	2018-19	2019-20	2020-21	2021-22	2018-19	2019-20	2020-21	2021-22	2018-19	2019-20	2020-21	2021-22
1	2																
A	Central Sector Power Stations																
I	NTPC	1,171.17	1,171.17	1,171.17	1,171.17	252.83	262.94	268.20	273.56	95.49	99.31	99.31	99.31	348.32	362.25	367.51	372.87
	KSTPS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	RSTPS Stage I & II	490.59	490.59	490.59	490.59	117.74	122.45	124.90	127.40	37.14	38.63	38.63	38.63	154.88	161.08	163.53	166.02
	RSTPS Stage -III	137.33	137.33	137.33	137.33	32.20	33.49	34.16	34.84	10.14	10.55	10.55	10.55	42.34	44.03	44.70	45.39
	Talcher Stage- II	433.63	433.63	433.63	433.63	71.01	73.85	75.33	76.83	31.63	32.90	32.90	32.90	102.64	106.75	108.22	109.73
	Simhadri Stage- II	109.62	109.62	109.62	109.62	31.88	33.15	33.81	34.49	16.58	17.24	17.24	17.24	48.46	50.39	51.06	51.73
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
II	NLC	961.46	961.46	961.46	961.46	284.71	296.09	302.02	308.06	87.57	91.07	91.07	91.07	372.28	387.17	393.09	399.13
	NLC TPS II Stage I	469.59	469.59	469.59	469.59	141.26	146.91	149.85	152.84	33.79	35.14	35.14	35.14	175.05	182.05	184.99	187.98
	NLC TPS II Stage II	179.75	179.75	179.75	179.75	53.91	56.07	57.19	58.34	13.43	13.97	13.97	13.97	67.34	70.04	71.16	72.30
	NLC TPS I (Expn)	88.41	88.41	88.41	88.41	24.54	25.52	26.03	26.56	10.91	11.35	11.35	11.35	35.45	36.87	37.38	37.90
	NLC TPS II (Expn)	44.71	44.71	44.71	44.71	12.44	12.94	13.20	13.46	4.26	4.43	4.43	4.43	16.70	17.37	17.63	17.89
	NTPL	178.99	178.99	178.99	178.99	52.55	54.65	55.74	56.86	25.18	26.19	26.19	26.19	77.73	80.84	81.93	83.05
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
III	NPCIL	595.67	595.67	595.67	595.67	189.49	197.07	201.01	205.04					189.49	197.07	201.01	205.04
	MAPS	46.77	46.77	46.77	46.77	9.70	10.08	10.29	10.49					9.70	10.08	10.29	10.49
	KAPS Stage I	137.70	137.70	137.70	137.70	78.56	81.70	83.33	85.00					78.56	81.70	83.33	85.00
	KAPS Stage II	125.60	125.60	125.60	125.60									-	-	-	-
	Kudankulam U1	127.13	127.13	127.13	127.13	101.24	105.29	107.40	109.54					101.24	105.29	107.40	109.54
	Kudankulam U2	158.47	158.47	158.47	158.47									-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IV	Others	311.43	274.25	387.07	387.07	134.53	85.61	87.32	89.07	23.16	24.09	24.09	24.09	157.69	149.18	190.38	192.13
	TNEB (Pondy)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	TNEB (Karaikal)	150.00	-	-	-	52.21	-	-	-	-	-	-	-	52.21	-	-	-
	KSEB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Vallur Thermal Project	161.43	161.43	161.43	161.43	82.31	85.61	87.32	89.07	23.16	24.09	24.09	24.09	105.47	109.69	111.41	113.15
	New NLC TS-I	-	112.82	225.64	225.64									-	39.49	78.97	78.97

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Sr. No.	Source	Power Purchase (MUs)				Power Purchase Cost - Variable Cost (VC) (Rs.Cr)				Power Purchase Cost - Fixed Cost Cost (FC) (Rs.Cr)				Total Power Purchase Cost (Rs Cr)							
		Base Year Projections	Projections				Base Year Projections	Projections				Base Year Projections	Projections				Base Year Projections	Projections			
			2018-19	2019-20	2020-21	2021-22		2018-19	2019-20	2020-21	2021-22		2018-19	2019-20	2020-21	2021-22		2018-19	2019-20	2020-21	2021-22
V	Renewable Sources	2.40	71.61	69.50	198.69	1.44	21.48	20.85	59.61	26.40	52.23	34.90	30.29	27.84	73.71	55.75	89.90				
	Solar	2.40	71.61	69.50	100.00	1.44	21.48	20.85	30.00					1.44	21.48	20.85	30.00				
	Non-Solar	-			98.69				29.61					-	-	-	29.61				
	RECs									26.40	52.23	34.90	30.29	26.40	52.23	34.90	30.29				
		-												-							
		-												-							
B	Within State Generations	216.37	216.37	216.37	216.37	51.50	53.56	54.63	55.73	35.54	36.96	38.44	39.98	87.04	90.53	93.07	95.71				
I	PPCL	216.37	216.37	216.37	216.37	51.50	53.56	54.63	55.73	35.54	36.96	38.44	39.98	87.04	90.53	93.07	95.71				
		-												-							
C	OTHER CHARGES	-																			
	PGCIL Transmission Charges, Wheeling & Other Charges	-												69.11	70.02	70.89	71.74				
	POSOCO	-												-							
	PCKL	-												-							
D	UI	-												-							
	Sale of Surplus power open access	(181.41)	(172.90)	(244.81)	(336.10)	(57.51)	(54.81)	(77.60)	(106.54)	-				(57.51)	(54.81)	(77.60)	(106.54)				
		-												-							
		-												-							
E	Total	3,077.09	3,117.63	3,156.43	3,194.32	856.99	861.95	856.43	884.51	241.76	251.43	252.91	254.45	1,194.26	1,275.12	1,294.10	1,319.96				


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- 5.7.5 With respect to the above submission, PED requests the Hon'ble Commission to approve the total quantum and cost of power purchase for the MYT control period as summarized above.

5.8 Operation and Maintenance

- 5.8.1 Regulation 51 and Regulation 60 of JERC for the State of Goa and Union Territories (Multi Year Tariff) Regulations, 2018 provides for O&M Expense for a distribution licensee for Distribution wire business and Retail supply respectively. The relevant regulation is re-produced hereunder:

"The Licensee shall submit the required O&M expenses for the Control Period as a part of Multi Year Tariff Petition. O&M expenses for the base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the transmission Licensee, estimates of the actuals for the Base Year, prudence check and any other factors considered appropriate by the Commission.

O&M expenses for the nth Year of the Control Period shall be approved based on the formula given below:

$$O\&M_n = (R\&M_n + EMP_n + A\&G_n) \times (1 - X_n) + \text{Terminal Liabilities}$$

Where,

$$R\&M_n = K \times GFA_{n-1} \times (WPI \text{ inflation})$$

$$EMP_n = (EMP_{n-1}) \times (1 + G_n) \times (CPI \text{ inflation})$$

$$A\&G_n = (A\&G_{n-1}) \times (CPI \text{ inflation})$$

'K' is a constant (expressed in %). Value of K for each Year of the Control Period shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;

CPI inflation – is the average increase in Consumer Price Index (CPI) for immediately preceding three (3) Years before the base Year;

WPI inflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three (3) Years before the base Year;

EMP_n – Employee expenses of the Distribution Licensee for the nth Year;

A&G_n – Administrative and General expenses of the Distribution Licensee for the nth Year;

R&M_n – Repair and Maintenance expenses of the Distribution Licensee for the nth Year;

GFA_{n-1} – Gross Fixed Asset of the transmission Licensee for the n-1th Year;

X_n is an efficiency factor for nth Year. Value of X_n shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate;

G_n is a growth factor for the nth Year. Value of G_n shall be determined by the Commission for each Year in the Multi Year Tariff Order for meeting the additional manpower requirement based on Licensee's filings, benchmarking, and approved cost by the Commission in past and any other factor that the Commission feels appropriate:

Provided that in case the Licensee has been in operation for less than three (3) Years as on the date of effectiveness of these Regulations, the O&M Expenses shall be determined on a case to case basis."

Employee Expenses:

5.8.2 PED has analyzed the actual employee expense, number of employees and has considered the employee expense per employee for the last four years actual numbers (i.e. FY 2014-15 to FY 2017-18) while estimating the growth factor (G_n) norm for the control period. Accordingly, the Growth factor (G_n) works out to be 4.41%.

Table 5-9: Growth Rate (G_n)

Particulars	Actuals			Previous Year (Provisional)
	2014-15	2015-16	2016-17	FY 2017-18
Number of employees	2097	2179	2179	2265
Projected Employee Cost (Rs. Cr)	75.93	78.21	93.69	93.33
Employee Expense per Employee (Rs Cr)	0.0362	0.0359	0.0430	0.0412
G_n (4 yr. CAGR)				4.41%
G_n (3 yr. CAGR)				7.15%

5.8.3 Based on the MYT Regulations, the employee expenses projected for the Control Period should take CPI escalation into account along with Growth factor. The average WPI Index of last three years i.e. 4.28% has been considered for escalating employee expense per employee of FY 2017-18 (provisional actuals) for the Control period.

Table 5-10: CPI index of last three years

Sr. No.	Period	CPI	Increase over previous year
1	Financial Year 2014-15	250.83	
2	Financial Year 2015-16	265.00	5.65%
3	Financial Year 2016-17	275.92	4.12%
4	Financial Year 2017-18	284.42	3.08%
5	Average CPI of last three years		4.28%

5.8.4 Accordingly Employee Expenses have been calculated for the MYT Control period

as per formula $EMP_n = (EMP_{n-1}) \times (1+G_n) \times (CPI \text{ inflation})$. Calculation are as under:

Table 5-11: Employee expense for the Control Period

(Rs. Crs)

	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
EMP _n (Rs. Crs)	101.62	110.64	120.47	131.16
G _n		4.41%	4.41%	4.41%
CPI Inflation		4.28%	4.28%	4.28%

5.8.5 PED requests the Hon'ble Commission to approve the employee expenses as projected for the Control Period based on approved norms in the Regulations.

A&G Expenses:

5.8.6 The A&G Expenses are estimated based on the methodology specified by the Commission in MYT Regulations i.e. $A\&G_n = (A\&G_{n-1}) \times (CPI \text{ inflation})$. Accordingly, A&G Expenses for the MYT Control period are calculated as per the formula, based on actual A&G Expenses for FY 2017-18 (excluding EESL Charges) and revised estimates for FY 2018-19. EESL Charges are hen added separately to the calculated expenses as they are not regular expenses.

5.8.7 Average increase in CPI for past 3 years has been considered for estimating A&G expenses for the control period. The calculation of A&G expenses are per the formula for the control period are as per the table below:

Table 5-12: A&G Expense projection excluding EESL and Smart grid expense for the Control Period

(Rs. Crs)

Particulars	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
A&G _n	9.64	10.05	10.48	10.93
CPI Inflation		4.28%	4.28%	4.28%

Table 5-13: Total A&G expenses for the control period

(Rs. Crs)

Particulars	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
A&G _n	9.64	10.05	10.48	10.93
EESL/DSM Expenses	9.558	4.484	4.012	3.776
Payments towards Smart Grid Works		3.93	3.93	3.93
Total A&G Expenses	19.20	18.47	18.42	18.64

5.8.8 PED requests the Hon'ble Commission to approve the A&G expense projected for the MYT Control Period based on approved A&G norms.

Repair and Maintenance Expenses

5.8.9 R&M Expenses have been calculated based on the formula and methodology provided in the Regulations, $R\&M_n = K \times GFA_{n-1} \times (WPI \text{ inflation})$. For the purpose of R&M expenses GFA inclusive of assets created from Consumer Contribution & Grant has been considered.

5.8.10 Based on the past trend of R&M expenses in % to GFA, PED estimated k-factor of 1.61% for the control period as under:

Table 5-14: Calculation of 'K' for R&M Expenses for the Control Period

	2013-14	2014-15	2015-16	2016-17	2017-18
Opening GFA	555.3	563.6	634.0	660.9	676.2
Closing GFA	563.6	634.0	660.9	676.2	711.8
Avg. GFA	559.4	598.8	647.4	668.5	694.0
R&M	13.46	7.71	9.62	9.38	10.11
K-factor (%) (R&M/GFA)	2.41%	1.29%	1.49%	1.40%	1.46%
CAGR 5 Year (K factor)	1.61%				

5.8.11 The growth of R&M expense for the control period is based on opening GFA, k-factor and WPI of 0.33% is as follows.

Table 5-15: WPI Index for last 3 years

Sr. No.	Period	WPI	Increase over previous year
1	Financial Year 2014-15	113.90	
2	Financial Year 2015-16	109.70	-3.69%
3	Financial Year 2016-17	111.60	1.73%
4	Financial Year 2017-18	114.90	2.96%
5	Average WPI of last three years		0.33%

5.8.12 R&M Expenses have been calculated based on the formula and methodology provided in the Regulations, $R\&M_n = K \times GFA_{n-1} \times (WPI \text{ inflation})$.

Table 5-16: R&M Expenses for the Control Period

	FY 2019-20	FY 20-21	FY 21-22
K	1.61%	1.61%	1.61%
GFA _{n-1}	758.59	838.83	917.93
WPI Inflation	0.33%	0.33%	0.33%
R&M_n	12.24	13.53	14.81

5.8.13 PED requests the Hon'ble Commission to approve the R&M expense as projected for the Control Period based on approved R&M norms.

5.9 Details of Capital Expenditure & Capitalization during MYT Control Period

5.9.1 The MYT Regulations, 2018 specifies the following provisions for projection of capital expenditure.

"8.5 Capital Investment Plan

a) The Capital Investment Plan to be submitted as part of Business Plan shall include details of New Projects planned during the Control Period, purpose of investment, capital structure, implementation schedule, quarter-wise capital expenditure and capitalisation schedule, financing plan, cost-benefit analysis, improvement in operational efficiency envisaged in the Control Period owing to proposed investment and such details for ongoing projects that will spill over into the Control Period under review along with justification;

b) The Capital Investment Plan proposed by the Transmission Licensee shall be in conformity with the plans made by the Authority/Central Transmission Utility and with the Capital Investment Plan of the Distribution Licensee;

c) During the annual performance review, the Commission shall monitor the progress of the actual capital expenditure incurred by the Licensee vis-à-vis the approved capital expenditure. The Licensees shall submit the actual capital expenditure incurred along with the annual performance review, true-up and determination of tariff filing;

d) In case, during the annual performance review, the cumulative (starting from first Year of the Control Period up to the current Year) actual capital expenditure incurred is less than 50% of the cumulative approved capital expenditure, the Commission shall true-up the ARR elements relevant to actual capital expenditure in the current Year and remaining Years of the Control Period;

e) In case the capital expenditure is required for emergency work which has not been approved in the Capital Investment Plan, the Licensee shall submit an application containing all relevant information along with reasons justifying emergency nature of the proposed work seeking approval of the Commission:

Provided that in case capital expenditure is required for emergency work or unforeseen situation to mitigate threat to life and property and if prior intimation thereof to the Commission shall cause any irreparable loss or injury, the Licensee may undertake that capital expenditure and submit the details along with adequate justification for ex post facto approval of the Commission:

Provided further that for the purpose of Regulation 8.5(e) above, such approved capital expenditure shall be treated as a part of both the actual

capital expenditure incurred by the Licensee and approved capital expenditure by the Commission;

f) The Licensee shall submit a report for every quarter detailing the progress of the capital expenditure and capitalisation undertaken against that proposed in the Capital Investment Plan, on or before the last Day of the month succeeding the respective quarter for review by the Commission."

5.9.2 The distribution network of PED is old and it has been continuously upgrading and strengthening its network to cater quality and reliable power services to its increasing consumer base.

5.9.2.1 The distribution network of PED needs to be developed and strengthened in such a way that demand of such rising consumers can be met. The majority of the capital expenditure during the control period is required to address this demand requirement. This section discusses the scheme wise capital expenditure and funding of the same to be carried out by PED during the MYT control period.

5.9.3 Details of Capital Expenditure

5.9.3.1 PED plans to carry out the capital expenditure during the control period for augmentation and expansion of its capacity and to reduce the transmission and distribution loss in the system. The works to be carried out are with an intention to maintain a reliable and efficient system. The same was submitted in detail in the Business Plan petition.

5.9.3.2 The Hon'ble Commission has analysed various transmission and distribution schemes proposed during the control period along with justification for each scheme and issues the Business Plan order on 31.10.2018.

5.9.3.3 In the Business plan order, the Hon'ble Commission has approved the various schemes proposed including those proposed under the JICA loan, R-APDRP, IPDS, DDUGJY and other schemes including Normal development schemes, Reliable communication, PSDF schemes.

5.9.3.4 It is submitted that PED has considered the same capital expenditure and capitalization as approved by the Hon'ble Commission in the Business Plan Order. However for FY 2019-20, PED has revised the same w.r.t R-APDRP scheme and has proposed the revised estimates of capital expenditure and capitalization. The Commission has approved a capital expenditure of Rs.216.09 Crs and capitalization of Rs.125.86 Crs for FY 2019-20 which includes capital expenditure of Rs.41.04 Crs

and capitalization of Rs.42.61 Crs for R-APDRP works. The petitioner submits that PED has proposed all the Capital Expenditure for RAPDRP works in FY 2018-19, however the Commission, while approving had shifted the same to FY 2019-20. It is to mention that the Ministry of Power has directed to complete and close all the R-APDRP works by December 2018. In this regard, the capital expenditure and capitalization corresponding to R-APDRP works will be completed and closed in FY 2018-19 and the capex and capitalization to that tune has been reduced/adjusted in FY 2019-20. The revised estimates of capital expenditure and capitalization has been shown in tables below:

Table 5-17: Capital Expenditure for the Control Period

Sr. No.	Particulars	Approved Capital Expenditure (Rs.Crs)		
		Projections		
		FY 2019-20	FY 2020-21	FY 2021-22
A	Transmission Schemes			
1	Establishment of New Substations	9.85	38.03	23.86
2	Augmentation of System Capacity	11.73	6.86	6.86
3	Renovation and Modernization Works of Existing Capacity	4.76	14.30	17.53
4	Replacement of Capacitor Banks	4.00		
5	Erection/ establishment/ upgradation of 230kV and 110kV Substations	85.00	69.44	58.42
	Total Transmission	115.34	128.63	106.67
B	Distribution Schemes			
1	R-APDRP Part-A Works			
2	R-APDRP Part-B Works	-		
3	System Strengthening Schemes	5.52	97.47	95.51
4	Normal Development Schemes	15.00	15.00	15.00
5	Rural Electrification (BNP)			
6	100% Metering Programme			
7	Conversion of HT Overhead lines into UG cables			
8	Reliable communication	4.00	1.60	
9	IPDS	12.92		
10	DDUGJY	12.21		
11	PSDF	10.06		
	Total Distribution	59.71	114.07	110.51
A+B	Total Capital Expenditure	175.05	242.70	217.18

Table 5-18: Capitalization Expenses for the Control Period

Sr. No.	Particulars	Approved Capitalization (Rs. Crs)		
		Projections		
		FY 2019-20	FY 2020-21	FY 2021-22
A	Transmission Schemes			

Sr. No.	Particulars	Approved Capitalization (Rs. Crs)		
		Projections		
		FY 2019-20	FY 2020-21	FY 2021-22
1	Establishment of New Substations	-		19.71
2	Augmentation of System Capacity	11.73		13.72
3	Renovation and Modernization Works of Existing Capacity			30.52
4	Replacement of Capacitor Banks	4.04		
5	Erection/ establishment/ upgradation of 230kV and 110kV Substations	6.49	40.02	140.21
	Total Transmission	22.26	40.02	204.16
B	Distribution Schemes			
1	R-APDRP Part-A Works			
2	R-APDRP Part-B Works			
3	System Strengthening Schemes	5.52	48.74	96.50
4	Normal Development Schemes	33.54	15.00	15.00
5	Rural Electrification (BNP)			
6	100% Metering Programme			
7	Conversion of HT Overhead lines into UG cables			
8	Reliable communication	2.65	0.80	
9	IPDS	4.66		
10	DDUGJY	4.06		
11	PSDF	10.56		
	Total Distribution	60.99	64.54	111.50
A+B+C	Total Capitalization	83.25	104.56	315.66

5.9.4 The proposed capital expenditure will definitely be helpful to achieve the loss targets set by PED in its distribution loss trajectory and to meet any additional load surging due to increase in demand.

5.10 Funding of Capital Expenditure

5.10.1 In the current petition, PED has considered the same scheme-wise funding details as approved by the Commission in the Business Plan Order dated 31.10.2018.

5.10.2 PED plans on funding majority of its capital expenditure through loan from Japan International Co-Operation Agency (JICA). The works carried out under R-APDRP (Part A&B) is funded by Power Finance Corporation.

5.10.3 The Commission has considered the PFC funding for R-APDRP schemes to be treated as 'loan' i.e. debt initially and later when PFC allows it as 'grant' based on the fulfilment of conditions by PED, they shall treat it as 'grant'.

5.10.4 The funding pattern approved by the Commission has been considered for funding of revised Capital Expenditure as shown below.

Table 5-19: Funding of CAPEX for the MYT Period

(Rs. Crs)					
Sr. No.	Sources of Funds	Component	FY 2019-20	FY 2020-21	FY 2021-22
1	Japan International Co-Operation Agency (JICA)	Debt	120.86	226.10	262.36
2	Power Finance Corporation (PFC)	Debt	-	-	-
3	REC		3.05	-	-
A	Total Debt (1+2)		123.91	226.10	262.36
3	EDP Budgetary Allocation	Equity	23.24	16.60	15.00
B	Total Equity (3)		23.24	16.60	15.00
C	Grant from Central Govt Schemes	Grant	27.90	-	-
D	Consumer Contributions				
E	Total Capital Expenditure (A+B+C+D)		175.05	242.70	277.36
F	Debt		84%	93%	95%
G	Equity		16%	7%	5%

* PFC disbursement may be converted as grant on achieving the targets.

5.10.5 In view, of the above, the petitioner has claimed the funding of capex and capitalization as under:

Table 5-20: Closing GFA for each year of the control period

(Rs. Crs)					
Sr. No.	Particulars	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	2	5	6	7	8
1	Opening GFA	709.81	789.04	859.02	963.58
2	Additions to GFA	93.57	83.25	104.56	315.66
3	Less: Grant	14.34	13.27	-	-
5	Less: Consumer Contribution	2.00	-	-	-
6	Net Additions to GFA	79.23	69.98	104.56	315.66
7	Adjustment/Retirement				
8	Closing GFA	789.04	859.02	963.58	1,279.24

5.11 Gross Fixed Assets and Depreciation

5.11.1 The MYT Regulations, 2018 specifies the following provisions for projection of Depreciation.

30 Depreciation

30.1 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

Provided also that the no depreciation shall be allowed on the assets financed through consumer contribution, deposit work, capital subsidy or grant.

30.2 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.

30.3 Land other than the land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets.

30.4 In case of existing assets, the balance depreciable value as on April 1, 2019, shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to March 31, 2018, from the gross depreciable value of the assets.

30.5 The depreciation shall be chargeable from the first Year of commercial operations. In case of projected commercial operation of the assets during the Year, depreciation shall be computed based on the average of opening and closing value of assets:

Provided that depreciation shall be re-calculated during truing-up for assets capitalised at the time of truing up of each Year of the Control Period, based on documentary evidence of asset capitalised by the Applicant, subject to the prudence check of the Commission.

30.6 For Transmission Licensee, the depreciation shall be calculated at rates and norms specified in the prevalent CERC Tariff Regulations for transmission system.

30.7 The depreciation for a Distribution Licensee shall be shall be calculated annually, based on the Straight Line Method, over the Useful Life of the asset at rates specified in Appendix I of the Regulations.

30.8 In addition to allowable depreciation, the Distribution Licensee shall be entitled to advance against depreciation (AAD), computed in the manner given hereunder:

AAD = Loan (raised for capital expenditure) repayment amount based on loan repayment tenure, subject to a ceiling of 1/10th of loan amount minus depreciation as calculated on the basis of these Regulations:

Provided that advance against depreciation shall be permitted only if the cumulative repayment upto a particular Year exceeds the cumulative depreciation upto that Year:

Provided further that advance against depreciation in a Year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation upto that Year.

30.9 The Distribution Licensee shall provide the list of assets added during each Year of Control Period and list of assets completing 90% of depreciation in the Year along with Petition for annual performance review, true-up and tariff determination for ensuing Year.

30.10 The remaining depreciable value for a Distribution Licensee shall be spread over the balance useful life of the asset, on repayment of the entire loan

5.11.2 As stated in the above Regulation, PED has arrived at fixed assets balance after reduction of accumulated depreciation as on 1st April 2019. The same block is carried forward for existing assets and depreciation is charged as per new depreciation rate specified in the MYT regulations 2018. Further, the assets which are newly commissioned or capitalised, for which depreciation is calculated at new rate mentioned in the Regulations.

5.11.3 Total depreciation is calculated asset block wise on the total GFA. However, since depreciation on assets created through grants, electricity duty fund or subsidies are not allowed as per regulations. Hence Depreciation for the GFA excluding grant and electricity duty fund arrived in the proportion of total GFA and GFA excluding grant and electricity duty fund.

5.11.4 Based on the methodology given in MYT Regulations, depreciation for the control period is calculated:

Table 5-21: GFA and Depreciation for the Control Period

(Rs. Crs)

S. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Opening value of the assets at the beginning of the year	789.03	859.01	963.57
2	Additions during the year	69.98	104.56	315.66
3	Gross Fixed Assets at the end of the year	859.01	963.57	1279.23
4	Net Depreciation for the year	13.97	17.17	24.89

5.11.5 In view of the above, the Hon'ble commission is requested to allow the depreciation charges as provided above for the control period.

5.12 Interest on Loan

5.12.1 The debt-equity ratio for determination of tariff shall be considered as per Regulation 26 of MYT Regulations

"26. Debt to Equity Ratio:

26.1 In case of Existing Projects, debt to equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2018 shall be considered:

Provided that in case of retirement or replacement or De-capitalisation of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or De-capitalisation of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets.

26.2 For New Projects, the debt-equity ratio as on the Date of Commercial Operation shall be 70:30 of the amount of capital cost approved by the Commission under Regulation 23, after prudence check for determination of tariff:

Provided that where equity actually deployed is less than 30% of the capital cost of the capitalised asset, the actual equity shall be considered for determination of tariff:

Provided also that if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as a normative loan for the Licensee for determination of tariff:

Provided also that the Licensee shall submit documentary evidence for the actual deployment of equity and explain the source of funds for the equity:

Provided also that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

Provided further that the premium, if any, raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the scheme, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the transmission system or the distribution system, and are within the ceiling of 30% of capital cost approved by the Commission.

26.3. Any expenditure incurred or projected to be incurred on or after April 1, 2019, as may be admitted by the Commission, as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in this Regulation."

5.12.2 The rate of interest on normative loan shall be considered as per Regulation 28.4 of MYT Regulations.

"28.4. The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Transmission Licensee or the Distribution Licensee:

Provided that at the time of truing up, the weighted average rate of interest calculated on the basis of the actual loan portfolio during the Year applicable to the Transmission Licensee or the Distribution Licensee shall be considered as the rate of interest:

Provided also that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest for the actual loan shall be considered:

Provided further that if the Transmission Licensee or the Distribution Licensee does not have actual loan, then one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1) Year period, as may be applicable as on 1st April of the relevant Year plus 100 basis points"

5.12.3 The Interest on loan for the Control Period based on MYT regulations, 2018 is tabulated below.

Table 5-22: Interest on Loan for the Control Period

(Rs. Crs)

S. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Opening Normative Loan	115.64	160.60	240.84
2	Add: Normative Loan during the Year	58.93	97.41	293.86
3	Less: Normative Repayment	13.97	17.17	24.89
4	Closing Normative Loan	160.60	240.84	509.81
5	Average Normative Loan	138.12	200.72	375.33
6	Rate of Interest(@SBAR)	9.23%	9.23%	9.23%
7	Interest on Normative Loan	12.75	18.53	34.65
7	Other Finance Charges	0.00	0.00	0.00
9	Total Interest and Finance Charges	12.75	18.53	34.65

5.12.4 Other finance charges incurred by the Petitioner shall be claimed based on actuals during true-up for the respective years.

5.12.5 The Hon'ble Commission is requested to approve the Interest & Finance Charges proposed during the MYT Control period and as provided in Format 10A of the Tariff Filing Formats.

5.13 Interest on Working Capital

5.13.1 Regulation 52 and 63 specify norms for working capital for Distribution wire business and Retail supply business respectively.

"52 (63). The Distribution Licensee shall be allowed interest on the estimated level of working capital for the Distribution Wires (Retail Supply) Business for the Financial Year, computed as follows:

(a) O&M Expenses for one (1) month; plus

(b) Maintenance spares at 40% of repair and maintenance expenses for one (1) month; plus

(c) Receivables equivalent to two (2) months of the expected revenue from charges for use of distribution wires at the prevailing tariff;

Less

(d) Amount, if any, held as security deposits under clause (b) of sub-section (1) of Section 47 of the Act from distribution system users except the security deposits held in the form of Bank Guarantees:

Provided that at the time of truing up for any Year, the working capital requirement shall be re-calculated on the basis of the values of components of working capital approved by the Commission in the truing up."

5.13.2 The interest on working capital considered is the MCLR plus 200 basis points for SBI on the 1st November, 2018.

Table 5-23: Interest on working capital for the MYT Period

(Rs. Crs)

S. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Two Months Receivable	249.49	256.25	267.02
2	O&M Expense - 1 month	11.78	12.70	13.72
3	Maintenance Spare @ 40% of R&M Exp - one month	0.41	0.45	0.49
4	Less : Amount held as Security Deposit	-231.44	-254.79	-279.31
5	Total	30.24	14.61	1.92
6	Interest Rate	10.15%	10.15%	10.15%
7	Interest on Working Capital	3.07	1.48	0.20

5.13.3 The Hon'ble Commission is requested to approve the Interest on working capital proposed during the MYT Control period as per the above table.

5.14 Provision for Bad Debts

5.14.1 Regulation 62 provides provision for Bad debts

"The Commission may allow bad debts written off as a pass through in the Aggregate Revenue Requirement, based on the trend of write off of bad debts in the previous years, subject to prudence check:

Provided that the Commission shall true up the bad debts written off in the Aggregate Revenue Requirement, based on the actual write off of bad debts excluding delayed payment charges waived off, if any, during the year, subject to prudence check:

Provided also that the provision for bad and doubtful debts shall be limited to 1% of the annual Revenue Requirement of the Distribution Licensee:

Provided further that if subsequent to the write off of a particular bad debt, revenue is realised from such bad debt, the same shall be included as an uncontrollable item under the Non-Tariff Income of the year in which such revenue is realised."

5.14.2 Since the amount is to be claimed at the time-up of true-up limited to 1% of the receivables, the same is not claimed in the MYT Petition and may be claimed at the time of true-up in case such cost has been incurred.

5.15 Interest on Security Deposits

5.15.1 Regulation 28.11 gives provision for Interest on Security deposit.

"Interest shall be allowed on the amount held as security deposit held in cash from Retail Consumers at the Bank Rate as on 1st April of the Financial Year in which the Petition is filed:

Provided that at the time of truing-up, the interest on the amount of security deposit for the Year shall be considered on the basis of the actual interest paid by the Licensee during the Year, subject to prudence check by the Commission."

5.15.2 Interest on security deposits based on MYT Regulations is tabulated below


SUPERINTENDING ENGINEER
-cum-HOD
Electricity Department
Puducherry

Table 5-24: Interest on Security Deposit for MYT Control Period

(Rs. Crs)

S. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Opening Security Deposit	220.06	242.83	266.75
2	Add: Deposits during the year	22.78	23.92	25.11
3	Less: Deposits refunded			
4	Less: Deposits in the form of BG/FDR			
5	Closing Security Deposit	242.83	266.75	291.86
6	Bank Rate	8.70%	8.70%	8.70%
7	Interest on Security Deposit	20.14	22.17	24.30

5.15.3 PED submits that deposit during the year is considered by taking FY 2017-18 as base and an escalation of 5% has been considered every year to arrive at security deposit addition for following years.

5.15.4 The Hon'ble Commission is requested to approve the Interest on Security Deposit as proposed in the MYT Petition.

5.16 Return on Equity

5.16.1 The debt-equity ratio for determination of tariff shall be considered as per Regulation 26 of MYT Regulations

"26. Debt to Equity Ratio:

26.1 In case of Existing Projects, debt to equity ratio allowed by the Commission for determination of tariff for the period ending March 31, 2018 shall be considered:

Provided that in case of retirement or replacement or De-capitalisation of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or De-capitalisation of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets.

26.2 For New Projects, the debt-equity ratio as on the Date of Commercial Operation shall be 70:30 of the amount of capital cost approved by the Commission under Regulation 23, after prudence check for determination of tariff:

Provided that where equity actually deployed is less than 30% of the capital cost of the capitalised asset, the actual equity shall be considered for determination of tariff: Provided also that if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as a normative loan for the Licensee for determination of tariff:

Provided also that the Licensee shall submit documentary evidence for the actual deployment of equity and explain the source of funds for the equity:

Provided also that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment:

Provided further that the premium, if any, raised by the Licensee while issuing share capital and investment of internal resources created out of its free reserves, for the funding of the scheme, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the transmission system or the distribution system, and are within the ceiling of 30% of capital cost approved by the Commission.

26.3. Any expenditure incurred or projected to be incurred on or after April 1, 2019, as may be admitted by the Commission, as additional capital expenditure for determination of tariff, and renovation and modernisation expenditure for life extension shall be serviced in the manner specified in this Regulation."

5.16.2 Regulation 27 specifies the return on equity that shall be allowed for Distribution wire and Retail Supply business.

"27.2 The return on equity for the Distribution Wires Business shall be allowed on the equity capital determined in accordance with Regulation 26 for the assets put to use at post-tax rate of return on equity specified in the prevalent CERC Tariff Regulations for transmission system.

27.3 The return on equity for the Retail Supply Business shall be allowed on the equity capital determined in accordance with Regulation 26 for the assets put to use, at the rate of sixteen (16) per cent per annum.

27.4 The return on equity shall be computed on average of equity capital at the beginning and end of Year."

5.16.3 In line with the regulation and the methodology proposed in the MYT Regulations, 2018, PED has calculated the Return on Equity as outlined in the following table for MYT Control Period.

Table 5-25: Return on Equity for Control Period

(Rs. Crs)

S. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Opening Equity Amount	236.71	247.76	254.91
2	Equity Addition during year	11.05	7.15	21.80
3	Closing Equity Amount	247.76	254.91	276.71
4	Average Equity Amount	242.24	251.34	265.81
5	Rate of Return on Equity	16.00%	16.00%	16.00%
6	Return on Equity	38.76	40.21	42.53

5.16.4 PED submits that the RoE claimed during each year of the control period is calculated on an average basis. In view of above, the Hon'ble Commission is requested to kindly allow the above Return on Equity as submitted in the petition for the MYT control Period.

5.17 Non-Tariff Income

5.17.1 The amount received by the licensee on account of non-tariff Income shall be deducted from the aggregate revenue requirement in calculating the net revenue requirement of such licensee. The non-tariff Income comprises of Testing charges, Service connection charges, Cancellation charges, Meter charges, income from trading of materials, reconnection fee, and miscellaneous income among others. The Non-tariff income has been escalated by 5% by considering non-tariff income of FY 2017-18 as base and projected for the control period.

5.17.2 The details of the non-tariff income are provided in Format 20 of the Tariff filing formats and the same is also outlined in the following table:

Table 5-26: Non-Tariff Income for the Control Period

(Rs. Crs)

S. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Total Non-Tariff Income	8.18	8.59	9.02

5.17.3 PED requests the Hon'ble commission to approve the non-tariff income as projected for the Control Period.

5.18 Revenue from Sale of Power at Existing Tariff

5.18.1 As per the business plan order, the retail tariff proposal is to be submitted only for the first year of the control period i.e. FY 2019-20 whereas ARR calculations are to

be submitted for the full control period FY 2019-20 to FY 2021-22.

5.18.2 The Revenue from existing Tariff for all the years of the Control Period has been calculated as under:

Table 5-27: Revenue from Sale of Power for FY 2019-20 for the MYT Control Period

		FY 2019-20		FY 2020-21		FY 2021-22	
S. No.	Particulars	Sales (MUs)	Revenue (Rs. Crs)	Sales (MUs)	Revenue (Rs. Crs)	Sales (MUs)	Revenue (Rs. Crs)
LT Category							
1	Domestic	774.95	223.38	802.15	231.08	830.30	239.05
2	OHOB	10.49	1.15	10.61	1.15	10.74	1.15
3	Commercial	236.55	155.82	247.31	162.72	258.57	169.93
4	Agriculture	57.92	2.30	58.08	2.30	58.23	2.28
5	Public Lighting	24.48	21.08	24.48	21.13	24.48	21.15
6	LT Industrial	148.02	83.69	148.02	83.69	148.02	83.70
7	Water Tank	37.59	24.08	37.59	24.08	37.59	24.08
8	Temporary Supply-LT&HT	10.27	10.01	11.31	11.03	12.44	12.13
	Total LT	1300.27	521.51	1339.55	537.18	1380.37	553.47
HT Category							
9	HT 1 Industrial / Commercial	902.73	603.11	905.44	611.99	908.16	622.23
10	HT 2 - Government & Water Tank	119.08	90.53	130.98	99.46	144.08	109.44
11	HT 3 - EHT	327.03	202.57	327.10	202.60	327.16	202.63
12	Total HT	1348.84	896.21	1363.52	914.05	1379.40	934.30
13	Total LT and HT	2649.11	1417.73	2703.07	1451.23	2759.77	1487.77
14	Total	2649.11	1417.73	2703.07	1451.23	2759.77	1487.77

5.18.3 PED hereby submits that the revenue mentioned above does not consist of FPPCA charges or Regulatory Surcharge. In view of above, the Hon'ble Commission is requested to kindly allow Revenue at existing tariff (without surcharge) as proposed for the MYT Control Period.

5.19 ARR for the Control Period

5.19.1 Based on the parameters discussed above, the projection of Annual Revenue Requirement (ARR) of PED for the MYT Control Period is as follows:


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Table 5-28: ARR for the MYT Control Period

(Rs. Crs)				
S. No.	Particulars	FY 2019-20	FY 2020-21	FY 2021-22
1	Cost of power purchase	1275.12	1294.10	1319.96
2	Employee Costs	110.64	120.47	131.16
3	R&M Expenses	12.24	13.53	14.81
4	Administration and General Expenses	18.47	18.42	18.64
5	Depreciation	13.97	17.17	24.89
6	Interest & Finance Charges	12.75	18.53	34.65
7	Interest on Working Capital	3.07	1.48	0.20
8	Return on Equity	38.76	40.21	42.53
9	Provision for Bad debt	-	-	-
10	Interest on consumer security deposit	20.14	22.17	24.30
11	Total Revenue Requirement	1505.14	1546.09	1611.13
12	Less: Non- Tariff Income	8.18	8.59	9.02
13	Net Aggregate Revenue Requirement	1496.96	1537.50	1602.11

5.19.2 The Annual Revenue Requirement for the control period is based on Business plan order dated 31st October, 2018. PED requests the Hon'ble Commission to approve the said ARR for the MYT control Period.

5.20 Revenue Gap for the MYT Control period

5.20.1 As per the business plan order, the retail tariff proposal is to be submitted only for the first year of the control period i.e. FY 2019-20 whereas ARR calculations are to be submitted for the full control period FY 2019-20 to FY 2021-22. Hence, the revenue gap @ existing tariff has been calculated for the entire Control period and is shown in the table below:

Table 5-29: Revenue Gap for MYT Control Period

(Rs. Cr)			
	FY 2019-20	FY 2020-21	FY 2021-22
Aggregate Revenue Requirement (ARR)	1,496.96	1,537.50	1,602.11
Less: Revenue at Existing Tariffs excluding Surcharge	1,417.73	1,451.23	1,487.77
Less: Revenue from Open Access	-	-	-
Revenue Gap for the year (excluding surcharge)	79.24	86.27	114.35

5.20.2 In view of above, the Hon'ble Commission is requested to kindly allow the Revenue Gap of Rs. 79.24 Crs to be recovered during FY 2019-20 at existing tariff.

5.20.3 PED in the subsequent chapters has proposed the required treatment to the cumulative gap till FY 2019-20 and recovery for the same.

CHAPTER 6. REGULATORY ASSETS AND TOTAL REVENUE GAP

6.1 Preamble

- 6.1.1 PED in determining the ARR and retail supply tariff (for FY 2019-20 only) for MYT control period i.e. FY 2019-20 to FY 2021-22 and has been guided by the provisions of the Electricity Act 2003, National Tariff Policy, MYT Regulations 2018 and any other applicable law, enactments, Orders, etc. as amended from time to time.
- 6.1.2 PED submits that this section covers the additional claims apart from the revenue gap claimed while computing ARR of the respective years, treatment of regulatory assets as approved by the Hon'ble Commission and the total revenue gap to be recovered in MYT Control period i.e. FY 2019-20 to FY 2021-22.
- 6.1.3 This section overall provides a detailed overview of each and every claim considered in calculation of total revenue gap of PED.

6.2 Treatment of Regulatory Assets and Net Gap:

6.2.1 Regulatory Asset

- 6.2.1.1 In a general term, Regulatory assets include previously-incurred losses that are in the nature of deferred expenditure and that can be recovered from consumers in future if allowed by regulatory authorities.
- 6.2.1.2 As per the Guidance Note on Accounting for Rate Regulated Activities, issued by ICAI, a Regulatory Asset is defined as follows:
"A regulatory asset is an entity's right to recover fixed or determinable amounts of money towards incurred costs as a result of the actual or expected actions of its regulator under the applicable regulatory framework"
- 6.2.1.3 The National Tariff Policy has also prescribed guidelines for allowing the facility of regulatory assets to be recovered with carrying cost. In cases where regulatory asset is proposed to be adopted, it should be ensured that the return on equity should not become unreasonably low in any year so that the capability of the licensee to borrow is not adversely affected.
- 6.2.1.4 It is submitted that a distribution business is a regulated business whereby the business activities creates a gap between operational and accounting situations that would not have arisen in the absence of such regulation. With cost-of-service

regulation, there is a direct link between the costs that an entity is expected to incur and its expected revenue as the rates is set to allow the entity to recover its expected costs. However, there could be a significant time lag between incurrence of costs by the entity and their recovery through tariffs. Recovery of certain costs may be provided for by regulation either before or after the costs are incurred. Also, the need for creation of regulatory assets can be due to any or all of the following reasons:

- such as infrequent revision of tariffs,
- variation in the actual and estimated values of major expenditure along with their reasons and treatment;
- gap between the total validated expenditure and total estimated revenue;
- difference between the cost estimated and approved by the appropriate authority;
- effect of prescribed and achieved milestones for loss reduction and sharing of efficiencies and losses;

6.2.2 Creation of Regulatory Assets

6.2.2.1 As specified in Tariff Order dated 28th March 2018, the Hon'ble Commission was of the estimated a revenue gap of Rs.338.43 Cr at the tariff existing before the date of issue of tariff order. In the tariff order, the Commission opined that in order to cover this revenue deficit and to be financially sustainable, the retail consumer tariffs demand a tariff increase. The Commission proposed to recover certain portion of that gap by continuing Regulatory surcharge of 4% and remaining through increase in Retail tariff.

6.2.2.2 In the Tariff order dated 28th March 2018, the Commission approved a tariff hike of 9.94% and continued Regulatory surcharge of 4% which was levied in FY 2017-18 as well. Based on revised tariff, the Commission approved a cumulative revenue gap of Rs.152.47 Crs till FY 2018-19.

6.3 Cumulative Revenue Gap/(Surplus) till FY 2019-20

6.3.1 In the tariff order dated 28th March 2018, the Hon'ble Commission approved a consolidated revenue gap of Rs.94.05 Crs till FY 2016-17 based on trued up costs till FY 2016-17.

6.3.2 In this section, PED submits the standalone revenue gap/(surplus) for FY 2017-18 based on provisional actual costs and standalone gap/(surplus) for FY 2018-19 based on revised estimates for FY 2018-19 and projected gap without Regulatory surcharge for the control period FY 2019-20 to FY 2021-22.

6.3.3 As discussed in Chapter 4, section 4.19 Revenue Gap for FY 2018-19, the cumulative Gap up to FY 2018-19 comes as under:

Table 6-1: Cumulative Revenue Gap till FY 2018-19

Particulars	(Rs. Crs)	
	Previous Year (Provisional Actuals)	APR
	FY 2017-18	FY 2018-19
Opening Balance of Gap (previous years)	94.05	251.84
Revenue Gap for the year (including surcharge)	157.79	(59.39)
Closing Gap	251.84	192.44
Total Cumulative Gap for years (Rs. Crs)	251.84	192.44

6.3.1 From the above table, it can be seen that the cumulative gap including Revenue from Regulatory surcharge till FY 2018-19 is Rs.192.44 Crs. and even the additional revenue form regulatory surcharge @ 4% is not providing full recovery of the Regulatory Assets and is piling up huge losses.

6.3.2 Now, considering the Cumulative Gap upto 18-19 and stand-alone Gap of each year of MYT period, the Cumulative Gap at existing tariff without Regulatory Surcharges come out to be as under:

Table 6-2: Cumulative Revenue gap without Surcharge for the Control period

Particulars	(Rs. Crs)		
	Ensuing Year (Projections)		
	FY 2019-20	FY 2020-21	FY 2021-22
Net ARR (Rs.Crs)	1,496.96	1,537.50	1,602.11
Less: Revenue at Existing Tariffs excluding Surcharge	1,417.73	1,451.23	1,487.77
Less: Revenue from Open Access			
Revenue Gap for the year (excluding surcharge)	79.24	86.27	114.35
Opening Balance of Gap (previous years)	192.44	271.68	357.95
<i>Add: Gap During the year</i>	79.24	86.27	114.35
Closing Gap	271.68	357.95	472.3
Total Cumulative Gap for years (Rs. Crs)	271.68	357.95	472.3

6.3.3 From above, it can be seen that stand alone Gap for FY 2019-20 is Rs. 79.24 Crs. However, Cumulative Gap upto 18-19 in form of Regulatory asset is 192.44 Crs, whose recovery is required urgently to reduce the Regulatory assets. Accordingly PED proposes that, in order to recover the cumulative Gap and reduce Regulatory

Assets, a higher Regulatory Surcharge rate is required. Hence, PED proposes a rate of Regulatory Surcharge @ 10%, instead of 4% which is currently applicable to all categories of consumers except OHOB and agriculture, for recovery of regulatory assets. With Regulatory Surcharge @ 10%, the net Gap will come down submitted in the table below:

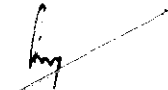
Table 6-3: Cumulative Revenue Gap for MYT Control Period

(Rs. Crs)

Particulars	Ensuing Year (Projections)		
	FY 2019-20	FY 2020-21	FY 2021-22
Net ARR	1,496.96	1,537.50	1,602.11
Less: Revenue at Existing Tariffs excluding Surcharge	1,417.73	1,451.23	1,487.77
Less: Revenue from Open Access			
Revenue Gap for the year (excluding surcharge)	79.24	86.27	114.35
Opening Balance of Gap (previous years)	192.44	130.25	71.74
<i>Add: Gap During the year</i>	79.24	86.27	114.35
Closing Gap	271.68	357.95	472.30
Less: Additional Revenue due to Regulatory Surcharge @ 10%	141.43	144.78	148.43
Net Closing Gap	130.25	71.74	37.66
Total Cumulative Gap for years	130.25	71.74	37.66

6.3.4 It is to mention that the above calculations do not include the carrying cost @ 8% on Revenue gap as calculated by the Commission in the tariff order dated 28th March, 2018. From the above table, it can be observed that at a higher rate of Regulatory Surcharge, the Gap reduces considerably. Accordingly, the petitioner, PED requests the Hon'ble Commission to allow the recovery of revenue gap to be recovered by way of creation of regulatory assets instead of recovering through tariff hike in FY 2019-20 and with a Regulatory Surcharge of 10% instead of 4% which is currently applicable on all consumer categories except OHOB and Agriculture.

6.3.5 The petitioner requests the Hon'ble Commission to allow Regulatory Surcharge of 10% to be levied on Retail supply tariff and approve the cumulative revenue gap for the control period as per the above table.


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CHAPTER 7. TARIFF FOR RETAIL SALE OF ELECTRICITY DURING MYT CONTROL PERIOD

7.1 Preamble

- 7.1.1 This section elucidates the retail tariff and proposed amendments in the retail tariff schedule to be applicable for MYT Control Period i.e. FY 2018-19 to FY 2017-18. PED prays the Hon'ble Commission to approve the retail tariff for MYT Control Period i.e. FY 2019-20 to FY 2021-22 as proposed for different categories of consumers, applicable from April 1 '2019.

7.2 Tariff Design Principles

- 7.2.1 Over the years, Hon'ble Commission has been guided by the Electricity Act, 2003 and the National Tariff Policy while determining retail tariffs across the Union Territory, Puducherry. Hon'ble Commission has always laid emphasis on adoption of factors that encourages economy, efficiency, effective performance and improved conditions of supply. On these lines Hon'ble Commission, in this order too, may apply similar principles keeping in view the ground realities.

7.3 Philosophy of Tariff Design

- 7.3.1 PED submits that considering the total proposed cumulative Revenue Gap of Rs. 271.68 Crs till FY 2019-20, the Hon'ble Commission may kindly create a regulatory asset to recover the revenue gap during the three years of the MYT Control period i.e. FY 2019-20 to FY 2021-22.
- 7.3.2 Last year the increase in tariff was 9.94% and in addition Regulatory Surcharge of 4% was levied to all consumers except OHOB and agriculture. The petitioner, in the current petition is not proposing any tariff hike in FY 2019-20 to avoid any tariff shock to the consumers and is requesting the Hon'ble Commission to allow recovery of the revenue gap via additional surcharge of 10 % for three years i.e. FY 2019-20 to FY 2021-22.
- 7.3.3 The tariff schedule and rates for FY 2018-19 shall remain same and continue in FY 2019-20 till 31.3.2020. The rates are mentioned below:


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Table 7-1: Summary of Existing and Proposed Tariff Rates for MYT Control Period (FY 2019-20 to FY 2018-19)

S No	Consumer category	Existing tariff		Proposed tariff	
		Fixed charge	Energy charge (Rs/kWh)	Fixed charge	Energy charge (Rs/kWh)
1	Domestic & Cottage				
a	0 - 100		1.3		1.3
b	101 - 200	Rs.40/connection/month	2.25	Rs.40/connection/month	2.25
c	201 - 300		3.95		3.95
d	>300		5.1		5.1
e	OHOB	Rs.35/connection/month	0	Rs.35/connection/month	0
2	Commercial				
a	0 - 100	Rs.120/connection/month	5.15	Rs.120/connection/month	5.15
b	101 - 250		6.15		6.15
c	> 250		6.85		6.85
3	Agriculture				
a	Small farmers	Rs.10/HP/month	0	Rs.10/HP/month	0
b	Other farmers	Rs.45/HP/month	0	Rs.45/HP/month	0
	Cottage Industries /Poultry Farms/ Horticulture/Pisciculture (D2)				
	0-100 units per month	Rs.40/connection/month	1.3	Rs.40/connection/month	1.3
	101-200 units per month		2.25		2.25
	201-300 units per month		3.95		3.95
	Above 300 units per month		5.1		5.1
4	Public lighting	Rs.100/pole/month	6.75	Rs.100/pole/month	6.75
5	LT Industrial & Water Tank				
a	LT Industrial	Rs.100/connection/month	5.6	Rs.100/connection/month	5.6
c	Water tank	Rs.120/connection/month	6.4	Rs.120/connection/month	6.4
6	Temporary supply - LT&HT				
	Lights or combined installation of lights and fans, motive power, heating and others	Minimum charges of Rs 200.00/ connection/ month or part thereof	9.75	Minimum charges of Rs 200.00/ connection/ month or part thereof	9.75
	Special Illumination	Minimum charges of Rs 500.00/ connection/ month or part thereof	10	Minimum charges of Rs 500.00/ connection/ month or part thereof	10
	Construction and testing purpose for load exceeding 130 HP or 97 kW	Minimum charges of Rs 500.00/ connection/ month or part thereof	10	Minimum charges of Rs 500.00/ connection/ month or part thereof	10
7	HT 1				
a	HT Industries (For Supply at 11 kV, 22 kV or 33 kV)	Rs.350/kVA/month	5.3	Rs.350/kVA/month	5.3
b	HT Commercial	Rs.350/kVA/month	5.4	Rs.350/kVA/month	5.4
8	HT II (HT Others)	Rs.450/kVA/month	6.5	Rs.450/kVA/month	6.5
9	HT III (EHT Industries)	Rs.420/kVA/month	5	Rs.420/kVA/month	5
10	Hoardings/signboards	Rs.120/kVA/month	8	Rs.120/kVA/month	8

***A Regulatory Surcharge of 10.00% is proposed to all the consumer categories (except OHOB and Agriculture) as a percentage of the total Energy and Demand charges payable by the consumer towards recovery of past accumulated deficit**

CHAPTER 8. SEGREGATION OF WHEELING AND RETAIL SUPPLY BUSINESS

8.1 Allocation Policy

8.1.1 PED submits the bifurcation of all expenses between the functions of wheeling business (wire business) and retail supply business based on the allocation matrix as per Regulation 48 of MYT Regulations 2018. The summary of the allocation statement and the segregation of ARR into wheeling and retail supply business is given in the table below:

Table 8-1: Allocation Statement Wheeling and Retail Supply for FY 2019-20

(Rs. Crs)						
Sr. No.	Item of expense	Wheeling Business	Retail Supply Business	Wheeling Business	Retail Supply Business	Total
		%	%	FY 2019-20		
1	2	3	4	5	6	7
1	Cost of fuel					
2	Cost of power purchase	0%	100%	-	1,275.12	1,275.12
3	Employee costs	40%	60%	44.26	66.39	110.64
4	R&M expenses	90%	10%	11.01	1.22	12.24
5	Administration and General expenses	50%	50%	9.23	9.23	18.47
6	Depreciation	90%	10%	12.57	1.40	13.97
7	Interest & Financial charges	90%	10%	11.48	1.28	12.75
8	Interest on Working Capital	10%	90%	0.31	2.76	3.07
9	Return on NFA /Equity	90%	10%	34.88	3.88	38.76
10	Provision for Bad Debt	0%	100%	-	-	-
11	Interest on Consumer Security Deposit	10%	90%	2.01	18.12	20.14
12	Total Revenue Requirement			125.75	1,379.39	1,505.14
13	Less: Non Tariff Income	10%	90%	0.82	7.36	8.18
14	Net Revenue Requirement (12-13)			124.93	1,372.03	1,496.96

8.1.2 The Hon'ble Commission is requested to approve the segregation of ARR into wheeling & retail supply business for FY 2019-20 as per above table.


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CHAPTER 9. DETERMINATION OF OPEN ACCESS CHARGES

9.1 Approach for computation of open access charges

- 9.1.1 EDG submits that as per Regulation 67.2 and 67.3 of MYT Regulations, 2018, category wise cost of supply needs to be computed for facilitating determination of tariff and for gradual reduction of cross subsidy. Cost of supply study also facilitates determination of cross subsidy surcharge. However the cost of supply methodology suggested by APTEL is based on voltage wise segregation.
- 9.1.2 In absence of relevant data for computation of open access charges, PED followed the same methodology and approach as approved in Tariff Order dated 28th March 2018
- 9.1.3 Accordingly, EDG has computed open access charges considering the following wheeling losses for HT & EHT and allocation % for wheeling cost between HT & LT as approved in Tariff Order FY 2018-19.
- 9.1.4 Wheeling Loss at EHT Level and HT level are considered as - 1.5% and 5.44% respectively (balance losses attributable to LT Level)

9.2 Computation of Wheeling Charge and losses

- 9.2.1 Based on above mentioned and the projections for Sales and Wheeling ARR for FY 2019-20, the wheeling charges for HT/EHT & LT are determined.
- 9.2.2 In line with methodology, adopted by Hon'ble Commission in tariff order for FY 2018-19 to determine wheeling charges and losses, PED has calculated wheeling charges for LT and HT/EHT level. As per segregated ARR, out of total wheeling cost, O&M cost and other cost is separate out, O&M cost is allocated between LT, HT and EHT level based on number of consumers, whereas other cost allocated between LT, HT and EHT level as per assets allocation ratio. Parameters assumed for allocation of wheeling cost at LT, HT and EHT level as given below:-

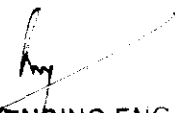

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Table 9-1: Voltage wise allocation of Consumers, Sales and Asset Allocation

Category	Consumers	Asset Allocation (%)	Sales (MU)
Low Tension (LT) Level	503136	50.00%	1300.27
High Tension (HT)	542	40.00%	1021.81
Extra High Tension(EHT) Level	7	10.00%	327.03
Total	503685	100%	2649

9.2.3 Based on above assumption of parameters, the wheeling charge at LT and HT/EHT level has been determined as shown below.

Table 9-2: Proposed wheeling charges for FY 2019-20

Category	O&M (Rs. Crs)	Others (Rs. Crs)	Total (Rs. Crs)	Sales (MU)	Wheeling Charges (Rs/kWh)
Low Tension (LT) Level	64.43	30.22	94.65	1300.27	0.73
High Tension (HT)	0.07	24.17	24.24	1021.81	0.24
Extra High Tension(EHT) Level	0.001	6.04	6.04	327.03	0.18
Total	64.50	60.43	124.93	2,649.11	0.47

9.2.4 PED requests the Hon'ble Commission to approve wheeling charges for different categories as determined in above table.

9.3 Additional Surcharge

9.3.1 The Hon'ble Commission has notified the Joint Electricity Regulatory Commission for the State of Goa And Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017. The Regulation 4.5 (1) of the said Regulations states the following:

"An Open Access Consumer, receiving supply of electricity from a person other than the Distribution Licensee of his area of supply, shall pay to the Distribution Licensee an additional surcharge in addition to wheeling charges and cross-subsidy surcharge, to meet the fixed cost of such Distribution Licensee arising out of his obligation to supply as provided under sub-section (4) of Section 42 of the Act:

Provided that such additional surcharge shall not be levied in case Open Access is provided to a person who has established a captive generation plant for carrying the electricity to the destination of his own use."

Regulation 4.5 (2) of the said Regulations stipulates:

This additional surcharge shall become applicable only if the obligation of the Licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and incidence to bear fixed

costs by the Licensee consequent to such a contract. However, the fixed costs related to network assets would be recovered through wheeling charges"

9.3.2 Further, Regulation 5.2 (1) (b) states the following:

"The quantum of drawal of electricity by a partial Open Access Consumer from the Distribution Licensee during any Time Block of a Day should not exceed the "Admissible Drawl of Electricity by the Open Access Consumer" which is the difference of Contract Demand and maximum quantum of Open Access for which approval has been granted by the Nodal Agency.

[Illustration: If an Open Access Consumer with a Contract Demand of 10 MW has been given an approval for a maximum Open Access quantum of 6MW for a period of 3 Months, the Admissible Drawl of Electricity from the Distribution Licensee during any Time Block shall be 4 MW for any Day during a period of 3 Months.]"

9.3.3 In line with the above Regulations, PED has determined additional surcharge as per the table below:

Table 9-3: Proposed Additional surcharge for FY 2019-20

Particulars	FY 2019-20
Total Power Purchase cost (Rs. Crs)	1,275.12
Fixed Cost component in Power Purchase Cost (excluding Transmission Charges) (Rs. Crs)	251.43
Energy Sales (MU)	2,649.11
Additional Surcharge (Rs/kWh)	0.95

9.3.4 PED requests the Hon'ble Commission to approve additional surcharge of Rs.0.95/kWh as determined in above table.

9.4 Computation of Cross Subsidy Surcharge for FY 2019-20

9.4.1 The National Electricity Policy as stipulated by the Central Government provides that –Under sub – section (2) of Section 42 of the Act, a surcharge is to be levied by the respective State Commissions on consumers switching to alternate supplies under open access. This is to compensate the host distribution licensee serving such consumers who are permitted Open Access under Section 42 (2), for loss of cross subsidy element built into the tariff of such consumers. An additional surcharge may also be levied under sub – section (4) of section 42 of the said Act for meeting the fixed cost of the distribution licensee arising out of obligation to supply in cases where consumers are allowed open access.

9.4.2 The Government of India has notified the National Tariff Policy, 2016 on 28th January 2016. The Cross subsidy surcharge is based on the following formula given in the Tariff Policy, 2016 which is as follows:

$$S = T - [C / (1 - L/100) + D + R]$$

Where,

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation;

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation;

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is per unit cost of carrying regulatory assets.

9.4.3 However, calculation of Cross subsidy surcharge is calculated in this chapter as per methodology adopted by Hon'ble Commission in last tariff order for FY 2018-19

9.4.4 Voltage wise losses for EHT and HT are considered at 1.50% and 5.44% respectively as considered in Tariff order for FY 2018-19. In order to maintain the Intra-State T&D losses at 12% for FY 2019-20 as approved in Business Plan order for MYT control period FY 2019-20 to 2021-22, cumulative losses at LT level is considered 19.49%.

Voltage wise energy sales based on Sales approved by Hon'ble Commission for FY 2019-20 in business Plan order, accordingly level wise calculation of energy input considering above voltage wise losses is arrived at as under:

Table 9-4: Voltage wise cumulative losses and Energy input

Category	Energy Sales (MU)	Cumulative Losses (%)	Energy Input (MU)
Low Tension (LT) Level	1300.27	19.49%	1,614.95
High Tension (HT)	1021.81	5.44%	1,080.59
Extra High Tension(EHT) Level	327.03	1.50%	332.01
Total	2649.11	12.50%	3,027.55

9.4.5 Overall ARR arrived for FY 2019-20 is divided into variable and fixed ARR with

variable ARR comprising of variable component of the power purchase cost and fixed ARR comprising of all the other costs.

9.4.6 The fixed component comprising of fixed cost of power purchase, O&M etc. is further allocated to each voltage category as per the following principles:

- The fixed cost of power purchase is assigned to each voltage level on the basis of energy input at respective voltage levels.
- The O&M expenses are allocated to each voltage level on the basis of the number of consumers. The resultant cost allocated to EHT, HT and LT levels is then further allocated between EHT, HT and LT level on the basis of input energy, as the EHT and HT network is utilized by both EHT and HT consumers and HT network is utilized by both HT and LT network consumers.
- The remaining fixed costs are allocated on the basis of voltage wise asset allocation assumed earlier and further allocated to respective voltage levels on the basis of input energy.

Table 9-5: Voltage wise Energy input, Asset allocation and Consumers

Category	Energy Input (MU)	Voltage wise Asset Allocation (%)	Number of Consumers
Low Tension (LT) Level	1,614.95	50.00%	5,03,136
High Tension (HT)	1,080.59	40.00%	542
Extra High Tension(EHT) Level	332.01	10.00%	7
Total	3,027.55	100.00%	5,03,685

9.4.7 The Variable component of the Power purchase cost is allocated on the basis of energy input.

9.4.8 The Voltage wise cost of supply (VCoS) is then calculated on the basis of energy sales of respective categories. Accordingly, the VCoS is determined as shown in the table below:

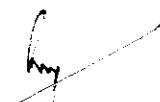

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Table 9-6: Voltage wise cost of Supply

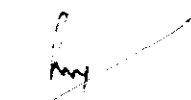
Category	Allocated Fixed Cost					Allocated Variable Cost @ Input Energy (Rs. Crs)	Total Cost (Rs. Crs)	Energy Sales (MU)	VCoS. (Rs/kwh)
	Power Purchase FC @ Input Energy (Rs. Crs)	O&M FC @ No. of Consumer (Rs. Crs)	O&M FC further @ Input energy (Rs. Crs)	Other FC @ Asset allocation (Rs. Crs)	Other FC further @ Input energy (Rs. Crs)				
Low Tension (LT) Level	134	141.19	141.28	40.25	42.94	546	864	1,300	6.65
High Tension (HT)	90	0.15	0.062	32.20	28.73	365	484	1,022	4.74
Extra High Tension(EHT) Level	28	0.0020	0.000	8.05	8.83	112	149	327	4.55
Total	251	141	141	80.50	80.50	1,024	1,497	2,649	5.65

9.4.9 As per above VCoS calculated and applicable level wise ABR level, following is the Cross-subsidy surcharge for FY 2019-20

Table 9-7: Proposed Cross-Subsidy surcharge for FY 2019-20

Category	VCoS (Rs/kWh)	ABR (Rs/kWh)	Cross- Subsidy (Rs/kWh)
Low Tension (LT) Level	6.65	4.41	(2.24)
High Tension (HT)	4.74	7.47	2.73
Extra High Tension(EHT) Level	4.55	6.81	2.27

9.4.10 Based on the above computations, PED requests the Hon'ble Commission to approve the cross subsidy surcharge of Rs. 2.73/kWh for HT and Rs.2.27/kWh for EHT consumers in FY 2019-20.


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CHAPTER 10. COMPLIANCE OF THE DIRECTIVES OF HON'BLE COMMISSION

10.1 Preamble

10.1.1 This section lists the directives issued by the Hon'ble Commission in the previous tariff order and the status of their compliances.

10.2 Status of Compliance

Table 10-1: Status of Compliance of directives

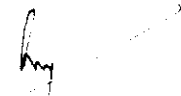
Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
1.	Preparation of Asset and Depreciation Register	The Asset and Depreciation Registers have been updated upto FY 2015-16 and for FY 2016-17 is being updated. The same will be produced at the time of Technical Validation.	The Commission observes that the Petitioner is yet to ensure full compliance of this directive. The Commission directs the Petitioner to update the asset register till FY 2017-18 before filing of the Tariff Petition in the next year.	The Government Orders to engage consultant for the preparation of Asset register up to the Year 2017-18 and preparation of accounts for the year 2017-18 is awaited. The EDP therefore submits that the same will be filed along with Tariff Petition for 2020-21.


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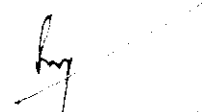
Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
2.	Accounting of security deposits etc. under appropriate head of accounts	The department is maintaining a separate head of account for the consumer security deposit from the year 2012-13 onwards, only based on the directions of payment of interest on the security deposit made, to the consumers. Accordingly, the payment of the interest is also being made based on the allocation of funds by the Government of Puducherry for the period from 2012-13. As far as the details of the security deposit made prior to the year 2012-13, all the deposits made by the consumers towards security deposits as well as the consumer contribution deposits were put together in a single head of account. The above issue can only be resolved after tracing out the details of the security deposits from the old policy files. The interest payable to the security deposit made from the year 2009-10 can be done only on tracing out of the details of the security deposit through new software system, which is being implemented under R-APDRP scheme. The department therefore prays to consider the additional time required to process the above work.	The Commission observes that the Petitioner is yet to ensure full compliance of this directive. In the FY 2016-17 the Petitioner has only paid Rs. 3.50 Cr to consumers against an approved amount of Rs. 4.00 Cr. The Commission directs the Petitioner to pay the full interest on consumer deposit in the FY 2018-19, as computed, to the eligible consumers and update the status to the Commission within 3 months of issue of this Order	It is submitted that an amount of Rs. 3.2 Crores out of allocation of Rs.5.00 Crores in the Budget has already been paid to the consumers and the action for payment of balance amount is in process.

Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
3.	Energy Audit and T&D Losses	All the distribution transformers in Mahe and Yanam regions have been provided with the meters. The recording of readings of the distribution transformers meter are being taken regularly every month and losses on each feeders upto 11 KV level are being worked out. As far as the Puducherry and Karaikal regions are concerned, there are 2475 nos. of distribution transformers in service, out of which around 1450 nos. of transformers have been provided with the meters. Under the scheme DDUGJY, 1168 nos. of distribution transformers have been considered for the provision of metering. The EDP has programmed to complete the metering of all DTs in the current financial year itself. It is also expected that the new software under R-APDRP will be installed and commissioned before March 2018. The software provides DT wise grouping of consumers and enables the Department to calculate losses upto LT level. The EDP therefore requests that the time limits may please be extended to the year 2018-19 to conduct energy audit up to LT level and submit to the Commission.	The Commission has taken a serious view of the fact that the Petitioner is yet to ensure full compliance despite repeated directives of the Commission. The Commission directs the Petitioner to expedite the process to complete energy audit of all distribution transformers in the said areas within 3 months of issuance of this Order and report the compliance to the Commission.	It is submitted that all the feeders have been provided with DLMS meters as per the requirement of Ministry of Power and the provision of DLMS meters in the Distribution Transformers under various central schemes are in progress. As such, the department will conduct energy audit in any specific feeders and furnish during the time of Technical validation.

Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
4.	Estimation of the consumption by agriculture pump-sets	The procurement of the meters for both the DT metering and Agricultural consumers has been contemplated in the DDUGJY scheme and the entire works are programmed to be completed during the current financial year itself. However, based on the meters already provided in the DTs connected to the agricultural consumers, the consumption pattern of the agricultural consumers will be submitted during the Technical Validation Session for the tariff petition for the FY 2018-19.	The Commission observes that the Petitioner is yet to ensure full compliance of this directive. The Commission directs the Petitioner to submit the status report regarding metering of the distribution transformers connected to agriculture consumers before 31 st July 2018 and complete the work of metering in the FY 2018-19.	The percentage consumption of the Agriculture sector is only around 2 %. As such, the department will take action to provide metering to the Agriculture consumers on completion of replacement of all defective static/ electro-mechanical meters in the service connections so as to ensure the proper energy accounting and improve the AT&C losses.


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Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
5.	Metering of consumer installations / replacement of non-functional or defective Meters	At present, the department is having around 55,000 meters in stock and the defective and electromechanical meters are being replaced. Order has been placed for the replacement of existing meters with smart meters in 35,600 services and the same is expected to commence in the month of March 2018. Action has also been initiated to procure around 1,10,000 meters under the central assistance scheme of IPDS and DDUGJY and the same will be utilized for the replacement of the existing defective and electromechanical meters. The department has programmed to replace all the defective and electromechanical meters in the current financial year itself	The Commission has taken a serious view of the fact that the Petitioner is yet to ensure full compliance despite repeated directives of the Commission. Since the Petitioner has proposed to replace all defective meters in FY 2017-18, the compliance status of the same has to be submitted by the Petitioner on or before 30 th April 2018.	The orders have been placed for the supply of 35,000 number of Energy meters under IPDS and 75,609 numbers of Energy meters under DDUGJY schemes. All the meters procured under R-APDRP have been installed. The Smart Grid Pilot Project covering provision of 34,000 Nos. of Smart Meters is nearing completion. It is expected that the replacement of defective / electromechanical meters will be completed before first quarter of 2019-20.


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Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
6.	Load Shedding and ensuring proper service to the consumers	The infrastructure for the operation of the 24X7 call centre has already been created. However, the operation of the call centre is pending for the completion of the software implementation by the firm under R-APDRP scheme. It is programmed to put the 24X7 call centre in operation by March 2018.	The action taken is noted. The Petitioner is directed to submit the compliance of the directive before 30 th May 2018	The operationalisation of 24X7 call centre is getting delayed due to the litigation between TANGEDCO and M/s Navayuga Infotech (P) Ltd, the consortium partner of the IT implementing Agency (ITIA) which is yet to be resolved. As such, project implementation work is completely stalled. However, effective grievances redressal mechanism is put in place and grievances are being received through toll free no. 1912 round the clock and attended on priority.
7.	Employee Cost/Manpower Study	It is submitted that the restructuring proposal submitted by the Government of Puducherry is still under consideration of the Ministry of Power. The Ministry of Power has raised some queries on the proposal and the same is being attended by the Expert Committee appointed by the Government of Puducherry.	The Commission has noted the efforts taken by the Petitioner. The Commission directs the Petitioner that the employee cost/manpower study should be submitted along with the filing of the next tariff petition	As directed by the Hon'ble Commission in the approval for the Business Plan, the department will study the requirement of manpower for the implementation of various schemes under JICA and other schemes and submit the same along with the cost estimates for consideration of the Hon'ble Commission.


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Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
8.	Connected Load/Contract Demand based fixed charges for LT Industrial and Commercial categories	EDP submits that the consumer indexing activities of all consumers in the urban areas wherein enumeration of connected load, is included in the upgrading/ implementing the new software under Part-A (IT) of R- APDRP scheme. Connected load enumeration would be taken up by this department while upgrading/ implementing the new software under Part-A (IT) of R-APDRP scheme. The EDP therefore requests that the department may be permitted to provide connected load/ contract demand based fixed charges for LT Industrial and Commercial categories from the FY 2019-20.	Action taken by the Petitioner is noted. The Petitioner is directed to have effective project management and complete the compliance of the directive before filing of next Tariff Petition.	The PED requests the Hon'ble Commission to permit the Department to provide connected load/ contract demand based fixed charges for LT Industrial and Commercial categories from the FY 2020-21, as R-APDRP Part-A is getting delayed.


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Provisional True-up for FY 2017-18, Review for FY 2018-19 and ARR & MYT Petition for FY 2019-22

Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
9.	Proposal of the Energy Charges for the agriculture category	It is requested that as the department has programmed to provide static meters to all the agricultural consumers in the current financial year itself, the department may be permitted to submit a proposal for energy tariff based billing for the agricultural consumers along with the tariff petition for the FY 2019-20.	The Commission noted that the directive has not been complied with in the present Tariff Petition also. The Commission directs the Petitioner to submit an action plan for 100% metering of agriculture consumers by 31 st July 2018 and submit a proposal for energy tariff based billing for agricultural consumers along with the next Tariff Petition	The percentage consumption of the Agriculture sector is only around 2 % and as such it is submitted that the existing flat rate system may please be arranged to be continued.
10.	Information for determination of voltage wise wheeling charges	It is submitted that FA Schedules have been prepared for the transmission, HT distribution and LT distribution separately for the FY 2016-17 and the same methodology will be adopted for the subsequent years.	The Commission notes that Petitioner has not complied with the directive and has given reasons for non - compliance which are not tenable. The Commission in this Tariff Order has determined the voltage wise wheeling charges based on certain assumptions. However, in order to determine the voltage wise wheeling charges more prudently, the Commission directs the Petitioner to submit a proposal supported by the study of the relevant parameters.	The PED has already initiated to engage consultant for the preparation of asset register and as well as the financial account up to the Year 2017-18 and the same will be submitted on finalization of the same.

Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
11.	New Bill Format	Presently, spot billing system is in vogue and switching to any other billing system would require major modification in the billing software which would also require more time. However, the metering, billing and collection system is being upgraded to the latest RDBMS platform under part-A (IT) of R-APDRP scheme which is likely to be completed by March 2018. It is also mentioned that the consumer indexing activities of all consumers in the urban areas wherein enumeration of connected load, is also included in the above scheme. Hence, the new bill format along with the connected load enumeration including the adjustment of the solar power fed into the grid would be adopted by this department while upgrading/ implementing the new software under Part-A (IT) of R-APDRP scheme.	The Commission observes that the Petitioner has not fully complied with the directive. The Commission now directs the Petitioner to finalize and introduce the new bill format (including the adjustment of the Solar Power fed to the Grid) within 2 months of issuance of this Order and report the compliance to the Commission	The present billing system adopted in the department is spot billing. On the other hand, the Bill Format proposed by the Commission requires major modification in the billing software which has been contemplated in Part-A, RAPDRP project. As such, the department may be permitted to continue with the existing bill format till such time R-APDRP Part- A project is completed. In order to avoid the complaints of the public on the billing and collection matters, the department has already initiated action to upgrade the existing billing software through National Informatics Centre, Puducherry and the same is expected to be ready in the first quarter of 2019-20.


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Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
12.	Time of Day (TOD) Tariff for HT/ EHT consumers	It is submitted that the Department is carrying out necessary modification in software and the work is expected to be completed by the end of March 2018.	The action taken is noted. The Petitioner is directed to complete the work of installing ToD compatible smart meters for all HT/EHT consumers along with necessary modifications in software within 3 months of issuance of this Order and report the compliance to the Commission. The Petitioner is also directed to widely publicize the implementation of ToD tariff to the HT/EHT consumers so that they can immediately start availing the benefits of ToD tariff mechanism	The PED requests the Hon'ble Commission to allow the Department to implement TOD metering for all HT/EHT consumers from the Year 2020-21. However, the Department will adopt the TOD tariff for HT/EHT consumers who are willing to avail the TOD tariff as 60% of the consumers have been provided with the TOD meters.
13.	Open Access	The subject matter of setting up of the STU and SLDC (nodal agency) is being placed before the Reforms committee constituted under the chairmanship of Secretary (Power) and the recommendations of the committee will be submitted to the Government for their approval. The decision of the Government will be intimated soon after its receipts from the Government.	The Commission has noted the submission of the Petitioner. The Petitioner is directed to submit a status report within 2 months of issuance of this Order and submit monthly progress updates for the review of the Commission.	The PED submits that none of the HT / EHT consumers have preferred for open access in the year 2018-19. In case of any requirement by the consumers, the department will allow them as was done in the year 2017-18. Regarding, setting up of STU and SLDC, the department will take up the matter with the Government and take action accordingly.

Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
14.	Category wise Connected Load	The EDP submits that the consumer indexing activities of all consumers in the urban areas wherein enumeration of connected load, is included in the upgrading/ implementing the new software under Part-A (IT) of R-APDRP scheme. Connected load enumeration would be taken up by this department while upgrading/ implementing the new software under Part-A (IT) of R-APDRP scheme. The EDP therefore requests that the department may be permitted to provide connected load details for all categories from the FY 2019-20.	The Commission has noted the submission of the Petitioner. The Petitioner is directed to maintain and submit the data for connected load for all categories in all future filing of tariff petition.	The PED requests the Hon'ble Commission to permit the Department to provide Category wise connected load/ contract demand from the FY 2020-21, as R-APDRP Part-A is getting delayed.

Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
10.2 New Directives				
1.	Capital Expenditure and Capitalisation		It is noticed that the Petitioner for FY 2017-18 and FY 2018-19 has proposed a capitalization of only Rs 64.49 Cr and Rs 54.31 Cr against the approved capitalisation of Rs 156.14 Cr and Rs 143.86 Cr respectively, in the MYT Order. Lower capital expenditure has direct impact on the reliability and quality of supply to consumers. Therefore, the Petitioner is directed to improve its efforts towards capital expenditure and further take steps towards strengthening the distribution network. The Petitioner is directed to submit quarterly status report on capital expenditure and capitalization from FY 2018-19 onwards	The PED submits that approval of the CEA has already been obtained to implement various development works under JICA loan and capital works to an extent of Rs.550 Cr has been proposed during the second Business Plan period.


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Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
2.	Determination of category wise / voltage wise cost of supply		The Petitioner is hereby directed to submit a proposal for category wise cost of supply along with the Tariff Petition for the next year. The Petitioner in this regard is directed to start collecting category wise and voltage wise data on losses, connected load, asset allocation etc. for prudent determination of the cost of supply	The PED requests the Hon'ble Commission to permit the Department to provide Category wise/Voltage wise cost of supply from the FY 2020-21, as R-APDRP Part-A is getting delayed.
3.	Replacement of defective meters		The Petitioner is directed to ensure that all the defective meters in the State are replaced at the earliest. Further, the Petitioner should ensure installation of electronic meters for all its consumers. The Petitioner in this regard is directed to submit a status report of the same within 3 months of issue of this Order.	The orders have been placed for the supply of 35,000 number of Energy meters under IPDS and 75,609 numbers of Energy meters under DDUGJY schemes. All the meters procured under R-APDRP have been installed. The Smart Grid Pilot Project covering provision of 34,000 Nos. of Smart Meters is nearing completion. It is expected that the replacement of defective / electromechanical meters will be completed before first quarter of 2019-20.

Sl.No.	Directives	Compliance by the Electricity Department	Commission's Response	Remarks
4.	Compliance towards Renewable Purchase Obligation (RPO)		The Petitioner has a pending RPO backlog of 164.75 MU till FY 2016-17. In its submission, the Petitioner has assured of clearing the cumulative backlog till FY 2016-17 by the end of FY 2017-18 along with the standalone target for FY 2017-18. Further, the Commission had also imposed penalty of Rs 13.53 Cr on the Petitioner in the previous Order for non-compliance of RPO targets upto FY 2015-16, which the Petitioner has failed to deposit. The Petitioner in this regard is directed to submit a compliance statement of the same within 1 month of issue of this Order.	The PED submits that request has already been made to MNRE / SECI to allocate 100 MW Wind Power and signing of the PPA is in process for the same. Similarly, request has also been made to both NTPC and MNRE / SECI for allocation of 100 MW and 50 MW of Solar Power respectively from government and the same is in process. Till such time, the physical power is made available, the department will procure RECs to meet the RPO compliance till 2019-20.


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CHAPTER 11. PROPOSED TARIFF SCHEDULE FOR MYT CONTROL PERIOD

11.1 Tariff Schedule for FY 2019-20

11.1.1 The tariff indicated in this tariff schedule is the tariff rate proposed to be payable by the consumers of Union Territory of Puducherry.

11.1.2 A Regulatory Surcharge of 10.00% shall be applicable to all the consumer categories as a percentage of the total Energy and Demand charges payable by the consumer towards recovery of past accumulated deficit subject to approval from Hon'ble Commission.

11.1.3 These tariffs are exclusive of electricity duty, tax on sale of electricity, taxes and other charges levied by the Government or other competent authorities from time to time.

11.1.4 Unless otherwise agreed to, these tariffs for power supply are applicable to single point of supply.

11.1.5 The power supplied to a consumer shall be utilized only for the purpose for which supply is taken and as provided for in the tariff. If energy supplied for a specific purpose under a particular tariff is used for a different purpose, not contemplated in the contract for supply and / or for which higher tariff is applicable, it will be deemed as unauthorized use of electricity and shall be dealt with for assessment under the provisions of section 126 of the Electricity Act, 2003 & Supply Code Regulation notified by JERC. Provided that,

- a) If a portion of the domestic premises limited to only one room is used for running small household business having connection under domestic category, such connection shall be billed under domestic category provided that the total monthly consumption of the consumer (including consumption for above mentioned small household business) does not exceed 150 kWh.
- b) If either more than one room or only one room having monthly consumption exceeding 150 kWh for consecutive three months is detected in the domestic premises being used for mixed purposes having domestic connection, such connection shall further be billed under commercial category until a separate connection of appropriate tariff is taken for that portion used for non-domestic purpose.

11.1.6 If connected load of a domestic category is found to be at variance from the

sanctioned/ contracted load as a result of replacement of appliances such as lamps, fans, fuses, switches, low voltage domestic appliances, fittings, it shall not fall under Section 126 and Section 135 of the EA 2003.

11.1.7 Power Factor Charges for HT and EHT

The monthly average power factor shall mean the ratio expressed as percentage of total kWh to total kVAh supplied during the month. The ratio shall be rounded up to two figures.

- a) The monthly average power factor of the supply shall be maintained by the consumer not less than 90% (lagging). If the monthly average power factor of a consumer falls below 90% (90% lagging), such consumer shall pay a surcharge in addition to his normal tariff @ 1% on billed demand and energy charges for each fall of 1% in power factor upto 70%(lagging).
- b) In case the monthly average power factor of the consumer is more than 95% (95% lagging), a power factor incentive @ 1% on demand and energy charges shall be given for each increase of 1% in power factor above 95% (lagging).
- c) If the average power factor falls below 70% (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.
- d) The power factor shall be rounded off to nearest whole number in percentage. For example, 94.4% shall be treated as 94% and 94.6% shall be treated as 95%.

11.1.8 If the consumer fails to pay the energy bill presented to him by the due date, the Department shall have the right to disconnect the supply after giving 15 days' notice as per provision of the Act & Supply Code Regulation.

11.1.9 Fixed charges, wherever applicable, will be charged on pro-rata basis from the date of release of connection. Fixed charges, wherever applicable, will be double as and when bi-monthly billing is carried out, Similarly slabs of energy consumption will also be considered accordingly in case of bi-monthly billing.

11.1.10 The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 85% of contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal rate. The definition of the maximum demand would be in accordance with the provisions of the Supply Code Regulation. If such over-drawl is more than 20% of the contract demand then the

connections shall be disconnected immediately.

Explanation: Assuming the contract demand as 100 KVA, maximum demand at 120 KVA and total energy consumption as 12000 kWh, then the consumption corresponding to the contract demand will be 10000 kWh ($12000 \times 100 / 120$) and consumption corresponding to the excess demand will be 2000 kWh. This excess demand of 20 KVA and excess consumption of 2000 kWh will be billed at twice the respective normal rate. Such connections drawing more than 120 kVA, shall be disconnected immediately.

11.1.11 Unless specifically stated to the contrary, the figures of energy charges relates to Rs per unit (kWh) charge for energy consumed during the month.

11.1.12 **Delayed payment surcharge** shall be applicable to all categories of consumers. Delayed payment surcharge of 1.5% per month or part thereof shall be levied on all arrears of bills. In case of delay less than a month, the surcharge will be levied at 1.5% per month on proportionate basis considering a month consists of 30 days. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paisa shall be ignored and amount of 50 paisa or more shall be rounded off to next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only up to the month of permanent disconnection. **The Government of Puducherry intends to exempt all the Government Departments / Undertaking from levy of delayed payment surcharge.**

11.1.13 **Advance Payment Rebate:** If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.

11.1.14 **Prompt Payment Rebate:** If payment is made at least 7 days in advance of the due date of payment a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.

11.1.15 **Time of Day (ToD) Tariff**

- i. Under the Time of Day (ToD) Tariff, electricity consumption and maximum demand in respect of HT/EHT consumers for different periods of the day, i.e. normal period, peak load period and off-peak load period, shall be recorded by installing a ToD meter.
- ii. The maximum demand and consumption recorded in different periods shall be billed at the following rates on the tariff applicable to the consumer.

Table 11-1: ToD charges

Time of use	Demand charges	Energy charges
Normal period (6:00 a.m. to 6:00 p.m.)	Normal rate	Normal rate of Energy charges
Evening Peak load period (6:00 p.m. to 10:00 p.m)	Normal rate	120% of normal rate of Energy charges
Off-peak load period(10:00 p.m to 6:00 a.m)	Normal rate	90% of normal rate of Energy charges

iii. Applicability and Terms and Conditions of TOD tariff:

1. The Commission directs the Petitioner to introduce the TOD tariff as mentioned above urgently including installation of the Smart Meters to capture ToD consumption.
2. The facility of aforesaid TOD tariff shall not be available to the HT/EHT consumers having captive power plants and/or availing supply from other sources through wheeling of power
3. The HT/EHT industrial consumers who have installed standby generating plants shall also be eligible for the aforesaid TOD tariff
4. In the event of applicability of the TOD tariff to a consumer, all other terms and conditions of the applicable tariff shall continue to apply

11.2 Low Tension Supply

LT supply limit for all categories: For single phase connection, the connected load shall not exceed 4 kW, and for 3 phase connection, the connected load shall not exceed 130 HP or 97 kW

Domestic Purposes

11.2.1 Domestic Purposes (A2)

1. This tariff is applicable to services for lights, fans, air-conditioning, heating and other small domestic appliances etc used for:
 - a) Genuine domestic purposes including common services for stair-case, lifts, water tanks in the purely domestic apartments.
 - b) Supply to actual places of public worship such as temples, mosques, churches etc.
 - c) Ashrams and Mutts, non-commercial orphanage homes and old people homes run by religious and charitable institutions, social welfare and voluntary organizations.
 - d) Youth hostels, Harijan hostels, Rehabilitation Centres, Anganwadies and Balwadies run by Social Welfare Department.
 - e) All Government Schools

- f) For own residences where one room is set apart for the purpose of consultation by doctors, lawyers, engineers, architects and auditors.
- g) To handloom in residence of handloom weavers (regardless of the fact whether outside labour is employed or not) and to handloom in sheds erected.
- h) To the residences where supply from a house is extended to tailoring shops, job typing, document writing, laundry pressing, and small caterers set up in the verandah of the house with small lighting load only (one tube light only).

2. The charges for domestic service are as indicated in the table below:

Table 11-2: Existing and Proposed Charges for Domestic Category

Consumption Range	Existing Charges		Proposed Charges	
	FC (Rs/ Connection/ Month)	EC (Rs/ kWh)	FC (Rs/ Connection/ Month)	EC (Rs/ kWh)
0-100 units per month	Rs.40/ connection/month	1.3	Rs.40/ connection/month	1.3
101-200 units per month		2.25		2.25
201-300 units per month		3.95		3.95
Above 300 units per Month		5.1		5.1

3. The method of billing of charges shall be as explained below (specifically for FY 2019-20).
 - a) Say units billed in a month are 80 units. Then the fixed charges will be Rs. 32/month and energy charges Rs. 88 (80 units X Rs 1.10/unit).
 - b) In case the units billed are 275, then the fixed charges will be Rs. 32/month and energy charges will be Rs 518.75 (100 units X 1.10 + 100 units X 1.65 + 75 units X 3.25).

11.2.2 HUT SERVICES (A3)

1. For supply to bonafide hut services with only two numbers of 40W Florescent Tube Lights.
2. The charges for hut services (OBOH) are as indicated in table below:

Table 11-3: Existing and Proposed Charges for Hut Category

Description	Existing Fixed Charges	Proposed Fixed Charges
Hut Services/ OHOB	Rs. 35 per connection per month	Rs. 35 per connection per month

Note:

- a. Hut is defined as a living place not exceeding 300 sq. ft. or 27.87 sq.m. with mud wall/brick wall or thatched wall and thatched roof only. Hut does not include farm huts. If any of the conditions is changed at a later stage, this concessional supply will be discontinued and the consumer will have to take metered supply.
- b. The tariff under this item is also applicable for houses constructed for economically weaker sections under the "Chief Minister's 5000 houses programme" and houses constructed by the District Rural Development Agency under Indira Awaas Yojana and by the Adi Dravidar Welfare Department having a living space not exceeding 300 sq. ft. or 27.87 sq.
- c. The consumer under this category should use only two numbers of 40 watts florescent tube lights. He should not use bulbs/tube lights of higher wattage or connect any other electrical equipment/ appliances other than those mentioned above. Supply from such services should not be tapped for any other purposes including functions, public meetings and also for neighboring huts. If at any time, any unauthorized load or extension, use of higher wattage bulbs or use of service for other purposes is detected, the service will be disconnected forthwith.

11.2.3 LT COMMERCIAL (A1)

1. This tariff is for lights and combined installation of lights and fans, mixed loads of lights and power, heating and air-conditioning applicable to:
 - a) Non-domestic and non-industrial consumers, trade and commercial premises.
 - b) Educational institutions excluding Government schools, hostels, public libraries.
 - c) Hotels, restaurants, boarding and lodging homes
 - d) Hospitals, Private clinics, Nursing Homes, Diagnostic Centre's, X-ray Units etc.
 - e) IT related development centres and service centres.
 - f) Common services for stair-case, lifts, water tanks etc in the purely commercial /combination of commercial and domestic.

2. The charges are as indicated in the table below.

Table 11-4: Existing and Proposed Charges for LT Commercial Category

Consumption Range	Existing Charges		Proposed Charges	
	FC (Rs/ Connection / Month)	EC (Rs/ kWh)	FC (Rs/ Connection/ Month)	EC (Rs/ kWh)
0-100 units per month	Rs.120/ connection/ month	5.15	Rs.120/ connection/ month	5.15
101-250 units per month		6.15		6.15
Above 250 units per month		6.85		6.85

AGRICULTURE SERVICES (D)

Agriculture/ Cottage Industries etc.

11.2.4 Agriculture (D1)

For supply to bonafide agricultural services with a connected load of not less than 3 HP per service.

Table 11-5: Existing and Proposed Charges for Agriculture Category

Description	Existing Fixed Charges	Proposed Fixed Charges
Small Farmers	Rs. 10.00 per HP per month	Rs. 10.00 per HP per month
Other Farmers	Rs. 45.00 per HP per Month	Rs. 45.00 per HP per Month

Note:

- Electricity will be supplied under the tariff category "Small farmers" to those consumers whose families are solely dependent on the income derived from their agricultural land holding, which should not exceed two and half acres of wet land or five acres of dry land. A certificate to this effect from Revenue authority shall be produced. "Small farmer means a person whose total holding, whether as owner, tenant or mortgaged with possession or partly in one capacity and partly in another, does not exceed two-and-a half acres of wet lands or five acres of dry land. In computing the extent of land held by a person who holds wet and dry lands, two acres of dry land shall be taken as equivalent to one acre of wet land.*
- The above concession will be withdrawn if resale of energy or unauthorized load / extension or use for other purpose is detected by the Department.*

- c. *Agricultural power loads below 3 HP will be charged under Tariff Category A1. A bonafide farmer may use his motor in the Agricultural Service for allied agricultural purposes such as sugarcane crushing, thrashing etc. with the prior approval of concerned Executive Engineer (Operation & Maintenance), Electricity Department.*
- d. *Power supply to Farm Houses shall be metered separately and charged under domestic tariff (A2).*

Payment of Tariff Charges by Agriculture Consumers

- a. The Tariff shall be collected in three equal installments payable in April, August and December in each year. The installments shall be payable before the 15th of the respective months.
- b. For new service, the first installment shall be proportionate to the number of whole months remaining till the month in which the first installment is due. Fraction of a month shall be reckoned as a whole month

11.2.5 Cottage Industries /Poultry Farms/ Horticulture/Pisciculture (D2)

It is applicable to bonafide cottage industries, horticultural nurseries including plant tissue culture media, bonafide poultry farms and pisciculture.

The charges are as indicated in the table below:

Table 11-6: Existing and Proposed Charges for Cottage Industry

Consumption Range	Existing Charges		Proposed Charges	
	FC	EC (Rs/ kWh)	FC	EC (Rs/ kWh)
0-100 units per month	Rs.40/ connection/ month	1.3	Rs.40/ connection/ month	1.3
101-200 units per month		2.25		2.25
201-300 units per month		3.95		3.95
Above 300 units per Month		5.1		5.1

Note:

1. Cottage industries

The following conditions should be satisfied in order that an industry may be classified as a bona fide cottage industry:

- a) *It should be conducted entirely within the home, the home being deemed to be permanent residence of the proprietor.*

- b) *The industry shall not cause any residence to constitute a factory within the meaning of the Factories Act, 1948.*
- c) *Not more than two persons outside the immediate family of the proprietor shall be employed in the factory.*
- d) *It should be certified by the Director of Industries that the industry for which power is used is a cottage industry.*
- e) *The produce is not purely utilized mainly for the domestic consumption of the proprietor but should also be available for sale to the public.*

2. Poultry farms

The following conditions should be satisfied in order that the service may be classified as a bona fide poultry farm.

- a) *The capacity of the farm shall be a minimum of 100 birds and maximum of 5,000 birds (both layer and broiler birds).*
- b) *The application of the beneficiary seeking such concession shall be verified and recommended by the Animal Husbandry Department.*

3. Horticultural/ Pisciculture

The applications of the beneficiary seeking such concession shall be verified and recommended by the Director, Agriculture Department. For Pisciculture, applications of the beneficiary seeking such concession shall be verified and recommended by the Director, Fisheries Department.

11.2.6 Public Lighting

- a. The tariff for public lighting will be as follows:

Table 11-7: Existing and Proposed Charges for Public Lighting

Consumption Range	Existing Charges		Proposed Charges	
	FC	EC (Rs/ kWh)	FC	EC (Rs/ kWh)
Public Lighting	Rs.100/pole/month	6.75	Rs.100/pole/month	6.75

- b. This tariff will also apply to public lighting in markets, bus stands, traffic signals, high mast lights on public ways, public parks, public lighting in notified industrial estates.

11.2.7 LT Industries

- a. Applicable to low tension industrial consumers including lighting in the industrial services

LT Water tanks:

Water Tanks including lighting in premises maintained by State Government Departments/ Undertakings and local bodies.

b. The charges are as indicated in the table below.

Table 11-8: Existing and Proposed Charges for LT Industrial

Consumption Range	Existing Charges		Proposed Charges	
	FC (Rs/ Connection / Month)	EC (Rs/ kWh)	FC (Rs/ Connection / Month)	EC (Rs/ kWh)
LT Industrial	Rs.100/ connection /month	5.6	Rs.100/ connection /month	5.6
LT Water tanks	Rs.120/ connection /month	6.4	Rs.120/ connection/month	6.4

11.3 High Tension Supply

11.3.1 High Tension – I

High Tension Industries (For Supply at 11 kV, 22 kV or 33 kV)

- The supply voltage for HT consumer's upto 5000 kVA will be 33 kV, 22 kV or 11 kV as the case may be. Applicable to industrial establishments, IT and ITES based Companies registered under Factories Act/ Companies Act with contracted maximum demand upto 5000 kVA. New High Tension consumers who want to avail a contract demand above 5000 kVA or existing High Tension consumers who want to enhance their demand beyond total contract demand of 5000 kVA should avail power at 110 kV or 132 kV as the case may be.

High Tension Commercial

- For Commercial Establishments including Laboratories, Hotels, Marriage Halls, Cinema Theatres, Private educational Institutions, Private Hospitals, shopping Malls, Telephone exchanges, broadcasting companies with contracted maximum demand upto 5000 kVA. New High Tension consumers who want to avail a contract demand above 5000 kVA or existing High Tension consumers who want to enhance their demand beyond total contract demand of 5000 kVA should avail power at 110 kV or 132 kV as the case may be.

11.3.2 The demand and the energy charges are as indicated in the table below:

Table 11-9: Existing and Proposed Charges for High Tension I Category

Consumption Range	Existing Charges	Proposed Charges
-------------------	------------------	------------------

	FC (Rs/ kVA/ Month)	EC (Rs/ kWh)	FC (Rs/ kVA/ Month)	EC (Rs/ kWh)
HT I Industries	Rs.350/ kVA/ month	5.3	Rs.350/ kVA/ month	5.3
HT I Commercial	Rs.350/ kVA/ month	5.4	Rs.350/ kVA/ month	5.4

11.3.3 High Tension – II (HT Others)

- Applicable to State and Central Government establishments of non-industrial and non-commercial nature.
- The fixed/demand charges and energy charges are as indicated in the table below.

Table 11-10: Existing and Proposed Charges for High Tension II Category

Consumption Range	Existing Charges		Proposed Charges	
	FC (Rs/ kVA/ Month)	EC (Rs/ kWh)	FC (Rs/ kVA/ Month)	EC (Rs/ kWh)
HT II	Rs.450/kVA /month	6.5	Rs.450/kVA /month	6.5

11.3.4 High Tension – III

- Applicable to all types of industries supplied at 110 kV or 132 kV as the case may be
- The demand and energy charges are as indicated in the table below:

Table 11-11: Existing and Proposed Charges for High Tension III Category

Consumption Range	Existing Charges		Proposed Charges	
	FC (Rs/ kVA/ Month)	EC (Rs/ kWh)	FC (Rs/ kVA/ Month)	EC (Rs/ kWh)

Consumption Range	Existing Charges		Proposed Charges	
	FC (Rs/ kVA/ Month)	EC (Rs/ kWh)	FC (Rs/ kVA/ Month)	EC (Rs/ kWh)
HT III	Rs.420/kVA /month	5	Rs.420/kVA /month	5

Supply Voltage for all HT categories

The supply voltage for HT consumer's upto 5000 kVA will be 33 kV, 22 kV or 11 kV as the case may be. New High Tension consumers who want to avail a contract demand above 5000 KVA or existing High Tension consumers who want to enhance their demand beyond total contract demand of 5000 kVA should avail power at 110 KV or 132 KV as the case may be.

11.4 Temporary Supply

- a. The tariff applicable and minimum charges for the temporary supply of energy will be as follows:

Table 11-12: Existing and Proposed Charges for Temporary Supply

Description	Existing Charges		Proposed Charges	
	Minimum charge	Tariff applicable for entire consumption (Rs./kWh)	Minimum charge	Tariff applicable for entire consumption (Rs./kWh)
Lights or combined installation of lights and fans, motive power, heating and others	Minimum charges of Rs 200.00/ connection/ month or part thereof	9.75	Minimum charges of Rs 200.00/ connection/ month or part thereof	9.75
Special Illumination	Minimum charges of Rs 500.00/ connection/ month or part thereof	10	Minimum charges of Rs 500.00/ connection/ month or part thereof	10
Construction and testing purpose for load exceeding 130 HP or 97 kW	Rs.120/kVA/month	10	Rs. 120/kVA/month	10

NOTE:

- a) The rate for Special illumination shall apply to weddings, garden-parties and other Private/Government functions when the illumination is obtained through bulbs fastened in other surfaces of wall of buildings, on trees and poles inside the compound and in pandal etc., outside the main building.
- b) In cases where such Special illumination is done in the existing regular services the energy utilized for such illumination shall be metered separately and the consumption will be charged under Special illumination charge as levied under

temporary supply.

- c) *Wherever such Special illumination is done unauthorized, a penal charge of Rs. 500 for service shall be levied in addition to the existing tariff of the installation.*
- d) *Other conditions for connection of line and service connection charges, dismantling, security deposit etc. will be as per the rules now in force.*
- e) *For supply required at short notice that is within three days from the date of application for temporary service connections, an urgency charge of Rs 50 shall be paid along with other normal tariff charges*

11.5 Hoardings and Sign boards

Electricity for lighting external advertisements, external hoardings and displays at departments stores, malls , multiplexes, theatres, clubs, hotels, bus shelters, Railway Stations shall be separately metered and charged at the tariff applicable for "Advertisements and Hoardings" category, except such displays which are for the purpose of indicating / displaying the name and other details of the shop, commercial premises itself. Such use of electricity shall be covered under the prevailing tariff for such shops or commercial premises. The connection for "Advertisements and Hoardings" category would be covered under the permanent supply of connection under commercial category.

Table 11-13: Existing and Proposed Charges for Hoardings and Sign boards

Consumption Range	Existing Charges		Proposed Charges	
	FC (Rs/ kVA/ Month)	EC (Rs/ kWh)	FC (Rs/ kVA/ Month)	EC (Rs/ kWh)
Hoardings/signboards	Minimum charges of Rs 500.00/ connection/ month or part thereof	8	Minimum charges of Rs 500.00/ connection/ month or part thereof	8


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CHAPTER 12. PROPOSED SCHEDULE OF SERVICES AND CHARGES

12.1 Charges for service connections

12.1.1 The following table shows the charges for service connections

Table 12-1: Proposed Service Connection Charges

	Particulars	Category	Existing Charges (Rs.)	Proposed Charges [Rs]
(A)	New LT/ HT overhead service lines	(i) One hut one Bulb	Nil	Nil
		(ii) Other single phase Services	250	250
		(iii) Three phase Services	500	500
		(iv) L.T C.T operated Meter services	3000	3000
		(v) H.T Services	5000	10000
(B)	New LT underground service lines	(i) Single Phase services -	500	500
		(ii) Three phase Services	1000	1000
(C)	Rating / re-rating of services	(i) Single phase Services	125	125
		(ii) Three phase Services	250	250
		(iii) L.T C.T operated Meter service	1500	1500
		(iv) H.T Service	2500	2500

Note: The above charges under (A) & (B) will be applicable for addition or alteration or reduction of connected load and enhancement or reduction of CMD or alteration of internal Electrical installations.

12.2 Testing of installation

12.2.1 Testing for servicing a new installation (or of an extension or alteration) - For the first test No Charge. Subsequent testing warranted due to absence of contractor or his representative (or) due to defects in wiring of consumer's premises or at the request of the consumer or at occasions that warrant testing of installations for the second time for reasons attributable to the consumers

Table 12-2: Proposed Testing of Installation Charges

Particulars	Existing Charges (Rs.)	Proposed Charges (Rs.)
(i) Domestic lighting / Commercial lighting / Agriculture Services	200	200
(ii) Other LT Services	900	900
(iii) HT/EHT Services	7500	7500

12.3 Testing of meters & metering arrangements

12.3.1 For testing of meter at the instance of the consumer

Table 12-3: Proposed Testing of Metering Charges

Particulars	Existing Charges (Rs.)	Proposed Charges (Rs.)
(i) Single phase direct meter	150	150
(ii) Three phase direct meter upto 50 A	200	200
(iii) L.T C.T coil test	800	800
(iv) H.T Tri-vector Meter (0.5 class accuracy or CT operated LT meters.	1500	1500
(v) H.T Tri-vector Meter (0.2 class accuracy)	2000	2000
(vi) H.T Metering Cubicle	3500	3500

12.4 Testing of HT/EHT consumer protective equipment

Table 12-4: Proposed Testing of HT/EHT Consumer Equipment Charges

Particulars	Existing Charges (Rs.)	Proposed Charges (Rs.)
Testing charges for protective relays (Earth fault, line fault etc.)	4500	4500
Testing charges for one set of current transformer.	4500	4500
Testing charges for one set of potential transformers.	4500	4500
Testing charges for one set of EHT Current transformer	4500	6000
Testing charges for one set of EHT Potential transformer /CVT	4500	6000
Testing charges for one set of HT circuit breaker	4500	4500
Testing charges for one set of EHT circuit breaker	4500	6000
Testing charges for measurement of earth resistance.	3000	3000
Testing charges for Transformer oils	500	500

12.5 Disconnection / Re-connection charges

Table 12-5: Proposed Disconnection/Reconnection Charges

Particulars	Existing Charges (Rs.)	Proposed Charges (Rs.)
(i) Disconnection of L.T service on request	100	100
(ii) Disconnection of HT service on request	500	500
(iii) Reconnection of L.T Service (on all occasions).	100	100
(iv) Reconnection of HT Service (on all occasions).	500	1000

12.6 Title transfer of services

Table 12-6: Proposed Disconnection/Reconnection Charges

Particulars	Existing Charges (Rs.)	Proposed Charges (Rs.)
(i) Domestic	250	250
(ii) Commercial lighting installation	500	500
(iii) All other LT installation	1000	1000
(iv) HT/EHT Services	2000	2000

12.7 Furnishing of certified copies

Table 12-7: Proposed Certified Copies Charges

Particulars	Existing Charges (Rs.)	Proposed Charges (Rs.)
(i) Issue of duplicate Monthly bills for a month.	10	10
(ii) Contractor's completion-cum-test report	10	10
(iii) Ledger extract	20.00 / calendar year or part thereof.	20.00 / calendar year or part thereof.
(iv) Agreement	50	50
(v) Estimate	50	50

12.8 Charges for Replacement of Burnt Meters

Particulars	Proposed Charges (Rs.)
LT Single Phase meters	700
LT Three Phase meters	1300
Three Phase LT meters with CTs	3000
HT Meter 0.5s class of accuracy	6500
HT Meter 0.2s class of accuracy	30000
HT Metering Cubicle (CT/PT Unit)	70000

12.9 Fuse renewal charges

Table 12-8: Proposed Fuse Renewable Charges

Particulars	Existing Charges (Rs.)	Proposed Charges (Rs.)
(i) Domestic	-NIL	-NIL
(ii) Commercial	50	50
(iii) L.T Industrial	50	50
(iv) High Tension/Extra High Tension installation	250	250

12.10 Shifting of meter board at consumer's request

Table 12-9: Proposed Shifting of meter board Charges

Particulars	Existing Charges (Rs.)	Proposed Charges (Rs.)
(i) LT single phase supply	125	125
(ii) LT Three phase supply	250	250

CHAPTER 13. PRAYER TO THE HON'BLE COMMISSION

13.1 Prayer to the Hon'ble Commission

13.1.1 The Electricity Department, Government of Puducherry (PED) respectfully prays to the Hon'ble Commission to:

- 1) Admit the petition seeking Provisional True Up for FY 2017-18, Annual Performance Review for FY 2018-19 and Multi-Year Tariff Petition for FY 2019-20 to FY 2021-22 as per the provisions of JERC (Multi Year Distribution Tariff) Regulations, 2018.
- 2) Condone the delay in filing/submission of petition due to administrative reasons.
- 3) Approve the total recovery of Provisional True Up for FY 2017-18, Annual Performance Review for FY 2018-19 and Aggregate Revenue Requirement for FY 2019-20 to FY 2021-22 and other claims as proposed by PED.
- 4) Review the provisional actual performance of FY 2017-18 and approve the Aggregate Revenue Requirement (ARR) and gap for FY 2017-18 based on the provisional actual figures.
- 5) Approve the Aggregate Revenue Requirement (ARR) for the Control Period i.e. FY 2019-20 to FY 2021-22, Expected Revenue from Charges (ERC) and the gap for FY 2019-20 till FY 2021-22.
- 6) Approve the consolidated gap till FY 2021-22 as regulatory assets as proposed in the petition and allow the gap to be recovered during the control period through levy of Regulatory surcharge.
- 7) To allow recovery of balance regulatory asset approved earlier up to FY 2017-18 during the MYT control period.
- 8) To allow carrying cost on Regulatory asset created during past period and on the revenue gap created from FY 2018-19 till FY 2021-22 as determined by the Commission.
- 9) Grant approval for levy of 10 % Regulatory Surcharge to all the consumer categories except OHOB and Agriculture.
- 10) Exemption of Delayed payment surcharge in respect of Govt.

departments/Government Undertakings.

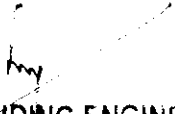
- 11) Grant Approval for Wheeling charges, Additional Surcharges and Open access charges for FY 2019-20.
- 12) Grant approval for the schedule of tariff, charges for services and schedule of charges along with the surcharge as made in the petition for FY 2019-20.
- 13) Grant any other relief as the Hon'ble Commission may consider appropriate. The petitioner craves leave of the Hon'ble Commission to allow further submission, addition and alteration to this petition as may be necessary from time to time.
- 14) 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.

The petitioner declares that the subject matter of the petition has not been raised by the petitioner before any other competent forum, and that no other competent forum is currently seized of the matter or has passed any order in relation thereto.

Annexure I: REGULATORY FORMATS

Format 1 – Energy Demand (FY 2017-18 and FY 2018-19)

Category of Consumer	FY 2017-18 (Provisional)			FY 2018-19 (Revised Estimates)		
	Consumers [No]	Connected load [HP / kVA]	Sales [MUs]	Consumers [No]	Connected load [HP / kVA]	Sales [MUs]
Domestic	325845	530206	723.28	336044	554648	748.67
OHOB	35537	2843	10.24	35537	2843	10.36
Commercial	53962	119092	216.41	55144	128476	226.26
Agriculture	6940	44654	57.61	6973	44654	57.77
Public lighting	50434	6119	24.48	50666	6180	24.48
LT Industrial + Water tanks	6668	125234	185.61	6725	127714	185.61
Temporary supply			8.48			9.33
Total LT	479386	828148	1226.11	491089	864515	1262.48
HT 1	453	344093	897.34	463	355345	900.03
HT 2 - Government & water tank	61	30504	98.41	64	33554	108.25
HT 3 – EHT	7	120912	326.90	7	126946	326.97
Total HT	521	495509	1322.65	534	515845	1335.25
Total	479907	1323657	2548.76	491623	1380360	2597.73


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Format 1 – Energy Demand (FY 2019-20 to FY 2021-22) MYT Control Period

Category of Consumer	FY 2019-20 (Ensuing Year)			FY 2020-21 (Ensuing Year)			FY 2021-22 (Ensuing Year)		
	Consumers [No]	Connected load [HP / kVA]	Sales [MUs]	Consumers [No]	Connected load [HP / kVA]	Sales [MUs]	Consumers [No]	Connected load [HP / kVA]	Sales [MUs]
Domestic	3,46,562	5,80,218	774.95	3,57,410	6,06,966	802.15	3,68,596	6,34,947	830.30
OHOB	35,537	2,843	10.49	35,537	2,843	10.61	35,537	2,843	10.74
Commercial	56,351	1,38,600	236.55	57,586	1,49,522	247.31	58,847	1,61,304	258.57
Agriculture	7,005	44,654	57.92	7,038	44,654	58.08	7,071	44,654	58.23
Public lighting	50,899	6,242	24.48	51,133	6,304	24.48	51,368	6,367	24.48
LT Industrial + Water tanks	6,782	1,30,242	185.61	6,839	1,32,821	185.61	6,898	1,35,451	185.61
Temporary supply			10.27			11.31			12.44
Total LT	503136	902799	1300.27	515543	943110	1339.55	528317	985566	1380.37
HT 1	474	366965	902.73	485	378964	905.44	496	391356	908.16
HT 2 - Government & water tank	68	36910	119.08	72	40601	130.98	76	44661	144.08
HT 3 – EHT	7	133280	327.03	7	139931	327.10	7	146913	327.16
Total HT	549	537155	1348.84	564	559496	1363.52	579	582930	1379.40
Total	503685	1439954	2649.11	516107	1502606	2703.07	528896	1568496	2759.77



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Format 2 - Information regarding Distribution Loss of Licensee

S.No	Particulars	Calculation	Unit	True up	APR	Ensuing Year (Projections)		
				FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	Generation (own as well as any other connected generation net after deducting auxiliary consumption) within area of supply of DISCOM	A	MU	215.31	218.77	287.98	285.87	415.06
2	Input energy (metered Import) received at interface points of DISCOM network.	B	MU	2,841.72	2,948.54	2,912.47	3,021.91	3,021.91
3	Input energy (metered Export) by the DISCOM at interface points of DISCOM network.	C	MU	29.14	181.41	172.90	244.81	336.10
4	UI Underdrawal	D		114.20				
5	Open Access Power Purchase	E		39.58				
6	Total energy available for sale within the licensed area to the consumers of the DISCOM	F=A+B+C-D+E	MU	3,011.54	2,985.90	3,027.55	3,062.97	3,100.87
7	Energy billed to metered consumers within the licensed area of the DISCOM	G=E+F	MU	2,548.76	2,529.60	2,580.70	2,634.38	2,690.80
8	Energy billed to un-metered consumers within the licensed area of the DISCOM	H	MU	-	68.13	68.41	68.69	68.97
9	Power drawn by TNEB at Pondy periphery			17.46	-			
10	Sale to Open Access			39.00				
11	Total energy billed	G=E+F	MU	2,605.22	2,597.73	2,649.11	2,703.07	2,759.77
10	Amount billed to consumer within the licensed area of DISCOM *	H	Rs.Crs	1,264.58	1,446.04	1,559.18	1,596.01	1,636.20
11	Amount realized by the DISCOM out of the amount Billed at H	I	Rs.Crs	1176.05	1,366.07	1,406.38	1,454.98	1,506.20
12	Collection efficiency (%) (= Revenue realized/ Amount billed)	J=(I/H)x100	%	93.00%	95.00%	95.00%	96.00%	97%
13	Energy realized by the DISCOM	K=L x G	MU	2,474.96	2,467.84	2,516.65	2,594.95	2,676.98
14	Distribution loss (%)	L	%	13.75%	13.00%	12.50%	11.75%	11.00%
15	AT&C Loss (%)	M= {(D-K)/D}x100	%	19.77%	17.35%	16.88%	15.28%	13.67%

*Revenue for the ensuing years – FY 2019-22 includes a regulatory surcharge of 10%

Format 3 – Energy Balance (in MUs)

S. No.	Item	April-March (Actuals)	April-March (R.E.)	Ensuing Year (Projections)		
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	2	4	5	6	7	8
A)	Energy Requirement					
1	Metered Sales	2,548.76	2,529.60	2,580.70	2,634.38	2,690.80
2	Unmetered Sales	-	68.13	68.41	68.69	68.97
3	Total Sales within the UT	2,548.76	2,597.73	2,649.11	2,703.07	2,759.77
5	Energy Drawal by TANGEDCO	17.46	-			
6	Sales to Electricity Traders / Power Exchange		181.41	172.90	244.81	336.10
7	Sale to Open access Consumers	39.00	-			
8	Total Sales	2,605.22	2,779.14	2,822.01	2,947.88	3,095.87
9	T&D Losses					
a	Loss(%)	13.75%	13.00%	12.50%	11.75%	11.00%
b	Loss (MU)	406.32	388.17	378.44	359.90	341.10
10	Total Energy Requirement	3,011.54	3,167.31	3,200.45	3,307.78	3,436.97
B)	Energy Availability					
1	Net Power Purchase (ex Bus)	2,932.17	3,039.73	3,002.55	3,115.37	3,115.37
2	Own Generation (PPCL+Renewable)	215	218.77	287.98	285.87	415.06
3	Power purchase from Common Pool / UI-overdrawal / Traders / Exchange / Others	29.14				
4	UI Underdrawal	114.20				
5	Open Access Power Purchase at periphery	39.58				
6	Net Power Purchased (1+2+3-4+5)	3,101.99	3,258.50	3,290.53	3,401.24	3,530.43
6	Transmission Losses	90.45	91.19	90.08	93.46	93.46
	Transmission Losses (%)	2.92%	3.00%	3.00%	3.00%	3.00%
8	Total Energy Availability (4-5-6)	3,011.54	3,167.31	3,200.45	3,307.78	3,436.97

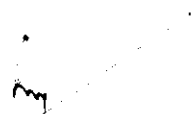
Note: The quantum of power supplied to TANGEDCO has not been included under Power purchase for FY 2018-19


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Format 4 – Power Purchase Cost for FY 2017-18

Sr. No.	Source	Power Purchase (MUs)	Power Purchase Cost - Variable Cost (VC) (Rs.Cr)	Power Purchase Cost - Fixed Cost (FC) (Rs.Cr)	Power Purchase Cost - Other Cost (FC) (Rs.Cr)	Total Power Purchase Cost (Rs. Cr)
		2017-18	2017-18	2017-18	2017-18	2017-18
A	Central Sector Power Stations					
I	NTPC					
	KSTPS					
	RSTPS Stage I & II	518.04	35.76	124.95	2.11	162.82
	RSTPS Stage -III	143.06	9.97	33.74	1.02	44.73
	Talcher Stage- II	459.70	30.34	71.08	4.37	105.79
	Simhadri Stage- II	92.11	16.93	25.97	0.69	43.58
II	NLC					
	NLC TPS II Stage I	376.61	32.59	111.57	0.37	144.54
	NLC TPS II Stage II	131.65	12.03	38.95	0.85	51.83
	NLC TPS I (Expn)	110.81	10.83	30.28	0.28	41.39
	NLC TPS II (Expn)	72.32	18.06	19.78	0.10	37.94
	NTPL	109.47	28.18	33.43	4.41	66.02
III	NPCIL					
	MAPS	45.79	0.00	9.64	0.53	10.16
	KAPS	280.49	0.00	84.95	5.00	89.96
	Kudankulam U1	147.23	0.00	54.70	5.69	60.40
	Kudankulam U2	130.82	0.00	50.99	3.69	54.68
IV	Others					
	TNEB (Por dy)					
	TNEB (Kara kal)	181.34	75.61	0.00	0.00	75.61
	KSEB	30.13	2.51	16.76	3.16	22.42
	Vallur Thermal Project	102.60	24.34	29.64	2.99	56.98
V	Renewable Sources					
	Solar	0.62	0.00	0.00	0.00	0.00
	Non-Solar			14.59		14.59
	RECs					
B	Within State Generations					
I	PPCL	214.69	21.80	47.74	7.69	77.22

Sr. No.	Source	Power Purchase (MUs)	Power Purchase Cost - Variable Cost (VC) (Rs.Cr)	Power Purchase Cost - Fixed Cost (FC) (Rs.Cr)	Power Purchase Cost - Other Cost (FC) (Rs.Cr)	Total Power Purchase Cost (Rs. Cr)
		2017-18	2017-18	2017-18	2017-18	2017-18
C	OTHER CHARGES					
	<i>PGCIL Transmission Charges, Wheeling & Other Charges</i>					
	<i>POSDCO</i>					
	<i>PCKL</i>					
D	<i>UI overdrawal</i>	29.14	0.00	0.00	0.00	1.17
	<i>UI underdrawal</i>	114.20	0.00	0.00	0.00	(13.88)
	<i>Sale to Tangedco</i>	17.46				
	<i>Open access power</i>	39.00				
E	Power Purchase Arrears of Past Years due to tariff revisions of various plants (additional details)					136.59
	Credit from NTPC					(31.73)
	Rebate					(15.99)
	Revenue through RR&S, Reactive Energy & URS					2.00
Net power purchase		3101.41	318.96	798.75	42.95	1236.82


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Format 4 – Power Purchase Cost for FY 2018-19

S. No.	Source	Power Purchase (MUs)	Power Purchase Cost - Variable Cost (VC) (Rs.Cr)	Power Purchase Cost - Fixed Cost (FC) (Rs.Cr)	Total Power Purchase Cost (Rs. Cr)
		2018-19	2018-19	2018-19	2018-19
A	Central Sector Power Stations				
I	NTPC	1,171.17	252.83	95.49	348.32
	KSTPS	-			-
	RSTPS Stage I & II	490.59	117.74	37.14	154.88
	RSTPS Stage -III	137.33	32.20	10.14	42.34
	Talcher Stage- II	433.63	71.01	31.63	102.64
	Simhadri Stage- II	109.62	31.88	16.58	48.46
		-			-
		-			-
II	NLC	961.46	284.71	87.57	372.28
	NLC TPS II Stage I	469.59	141.26	33.79	175.05
	NLC TPS II Stage II	179.75	53.91	13.43	67.34
	NLC TPS I (Expn)	88.41	24.54	10.91	35.45
	NLC TPS II (Expn)	44.71	12.44	4.26	16.70
	NTPL	178.99	52.55	25.18	77.73
		-			-
III	NPCIL	595.67	189.49		189.49
	MAPS	46.77	9.70		9.70
	KAPS Stage I	137.70	78.56		78.56
	KAPS Stage II	125.60			-
	Kudankulam U1	127.13	101.24		101.24
	Kudankulam U2	158.47			-
		-			-
IV	Others	311.43	134.53	23.16	157.69
	TNEB (Pondy)	-			-
	TNEB (Karaikal)	150.00	52.21	-	52.21
	KSEB	-		-	
	Vallur Thermal Project	161.43	82.31	23.16	105.47
	New NLC TS-I	-			-
V	Renewable Sources	2.40	1.44	26.40	27.84
	Solar	2.40	1.44		1.44
	Non-Solar	-			-
	RECs			26.40	26.40
		-			-
		-			-

S. No.	Source	Power Purchase (MUs)	Power Purchase Cost - Variable Cost (VC) (Rs.Cr)	Power Purchase Cost - Fixed Cost (FC) (Rs.Cr)	Total Power Purchase Cost (Rs. Cr)
		2018-19	2018-19	2018-19	2018-19
B	Within State Generations	216.37	51.50	35.54	87.04
I	PPCL	216.37	51.50	35.54	87.04
		-			-
C	OTHER CHARGES	-			
	PGCIL Transmission Charges, Wheeling & Other Charges	-			69.11
	POSOCO	-			-
	PCKL	-			-
D	UI	-			-
	Sale of Surplus power	(181.41)	(57.51)	-	(57.51)
	open access	-			-
		-			-
		-			-
		-			-
E	Total	3,077.09	856.99	241.76	1,194.26

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Format 4 – Power Purchase Cost for FY 2019-20

S. No.	Source	Power Purchase (MUs)	Power Purchase Cost - Variable Cost (VC) (Rs.Cr)	Power Purchase Cost - Fixed Cost (FC) (Rs.Cr)	Total Power Purchase Cost
		2019-20	2019-20	2019-20	2019-20
A	Central Sector Power Stations				
I	NTPC	1,171.17	262.94	99.31	362.25
	KSTPS				
	RSTPS Stage I & II	490.59	122.45	38.63	161.08
	RSTPS Stage -III	137.33	33.49	10.55	44.03
	Talcher Stage- II	433.63	73.85	32.90	106.75
	Simhadri Stage- II	109.62	33.15	17.24	50.39
II	NLC	961.46	296.09	91.07	387.17
	NLC TPS II Stage I	469.59	146.91	35.14	182.05
	NLC TPS II Stage II	179.75	56.07	13.97	70.04
	NLC TPS I (Expn)	88.41	25.52	11.35	36.87
	NLC TPS II (Expn)	44.71	12.94	4.43	17.37
	NTPL	178.99	54.65	26.19	80.84
III	NPCIL	595.67	197.07		197.07
	MAPS	46.77	10.08		10.08
	KAPS Stage I	137.70	81.70		81.70
	KAPS Stage II	125.60			-
	Kudankulam U1	127.13	105.29		105.29
	Kudankulam U2	158.47			-
IV	Others	274.25	85.61	24.09	149.18
	TNEB (Pondy)	-			-
	TNEB (Karaikal)	-	-	-	-
	KSEB	-		-	
	Vallur Thermal Project	161.43	85.61	24.09	109.69
	New NLC TS-I	112.82			39.49
V	Renewable Sources	71.61	21.48	52.23	73.71
	Solar	71.61	21.48		21.48
	Non-Solar				-
	RECs			52.23	52.23

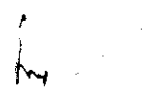
S. No.	Source	Power Purchase (MUs)	Power Purchase Cost - Variable Cost (VC) (Rs.Cr)	Power Purchase Cost - Fixed Cost Cost (FC) (Rs.Cr)	Total Power Purchase Cost
		2019-20	2019-20	2019-20	2019-20
B	Within State Generations	216.37	53.56	36.96	90.53
I	PPCL	216.37	53.56	36.96	90.53
C	OTHER CHARGES				
	<i>PGCIL Transmission Charges, Wheeling & Other Charges</i>				70.02
	<i>POSOCO</i>				
	<i>PCKL</i>				
D	<i>UI</i>				
	<i>Sale of Surplus power</i>	(172.90)	(54.81)		(54.81)
	<i>open access</i>				
E	Total	3,117.63	861.95	251.43	1,275.12


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Format 4 – Power Purchase Cost for FY 2020-21

S. No.	Source	Power Purchase (MUs)	Power Purchase Cost - Variable Cost (VC) (Rs.Cr)	Power Purchase Cost - Fixed Cost Cost (FC) (Rs.Cr)	Total Power Purchase Cost
		2020-21	2020-21	2020-21	2020-21
A	Central Sector Power Stations				
I	NTPC	1,171.17	268.20	99.31	367.51
	KSTPS				
	RSTPS Stage I & II	490.59	124.90	38.63	163.53
	RSTPS Stage - III	137.33	34.16	10.55	44.70
	Talcher Stage-II	433.63	75.33	32.90	108.22
	Simhadri Stage- II	109.62	33.81	17.24	51.06
II	NLC	961.46	302.02	91.07	393.09
	NLC TPS II Stage I	469.59	149.85	35.14	184.99
	NLC TPS II Stage II	179.75	57.19	13.97	71.16
	NLC TPS I (Expn)	88.41	26.03	11.35	37.38
	NLC TPS II (Expn)	44.71	13.20	4.43	17.63
	NTPL	178.99	55.74	26.19	81.93
III	NPCIL	595.67	201.01		201.01
	MAPS	46.77	10.29		10.29
	KAPS Stage I	137.70	83.33		83.33
	KAPS Stage II	125.60			-
	Kudankulam U1	127.13	107.40		107.40
	Kudankulam U2	158.47			-
IV	Others	387.07	87.32	24.09	190.38
	TNEB (Pondy)	-			-
	TNEB (Karaikal)	-	-	-	-
	KSEB	-		-	
	Vallur Thermal Project	161.43	87.32	24.09	111.41
	New NLC TS-I	225.64			78.97
V	Renewable Sources	69.50	20.85	34.90	55.75

S. No.	Source	Power Purchase (MUs)	Power Purchase Cost - Variable Cost (VC) (Rs.Cr)	Power Purchase Cost - Fixed Cost Cost (FC) (Rs.Cr)	Total Power Purchase Cost
		2020-21	2020-21	2020-21	2020-21
	Solar	69.50	20.85		20.85
	Non-Solar				-
	RECs			34.90	34.90
B	Within State Generations	216.37	54.63	38.44	93.07
I	PPCL	216.37	54.63	38.44	93.07
C	OTHER CHARGES				
	PGCIL Transmission Charges, Wheeling & Other Charges				70.89
	POSOCO				
	PCKL				
D	UI				
	Sale of Surplus power	(244.81)	(77.60)		(77.60)
	open access				
E	Total	3,156.43	856.43	252.91	1,294.10


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Format 4 – Power Purchase Cost for FY 2021-22

S. No.	Source	Power Purchase (MUs)	Power Purchase Cost - Variable Cost (VC) (Rs.Cr)	Power Purchase Cost - Fixed Cost (FC) (Rs.Cr)	Total Power Purchase Cost
		2021-22	2021-22	2021-22	2021-22
A	Central Sector Power Stations				
I	NTPC	1,171.17	273.56	99.31	372.87
	KSTPS				
	RSTPS Stage I & II	490.59	127.40	38.63	166.02
	RSTPS Stage -III	137.33	34.84	10.55	45.39
	Talcher Stage- II	433.63	76.83	32.90	109.73
	Simhadri Stage- II	109.62	34.49	17.24	51.73
II	NLC	961.46	308.06	91.07	399.13
	NLC TPS II Stage I	469.59	152.84	35.14	187.98
	NLC TPS II Stage II	179.75	58.34	13.97	72.30
	NLC TPS I (Expn)	88.41	26.56	11.35	37.90
	NLC TPS II (Expn)	44.71	13.46	4.43	17.89
	NTPL	178.99	56.86	26.19	83.05
III	NPCIL	595.67	205.04		205.04
	MAPS	46.77	10.49		10.49
	KAPS Stage I	137.70	85.00		85.00
	KAPS Stage II	125.60			-
	Kudankulam U1	127.13	109.54		109.54
	Kudankulam U2	158.47			-
IV	Others	387.07	89.07	24.09	192.13
	TNEB (Pondy)	-			-
	TNEB (Karaikal)	-	-	-	-
	KSEB	-		-	
	Vallur Thermal Project	161.43	89.07	24.09	113.15
	New NLC TS-I	225.64			78.97
V	Renewable Sources	198.69	59.61	30.29	89.90
	Solar	100.00	30.00		30.00
	Non-Solar	98.69	29.61		29.61
	RECs			30.29	30.29

S. No.	Source	Power Purchase (MUs)	Power Purchase Cost - Variable Cost (VC) (Rs.Cr)	Power Purchase Cost - Fixed Cost (FC) (Rs.Cr)	Total Power Purchase Cost
		2021-22	2021-22	2021-22	2021-22
B	Within State Generations	216.37	55.73	39.98	95.71
I	PPCL	216.37	55.73	39.98	95.71
C	OTHER CHARGES				
	<i>PGCIL Transmission Charges, Wheeling & Other Charges</i>				71.74
	<i>POSOCO</i>				
	<i>PCKL</i>				
D	<i>UI</i>				
	<i>Sale of Surplus power</i>	(336.10)	(106.54)		(106.54)
	<i>open access</i>				
E	Total	3,194.32	884.51	254.45	1,319.96


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Format 4 – RPO Compliance cost

S.No	Description	Unit	Actuals		Actuals		Base Year (Projections)		Projections					
			FY 2016-17		FY 2017-18		FY 2018-19		FY 2019-20		FY 2020-21		FY 2021-22	
			Physical	REC	Physical	REC	Physical	REC	Physical	REC	Physical	REC	Physical	REC
1	Sales Within State	MUs	2,466.27		2,548.76		2,597.74		2,649.11		2,703.07		2,759.78	
2	RPO Obligation	%	4.85%		6.70%		9.00%		11.50%		14.10%		17.00%	
	- Solar	%	1.65%		2.50%		3.60%		4.70%		6.10%		8.00%	
	- Non Solar	%		3.20%		4.20%		5.40%		6.80%		8.00%		9.00%
3	RPO Obligation	MUs		119.61		170.77		233.80		304.65		381.13		469.16
	- Solar	MUs		40.69		63.72		93.52		124.51		164.89		220.78
	- Non Solar	MUs		78.92		107.05		140.28		180.14		216.25		248.38
4	RPO Purchase	MUs												
	- Solar	MUs	0.50		0.62	-	2.40	98.40	71.61	148.91	69.50		100.00	
	- Non Solar	MUs		0.00		97.26		137.31		317.45	0.00	311.64	98.69	270.48
5	Cumulative RPO Obligation LEFT													
	- Solar	MUs		40.19		103.29		96.00		-				
	- Non Solar	MUs		124.56		134.35		137.31		-				
6	Floor Price of REC Certificates /MWh													
	- Solar	Rs./MWh	1000		1000		1000				1000		1000	
	- Non Solar	Rs./MWh	1000		1500		1000				1000		1000	
7	Amount for RPO Compliance													
	- Solar	Rs. Crs		-		-		11.02		16.68		-		
	- Non Solar	Rs. Crs		-		14.59		15.38		35.55		34.90		30.29
8	Total (Rs Crores)	Rs. Crs		0.00		14.59		26.40		52.23		34.90		30.29


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Format 6 – Return on Equity (Rs Crs)

S. No.	Particulars	Ensuing Year (Projection)				
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	Opening Equity Amount	202.85	212.94	236.71	247.76	254.91
2	Equity Addition during year (30% of Capitalization)	10.09	23.77	11.05	7.15	21.80
3	Closing Equity Amount	212.94	236.71	247.76	254.91	276.71
4	Average Equity Amount	207.90	224.83	242.24	251.34	265.81
5	Rate of Return on Equity	16.00%	16.00%	16.00%	16.00%	16.00%
6	Return on Equity	33.26	35.97	38.76	40.21	42.53

Format 6 A – DETAILS OF GFA / WIP AND CONSUMER CONTRIBUTION

(Rs Crs)

S. No.	Particulars	WIP	Fixed Assets
1	As on 31st March of Previous year (16-17)	98.11	724.32
	Add capital expenditure during FY 2017-18	29.42	
	Add capitalised during FY 2017-18		16.79
	Total:	127.53	741.11
	Less transferred to fixed assets	16.79	
2	As on 31st March of Current year (17-18)	110.74	741.11
	Add capital expenditure during FY 2018-19	79.23	
	Add capitalised during FY 2018-19		93.57
	Total:	189.97	834.68
	Less transferred to fixed assets	93.57	
3	As on 31st March of ensuing year (18-19)	96.40	834.68
	Add capital expenditure during FY 2019-20	175.05	
	Add capitalised during FY 2019-20		83.25
	Total:	271.45	917.93
	Less transferred to fixed assets	83.25	
4	As on 31st March of Ensuing year (19-20)	188.20	917.93
	Add capital expenditure during FY 2020-21	242.70	
	Add capitalised during FY 2020-21		104.56
	Total:	430.90	1022.49
	Less transferred to fixed assets	104.56	
5	As on 31st March of ensuing year (2020-21)	326.34	1022.49
	Add capital expenditure during FY 2021-22	217.18	
	Add capitalised during FY 2021-22		315.66
	Total:	543.52	1338.15
	Less transferred to fixed assets	315.66	
	As on 31 st March of ensuing year (2021-22)	227.86	1338.15

Format 6B – Details of Accumulated Depreciation and Consumer contribution (Rs. Crs)

S. No.	Particulars	Amount
A	Accumulated Depreciation	
1	As on 31st March of previous year (15-16)	328.46
2	Add: Depreciation for Previous year (16-17)	24.81
3	As on 31st March of Previous year (16-17)	353.27
4	Add: Depreciation for current year (17-18)	36.43
5	As on 31st March of current year (17-18)	389.70
6	Add: Depreciation for current year (18-19)	39.39
7	As on 31st March of current year (18-19)	429.09
8	Add: Depreciation for current year (19-20)	13.97
9	As on 31st March of current year (19-20)	443.06
10	Add: Depreciation for current year (20-21)	17.17
11	As on 31st March of current year (20-21)	460.23
12	Add: Depreciation for current year (21-22)	24.89
13	As on 31st March of current year (21-22)	485.11
B	Consumers Contribution	
3	As on 31st March of Previous year (16-17)	27.42
4	Add: Consumer Contribution for Previous year (17-18)	2.00
5	As on 31st March of Previous year (17-18)	29.42
6	Add: Consumer Contribution for Previous year (18-19)	2.00
7	As on 31st March of Previous year (18-19)	31.42


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Format 7 – COST OF FIXED ASSETS

(Rs. Crs)

S. No.	Assets group	Closing balance at the end of previous year	Addition during previous year	Closing balance at the end of previous year	Addition during previous year	Closing balance at the end of previous year	Addition during previous year	Closing balance at the end of previous year	Addition during previous year	Closing balance at the end of previous year	Addition during previous year	Closing balance at the end of previous year
		2016-17	2017-18	2017-18	2018-19	2018-19	2019-20	2019-20	2020-21	2020-21	2021-22	2021-22
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Land and Land rights	7.35	0.37	7.71	0.86	8.57	0.76	9.33	1.14	10.47	3.43	13.90
2	Building	17.37	0.86	18.24	2.04	20.27	1.80	22.07	2.69	24.76	8.11	32.87
3	Plant & Machinery	379.63	18.89	398.52	44.48	443.00	39.29	482.29	58.70	541.00	177.23	718.22
4	Lines and Cables Network	236.85	11.78	248.63	27.75	276.38	24.51	300.90	36.63	337.52	110.57	448.09
5	Vehicles	1.89	0.09	1.98	0.22	2.20	0.20	2.40	0.29	2.69	0.88	3.57
6	Furniture and Fixtures	0.15	0.01	0.16	0.02	0.18	0.02	0.19	0.02	0.22	0.07	0.29
7	Office Equipment	0.84	0.04	0.88	0.10	0.98	0.09	1.07	0.13	1.20	0.39	1.59
8	IT Equipment	2.00	0.10	2.10	0.23	2.33	0.21	2.54	0.31	2.85	0.93	3.78
9	Testing & Measuring Equipment	3.31	0.16	3.48	0.39	3.87	0.34	4.21	0.51	4.72	1.55	6.27
10	SCADA Centre	26.77	1.33	28.10	3.14	31.24	2.77	34.01	4.14	38.15	12.50	50.64
11	Others	-	-	-	-	-	-	-	-	-	-	-
20	Total	676.16	33.64	709.80	79.23	789.03	69.98	859.01	104.56	963.57	315.66	1,279.23

Format 8 – DETAILS OF WORK IN PROGRESS

Rs. Crs

S. No.	Particulars	Provisional True up		Ensuing Year (Projections)		
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	Opening Balance	125.57	119.35	108.30	200.10	338.24
2	Add: New Investments	29.42	84.52	175.05	242.70	217.18
3	Total	154.99	203.87	283.35	442.80	555.42
4	Less Investment Capitalized	35.64	95.57	83.25	104.56	315.66
5	Closing Balance	119.35	108.30	200.10	338.24	239.76

Format 9 – INTEREST CAPITALISED

(Rs Crs)

S. No.	Interest Capitalized	Provisional True Up		Ensuing Year (Projections)		
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	WIP	119.35	108.30	200.10	338.24	239.76
2	GFA* at the end of the year	709.80	789.03	859.01	963.57	1,279.23
3	WIP+GFA at the end of the year	829.15	897.33	1,059.11	1,301.81	1,518.99
4	Interest (excluding interest on WCL*)	14.68	14.42	12.75	18.53	34.65
5	Interest Capitalized	-	-	-	-	-


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Format 10A – NORMATIVE LOAN & INTEREST CALCULATION

(Rs Crs)

S. No.	Particulars	Previous Year (Est.)	Current Year (Rev. Est)	Ensuing Year (Projection)		
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	2	6	7	8	9	
1	Opening Normative Loan	112.45	99.57	115.64	160.60	240.84
2	Add: Normative Loan during the Year	23.55	55.46	58.93	97.41	293.86
3	Less: Normative Repayment	36.43	39.39	13.97	17.17	24.89
4	Closing Normative Loan	99.57	115.64	160.60	240.84	509.81
4	Average Normative Loan	106.01	107.61	138.12	200.72	375.33
5	Rate of Interest (@SBAR rate)	13.85%	13.40%	9.23%	9.23%	9.23%
6	Interest on Normative Loan	14.68	14.42	12.75	18.53	34.65
7	Other Finance Charges	2.54	2.67	-	-	-
8	Total Interest & Finance Charges	17.22	17.09	12.75	18.53	34.65

Format 11 – INFORMATION REGARDING RESTRUCTURING OF OUTSTANDING LOANS DURING THE FY 2017-18 TO FY 2021-22

S. No.	Source of loan	Amount of original loan (Rs. Crores)	Old rate of interest	Amount already restructured	Revised rate of interest	Amount now being restructured (Rs. Crores)	New rate of interest
				(Rs. Crores)			
1				NIL			


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Format 12 – VALUE OF ASSETS AND DEPRECIATION CHARGES FOR FY 2017-18 AND FY 2018-19

(Rs.Crs)

S. No.	Name of the Assets	Rate of Dep*	Provisional Actual		Revised Estimates	
			FY 2017-18		FY 2018-19	
			Assets value at the beginning of the year	Depreciation charges	Assets value at the beginning of the year	Depreciation charges
1	Land and Land rights	0.00%	7.35	-	7.71	-
2	Building	3.34%	17.37	0.59	18.24	0.64
3	Plant & Machinery	5.28%	379.63	20.54	398.52	22.22
4	Lines and Cables Network	5.28%	236.85	12.82	248.63	13.86
5	Vehicles	9.50%	1.89	0.18	1.98	0.20
6	Furniture and Fixtures	6.33%	0.15	0.01	0.16	0.01
7	Office Equipment	6.33%	0.84	0.05	0.88	0.06
8	IT Equipment	15.00%	2.00	0.31	2.10	0.33
9	Testing & Measuring Equipment	5.28%	3.31	0.18	3.48	0.19
10	SCADA Centre	6.33%	26.77	1.74	28.10	1.88
11	Others					
	Total		676.16	36.43	709.80	39.39


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Format 12 – VALUE OF ASSETS AND DEPRECIATION CHARGES FOR FY 2019-20 TO 2021-22

(Rs.Crs)

S. No.	Name of the Assets	Rate of Dep*	Ensuing Year (Control Period)					
			FY 2019-20		FY 2020-21		FY 2021-22	
			Assets value at the beginning of the year	Depreciation charges	Assets value at the beginning of the year	Depreciation charges	Assets value at the beginning of the year	Depreciation charges
1	Land and Land rights	0.00%	8.57	-	9.33	-	10.47	-
2	Building	1.80%	20.27	0.22	22.07	0.26	24.76	0.35
3	Plant & Machinery	3.60%	443.00	8.28	482.29	10.05	541.00	14.29
4	Lines and Cables Network	3.60%	276.38	4.79	300.90	5.89	337.52	8.54
5	Vehicles	18.00%	2.20	0.04	2.40	0.08	2.69	0.19
6	Furniture and Fixtures	6.00%	0.18	0.00	0.19	0.01	0.22	0.01
7	Office Equipment	6.00%	0.98	0.01	1.07	0.02	1.20	0.03
8	IT Equipment	6.00%	2.33	0.01	2.54	0.02	2.85	0.06
9	Testing & Measuring Equipment	6.00%	3.87	0.06	4.21	0.09	4.72	0.15
10	SCADA Centre	6.00%	31.24	0.55	34.01	0.76	38.15	1.26
11	Others			-		-		-
								-
	Total		789.03	13.97	859.01	17.17	963.57	24.89


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Format 13 – REPAIR AND MAINTENANCE EXPENSES

(Rs. Crs)

S. No	Particulars	Previous Year (Provisional)	Current Year (Provisional)	Ensuing Year (Projections)		
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	2	3	4	5	6	7
1	Plant & machinery					
2	Building					
3	Minor R&M works					
4	Total	-	-	-	-	-
5	Add/Deduct share of others (To be specified)					
6	Total expenses	-	-	-	-	-
7	Less : Capitalized					
8	Net expenses	-	-	-	-	-
9	Add: prior period					
10	Total expenses charged to revenue as R&M expenses	10.11	11.19	12.24	13.53	14.81


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Format 14 – NO. OF EMPLOYEES

S. No.	Particulars	Previous Year (Provisional)	Current Year (Provisional)	Ensuing Year (Projections)		
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	2	3	4	5	6	7
1	Number of employees as on 1st April	2,179	2,265	2,233	2,203	2,137
2	Employees on deputation/ foreign service as on 1st April			-	-	
4	Total number of employees as on 1st April (1+2)	2,179	2,265	2,233	2,203	2,137
3	Recruitment	139	30	80	40	200
5	Number of employees retired/ retiring during the year	53	62	110	106	95
6	Number of employees at the end of the year (4-5)	2,265	2,233	2,203	2,137	2,242


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Format 15 –EMPLOYEE COST

(Rs. Crs)

S.No	Particulars	Previous Year (Provisional)	Current Year (Provisional)	Ensuing Year (Projections)		
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	2	6	7	8	9	
	Salaries& Allowances					
1	Salary					
2	Wages					
3	Stipend					
4	Transport Allowance					
5	Overtime allowance					
6	Total	-	-			
7	Less: Add/Deduct share of others					
8	Total	112.67				
	Less: Employee Cost towards maintenance of Govt Department	4.47	4.96			
9	Less: Amount capitalized	14.86				
10	Net amount	93.33				
11	Add : prior period expenses				-	
12	Total Employee Expenses for PED	93.33	101.62	110.64	120.47	131.16


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Format 16 –ADMINISTRATION AND GENERAL EXPENSES

(Rs. Crs)

S. No.	Particulars	Previous Year (Provisional)	Current Year (Provisional)	Ensuing Year (Projections)		
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	2	3	4	5	6	7
1	Rent, rates & taxes	9.24	7.44			
2	Other Professional charges including Regulatory Expenses (License + Petition Fees)					
3	Office Expenses including Legal, Professional & Special Service Charges					
4	Advertisement & Publicity					
5	Other A&G Charges					
6	Other professional charges					
7	Conveyance & Travel expense					
8	Electricity & water charges					
9	Others					
10	Freight					
11	Incentives to consumers					
12	Grant - in - Aid					
12	Other material related expenses					
13	EESL Charges	1.29	9.56	4.48	4.01	3.776
14	Payment towards smart grid projects			3.93	3.93	3.93
15	Total	10.53				
16	Add/Deduct share of others (to be specified)					
17	Total expenses	10.53				
18	Less: Capitalized					
19	Net expenses	10.53				
20	Add: Prior period					
21	Total A&G Expenses charged to revenue	10.53	19.20	18.47	18.42	18.64

Format 17 – INFORMATION REGARDING BAD AND DOUBTFUL DEBTS

(Rs. Crs)

S. No.	Particulars	Ensuing Year (Projections)				
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	Amount of receivables (audited)			-	-	-
2	Bad and doubtful debts actually written-off in the books of accounts					
3	Provision made for debts in ARR					

Format 18 – INFORMATION REGARDING WORKING CAPITAL

(Rs. Crs)

S. No.	Particulars	Previous Year (Provisional)	Current Year (Provisional)
		FY 2017-18	FY 2018-19
1	2		
1	Receivable - 2 months	239.03	231.35
2	Less :Power Purchase - 1 months	103.10	97.20
3	Less : Inventory for two months	7.77	7.77
4	Less: Security Deposit Opening Bal.	177.70	198.36
5	Total	(34.01)	(56.45)
6	Interest Rate *	8.88%	8.70%
7	Interest on working capital	-	-

S. No.	Particulars	Ensuing Year (Projections)		
		FY 2019-20	FY 2020-21	FY 2021-22
1	2	3	4	5
1	Two Months Receivable	249.49	256.25	267.02
2	O&M Expense - 1 month	11.78	12.70	13.72
3	Maintenance Spare @ 40% of R&M Exp - one month	0.41	0.45	0.49
4	Less : Amount held as Security Deposit	(231.44)	(254.79)	(279.31)
6	Total Working capital	30.24	14.61	1.92
7	Interest Rate *	10.15%	10.15%	10.15%
8	Interest on working capital	3.07	1.48	0.20

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Format 18B – PROVISIONS OF INTEREST ON SECURITY DEPOSITS FROM CONSUMERS

(Rs. Crs)

S. No.	Particulars	Previous Year (Provisional)	Current Year (Est.)	Ensuing Year (Projections)		
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	2	6	7	8	9	
1	Opening Security Deposit	177.70	198.36	220.06	242.83	266.75
2	Add: Deposits during the Year	20.66	21.69	22.78	23.92	25.11
3	Less: Deposits refunded	-	-	-	-	
4	Less: Deposits in form of BG/FDR		-	-		
5	Closing Security Deposit	198.36	220.06	242.83	266.75	291.86
6	Bank Rate	6.50%	8.70%	8.70%	8.70%	8.70%
7	Interest on Security Deposit *	12.22	18.20	20.14	22.17	24.30

Format 19 – INFORMATION REGARDING FOREIGN EXCHANGE RATE VARIATION (FERV)

S. No.	Particulars	Previous Year (Provisional)	Current Year (Provisional)	Ensuing Year (Projections)		
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2018-19
1	2	6	7	8	9	
1	Amount of liability provided					
2	Amount recovered					
3	Amount adjusted					


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Format 20 – NON-TARIFF INCOME

(Rs. Crs)

S. No.	Particulars	Previous Year (Provisional)	Current Year (Provisional)	Ensuing Year (Projections)		
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2018-19
1	2	6	7	8	9	
1	Meter/service rent					
2	Late payment surcharge					
3	UI Sales / Sales to Exchange					
4	Wheeling charges under open access					
5	Income from trading of Materials					
6	Income staff welfare activities					
7	Misc. Receipts/income			-	-	-
8	Total income	-	-	-	-	-
9	Add: Prior Period income					
10	Total Non-Tariff income	7.42	7.79	8.18	8.59	9.02

Format 21 – REVENUE FROM OTHER BUSINESS

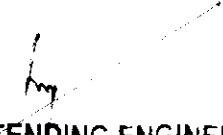
S. No.	Particulars	(Amount in Crores Rupees)				
		Provisional True up	APR	Ensuing Year (Projections)		
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
1	2	5	6	7	8	9
1	Total revenue from other business	NIL				
2	Income from other business to be considered for licensed business as per regulations					

Format 23 – WHOLESALE PRICE INDEX

S. No.	Period	WPI	Increase over previous year
1	Financial Year 2014-15	113.90	
2	Financial Year 2015-16	109.70	-3.69%
3	Financial Year 2016-17	111.60	1.73%
4	Financial Year 2017-18	114.90	2.96%
5	Average WPI of last three years		0.33%

Format 24 – EQUITY AND LOAN

S. No.	Period	Amount of equity (Rs. Crore) *	Amount of loan (Rs. Crore)	Ratio of equity & loan
1	2	3	4	5
4	As on March 31 of FY 2017-18	603.79	106.01	85 : 15
5	As on March 31 of FY 2018-19	681.43	107.61	86 : 14
6	As on March 31 of FY 2019-20	720.89	138.12	84 : 16
7	As on March 31 of FY 2020-21	762.85	200.72	79 : 21
8	As on March 31 of FY 2021-22	903.91	375.33	71 : 29


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Format 25 – ANNUAL REVENUE REQUIREMENT FOR FY 2017-18 (PROVISIONAL ACTUALS)

(Rs. Crs)

S. No.	Item of expense	Approved by the Commission	Provisional Actuals
1	2	5	6
1	Cost of fuel		
2	Cost of power purchase including RPO Provision to meet obligation of the previous years	1,134.92	1,237.19
3	Employee costs	97.22	93.33
4	Administration and General expenses	9.41	10.53
5	R&M expenses	22.02	10.11
6	Depreciation	40.04	36.43
7	Interest charges	18.46	17.22
8	Interest on working capital		-
9	Return on NFA /Equity	34.00	33.26
10	Provision for Bad Debt	-	-
11	Interest on Consumer Security Deposit	10.46	3.50
12	Total Revenue Requirement	1,366.53	1,441.58
13	Less: Non-Tariff Income	4.51	7.42
14	Net Revenue Requirement (12-13)	1,362.03	1,434.16
15	Revenue from Tariff *	1,211.84	1,216.42
16	Revenue Gap (14-15)	150.19	217.74
17	Revenue from Regulatory surcharge	48.47	48.54
18	Revenue from Open Access Charges	8.19	11.41
19	Power Purchase /Revenue adjusted from Rooftop Solar Adjusted in Revenue Bills of Consumers		-
19	Net Revenue Gap after Surcharge (16-17-18+19)	93.53	157.79
20	Energy sales (MU)	2,535.58	2,548.76
21	Average Cost of Supply (Rs/kWh)	5.37	5.63


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Format 25 – ANNUAL REVENUE REQUIREMENT FOR FY 2018-19 (REVISED ESTIMATES)

(Rs. Crs)

S. No.	Item of expense	Approved by the Commission	Revised by Licensee
1	2	4	5
1	Cost of fuel		
2	Cost of power purchase	1,125.64	1,166.42
3	Employee costs	104.42	101.62
4	Administration and General expenses	13.45	19.20
5	R&M Expenses	26.51	11.19
6	Depreciation	43.39	39.39
7	Interest charges	17.93	17.09
8	Interest on working capital		-
9	Return on NFA /Equity	36.86	35.97
10	Provision for Bad Debt		-
11	Interest on Consumer Security Deposit	11.06	5.00
12	Provision to meet arrears of interest on consumer security deposit		
13	Total Revenue Requirement	1,379.26	1,395.88
14	Less: Non-Tariff Income	4.51	7.79
15	Net Revenue Requirement (11-12)	1,374.75	1,388.09
16	Revenue from Tariff *	1,367.89	1,392.00
17	Revenue Gap (13-14)	6.86	(3.91)
18	Additional Surcharge	55.18	55.48
19	Revenue from Open Access	11.57	-
20	Net Revenue Gap after Surcharge (15-16)	(59.89)	(59.39)
21	Energy sales (MU)	2,606.31	2,597.73
22	Average Cost of Supply (Rs/kWh)	5.27	5.34


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**Format 25 – ANNUAL REVENUE REQUIREMENT FOR FY 2019-20 to FY 2021-22
(PROJECTIONS)**

(Rs. Crs)

S. No.	Item of expense	Proposed by licensee		
		FY 2019-20	FY 2020-21	FY 2021-22
1	2	3	4	5
1	Cost of fuel			
2	Cost of power purchase	1,275.12	1,294.10	1,319.96
3	Employee costs	110.64	120.47	131.16
4	R&M expenses	12.24	13.53	14.81
5	Administration and General expenses	18.47	18.42	18.64
6	Depreciation	13.97	17.17	24.89
7	Interest charges	12.75	18.53	34.65
8	interest on working capital	3.07	1.48	0.20
9	Return on NFA /Equity	38.76	40.21	42.53
10	Provision for Bad Debt	-	-	-
11	Interest on Consumer Security Deposit	20.14	22.17	24.30
12	Total Revenue Requirement	1,505.14	1,546.09	1,611.13
13	Less: Non-Tariff Income	8.18	8.59	9.02
14	Net Revenue Requirement (12-13)	1,496.96	1,537.50	1,602.11
15	Revenue from Existing Tariff *	1,417.75	1,451.23	1,487.77
16	Revenue Gap (14-15)	79.21	86.27	114.35
17	Additional Surcharge	141.43	144.78	148.43
18	Net Gap (16-17)	(62.22)	(58.51)	(34.09)
19	Energy sales (MU)	2,649.11	2,703.07	2,759.77
20	Average Cost of Supply (Rs/kWh)	5.65	5.69	5.81


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Format 25 A – TREATMENT OF REGULATORY ASSETS

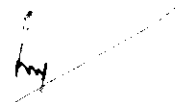
(Rs. Crs)

S. No.	Item of expense	Approved by Commission	Revised by Licensee
1	Consolidated Revenue Gap (16-17)	94.05	94.05
2	Revenue Gap (17-18) at existing tariff	93.53	157.79
3	Revenue Gap (18-19) at existing tariff	118.92	(59.39)
4	Revenue Gap (19-20) at proposed tariff		(62.22)
5	Revenue Gap (20-21) at proposed tariff		(58.51)
6	Revenue Gap (21-22) at proposed tariff		(34.09)

Format 25 B – BRIEF GAP SUMMARY

(Rs. Crs)

Particulars	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Opening Gap/(surplus)	94.05	265.67	225.16	178.47	131.90
Add: Gap/(surplus)	157.79	(59.39)	(62.22)	(58.51)	(34.09)
Closing Gap/(surplus)	251.84	206.28	162.94	119.96	97.81
Average Gap/(surplus)	172.94	235.97	194.05	149.21	114.85
Carrying Cost (@ 8%)	13.84	18.88	15.52	11.94	9.19
Final Closing Gap /(Surplus)	265.67	225.16	178.47	131.90	107.00


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Format 26 – REVENUE AT EXISTING TARIFF (PROVISIONAL ACTUALS FY 2017-18)

S. No.	Category of Consumer	No of Consumers	Energy Sale (MUs)	Contracted Maximum Demand (KW/kVA)	Tariff rate		Revenue (Rs Crore)				
					FC	EC	Demand Charges	Energy Charges	Total Billing	Surcharge	Total
1	2	3	4	5			6	7	10	11	12
1	Domestic & Cottage										
a	0 - 100	1,27,875	303.55	2,00,948	40.00	1.10	6.14	33.39	39.53	1.58	41.11
b	101 - 200	95,308	181.19	1,64,894	40.00	1.75	4.57	31.71	36.28	1.45	37.73
c	201 - 300	50,910	95.70	90,135	40.00	3.50	2.44	33.50	35.94	1.44	37.38
d	>300	51,752	142.84	74,229	40.00	4.60	2.48	65.71	68.19	2.73	70.92
e	OHOB	35,537	10.24	2,843	27.00	-	1.15		1.15		1.15
f	Total	3,61,382	733.52	5,33,049.00			16.79	164.30	181.09	7.20	188.29
2	Commercial										
a	0 - 100	21,943	57.12	23,818	100	4.70	2.63	26.85	29.48	1.18	30.66
b	101 - 250	8,941	48.52	25,009	100	5.60	1.07	27.17	28.24	1.13	29.37
c	> 250	23,078	110.77	70,264	100	6.25	2.77	69.23	72.00	2.88	74.88
d	Total	53,962	216.41	1,19,092.00			6.48	123.25	129.72	5.19	134.91
3	Agriculture										
a	Small farmers	960	8.05	6,237	9	-	0.07	-	0.07		0.07
b	Other farmers	5,980	49.56	38,417	27	-	1.38	-	1.38		1.38
c	Total	6,940	57.61	44,654			1.45	-	1.45	-	1.45
4	Public lighting	50,434	24.48	6,119	75.00	6.75	4.54	16.52	21.06	0.84	21.91
5	LT Industrial										
a	0 - 1000	6,478	148.02	99,869	86.00	5.10	0.67	75.49	76.16	3.05	79.20
b	> 1000						-	-	-		-
c	Water tank	138	37.59	25,365	100.00	5.90	0.02	22.18	22.20	0.89	23.08
d	Total	6,616	185.61				0.69	97.67	98.35	3.93	102.29
6	Temporary supply - LT&HT		8.48			9.75	-	8.27	8.27	0.33	8.60
7	Total LT	4,79,334	1,226.11	7,02,914.00			29.94	410.01	439.95	17.49	457.44
8	HT 1 Industrial & Commercial	453	897.34	2,37,553	250	5.25	67.87	481.11	548.98	21.96	570.94
9	HT 2 - Government & water tank	61	98.41	21,837	250	6.75	6.51	44.55	51.06	2.04	53.10
10	HT 3 - EHT	7	326.90	62,235	220	5.10	15.75	160.31	176.06	7.04	183.10
11	Total HT	521	1,322.65	3,21,625			90.13	685.97	776.10	31.04	807.14
12	Total	4,79,855	2,548.76	10,24,539			120.07	1,095.98	1,216.05	48.54	1,264.58

Format 26 – REVENUE AT EXISTING TARIFF (REVISED ESTIMATES FY 2018-19)

S. No.	Category of Consumer	No of Consumers	Energy Sale (MUs)	Contracted Maximum Demand (KW/kVA)	Tariff rate		Revenue (Rs Crore)				
					FC	EC	Demand Charges	Energy Charges	Total Billing	Surcharge	Total
1	2	3	4	5			6	7	10	11	12
1	Domestic & Cottage										
A	0 - 100	1,31,878	314.21		40.00	1.30	6.33	40.85	47.18	1.89	49.06
B	101 - 200	98,291	187.55		40.00	2.25	4.77	47.20	46.92	1.88	48.79
C	201 - 300	52,503	99.06		40.00	3.95	2.52	39.13	41.65	1.67	43.31
D	>300	53,372	147.85		40.00	5.10	2.56	77.64	80.20	3.21	83.41
E	OHOB	35,537	10.36		27.00		1.15		1.15		1.15
F	Total	3,71,581	759.03				17.28	199.81	217.09	8.64	225.73
2	Commercial										
A	0 - 100	22,424	59.65		120	5.15	3.23	30.72	33.95	1.36	35.31
B	101 - 250	9,137	50.93		120	6.15	1.32	31.32	32.64	1.31	33.94
C	> 250	23,584	115.68		120	6.85	3.40	79.24	82.64	3.31	85.94
D	Total	55,144	226.26				7.94	141.28	149.22	5.97	155.19
3	Agriculture										
A	Small farmers	960	8.05	6,237	10	-	0.07	-	0.07		0.07
B	Other farmers	6,013	49.72	38,541	45	-	2.22	-	2.22		2.22
C	Total	6,973	57.77	44,778			2.29	-	2.29	-	2.29
4	Public lighting	50,666	24.48		75.00	6.75	4.56	16.52	21.08	0.84	21.93
5	LT Industrial										
A	0 - 1000	6,586	148.02		100.00	5.60	0.79	82.89	83.68	3.35	87.03
B	> 1000						-	-	-		-
C	Water tank	139	37.59		120.00	6.40	0.02	24.06	24.08	0.96	25.04
D	Total	6,725	185.61				0.81	106.95	107.76	4.31	112.07
6	Temporary supply - LT&HT		9.33			9.75	-	9.10	9.10	0.36	9.46
7	Total LT	4,91,089	1,262.48				32.88	473.66	506.54	20.12	526.67
8	HT 1 Industrial	463	815.32	2,77,392	350	5.30	110.68	432.12	542.80	21.71	564.51
9	HT 1 Commercial		84.71	34,963	350	5.40	13.95	45.74	59.69	2.39	62.08
10	HT 2 - Others	64	108.25	26,610	450	6.50	8.62	70.36	78.98	3.16	82.14
11	HT 3 - EHT	6	326.97	81,560	420	5.00	39.05	163.49	202.54	8.10	210.64
12	Total HT	533	1,335	4,20,525			172.30	711.71	884.01	35.36	919.37
13	Total	4,91,622	2,597.73	4,20,525			205.18	1,185.37	1,390.56	55.48	1,446.04

Format 27 – REVENUE AT PROPOSED TARIFF (ENSUING YEAR FY 2019-20)

S. No.	Category of Consumer	No of Consumers	Energy Sale (MUs)	Contracted Maximum Demand (KW/kVA)	Tariff rate		Revenue (Rs Crore)				
					FC	EC	Demand Charges	Energy Charges	Total Billing	Surcharge	Total
1	2	3	4	5			6	7	10	11	12
1	Domestic & Cottage										
A	0 - 100	1,36,005	325.24		40.00	1.30	6.53	42.28	48.81	4.88	53.69
B	101 - 200	1,01,368	194.13		40.00	2.25	4.87	43.68	48.55	4.85	53.40
C	201 - 300	54,147	102.54		40.00	3.95	2.60	40.50	43.10	4.31	47.41
D	>300	55,042	153.04		40.00	5.10	2.64	80.28	82.92	8.29	91.22
E	OHOB	35,537	10.49		27.00	-	1.15		1.15		1.15
F	Total	3,82,099	785.44				17.78	206.75	224.53	22.34	246.87
2	Commercial										
A	0 - 100	22,914	62.36		120	5.15	3.30	32.12	35.42	3.54	38.96
B	101 - 250	9,337	53.25		120	6.15	1.34	32.75	34.09	3.41	37.50
C	> 250	24,100	120.94		120	6.85	3.47	82.84	86.31	8.63	94.94
D	Total	56,351	236.55				8.11	147.71	155.82	15.58	171.40
3	Agriculture										
A	Small farmers	960	8.05	6,237	10	-	0.07	-	0.07		0.07
B	Other farmers	6,045	49.87	38,658	45	-	2.22	-	2.22		2.22
C	Total	7,005	57.92	44,894			2.30	-	2.30	-	2.30
4	Public lighting	50,899	24.48	-	75.00	6.75	4.58	16.52	21.10	2.11	23.22
5	LT Industrial										
A	0 - 1000	6,642	148.02		100.00	5.60	0.80	82.89	83.69	8.37	92.06
B	> 1000						-	-	-		-
C	Water tank	140	37.59		120.00	6.40	0.02	24.06	24.08	2.41	26.49
D	Total	6,782	185.61				0.82	106.95	107.77	10.78	118.54
6	Temporary supply - LT&HT		10.27			9.75	-	10.01	10.01	1.00	11.01
7	Total LT	5,03,136	1,300.27				33.60	487.94	521.54	51.81	573.34
8	HT 1 Industrial	474	817.77	2,90,895	350	5.30	109.96	433.42	543.38	54.34	597.71
9	HT 1 Commercial		84.96	36,665	350	5.40	13.86	45.88	59.74	5.97	65.71
10	HT 2 - Others	68	119.08	28,610	450	6.50	13.13	77.40	90.53	9.05	99.59
11	HT 3 - EHT	7	327.03	81,560	420	5.00	39.05	163.52	202.57	20.26	222.82
12	Total HT	549	1,348.84	4,37,730			176.00	720.21	896.21	89.62	985.84
13	Total	5,03,685	2,649.11	4,37,730			209.60	1,208.15	1,417.75	141.43	1,559.18

Format 27 – REVENUE AT PROPOSED TARIFF (ENSUING YEAR FY 2020-21)

S. No.	Category of Consumer	No of Consumers	Energy Sale (MUs)	Contracted Maximum Demand (KW/KVA)	Tariff rate		Revenue (Rs Crore)				
					FC	EC	Demand Charges	Energy Charges	Total Billing	Surcharge	Total
1	2	3	4	5			6	7	10	11	12
1	Domestic & Cottage										
A	0 - 100	1,40,262	336.65		40.00	1.30	6.73	43.76	50.50	5.05	55.55
B	101 - 200	1,04,541	200.95		40.00	2.25	5.02	45.21	50.23	5.02	55.25
C	201 - 300	55,842	106.14		40.00	3.95	2.68	41.92	44.60	4.46	49.06
D	>300	56,765	158.42		40.00	5.10	2.72	83.02	85.75	8.57	94.32
E	OHOB	35,537	10.61		27.00	-	1.15		1.15		1.15
F	Total	3,92,947	812.76				18.31	213.92	232.23	23.11	255.34
2	Commercial										
A	0 - 100	23,417	65.20		120	5.15	3.37	33.58	36.95	3.70	40.65
B	101 - 250	9,541	55.67		120	6.15	1.37	34.24	35.61	3.56	39.17
C	> 250	24,628	126.44		120	6.85	3.55	86.61	90.16	9.02	99.17
D	Total	57,586	247.31				8.29	154.43	162.72	16.27	178.99
3	Agriculture										
A	Small farmers	960	8.10	6,278	10	-	0.08	-	0.08		0.08
B	Other farmers	6,078	49.98	38,740	45	-	2.23	-	2.23		2.23
C	Total	7,038	58.08	44,654			2.30	-	2.30	-	2.30
4	Public lighting	51,133	24.48		75.00	6.75	4.60	16.52	21.13	2.11	23.24
5	LT Industrial										
A	0 - 1000	6,697	148.02		100.00	5.60	0.80	82.89	83.69	8.37	92.06
B	> 1000						-	-	-		-
C	Water tank	142	37.59		120.00	6.40	0.02	24.06	24.08	2.41	26.49
D	Total	6,839	185.61				0.82	106.95	107.77	10.78	118.55
6	Temporary supply - LT&HT		11.31			9.75	-	11.03	11.03	1.10	12.13
7	Total LT	5,15,543	1,339.55				34.33	502.85	537.18	53.37	590.55
8	HT 1 Industrial	485	820.22	3,10,379	350	5.30	117.32	434.72	552.04	55.20	607.25
	HT 1 Commercial		85.22	39,121	350	5.30	14.79	45.17	59.95	6.00	65.95
9	HT 2 - Others	72	130.98	31,200	450	6.50	14.32	85.14	99.46	9.95	109.40
10	HT 3 - EHT	7	327.10	81,560	420	5.00	39.05	163.55	202.60	20.26	222.86
11	Total HT	564	1,363.52	4,62,260			185.48	728.57	914.05	91.41	1,005.46
12	Total	5,16,107	2,703.07	4,62,260			219.81	1,231.42	1,451.23	144.78	1,596.01

Format 27 – REVENUE AT PROPOSED TARIFF (ENSUING YEAR FY 2021-22)

S. No.	Category of Consumer	No of Consumers	Energy Sale (MUs)	Contracted Maximum Demand (KW/kVA)	Tariff rate		Revenue (Rs Crore)				
					FC	EC	Demand Charges	Energy Charges	Total Billing	Surcharge	Total
1	2	3	4	5			6	7	10	11	12
1	Domestic & Cottage										
a	0 - 100	1,44,652	348.46		40.00	1.30	6.94	45.30	52.24	5.22	57.47
b	101 - 200	1,07,812	208.00		40.00	2.25	5.17	46.80	51.97	5.20	57.17
c	201 - 300	57,589	109.86		40.00	3.95	2.76	43.39	46.16	4.62	50.77
d	>300	58,542	163.98		40.00	5.10	2.81	85.86	88.67	8.87	97.53
e	OHOB	35,537	10.74		27.00	-	1.15		1.15		1.15
f	Total	4,04,133	841.04				18.84	221.35	240.20	23.90	264.10
2	Commercial										
a	0 - 100	23,929	68.17		120	5.15	3.45	35.11	38.55	3.86	42.41
b	101 - 250	9,750	58.20		120	6.15	1.40	35.80	37.20	3.72	40.92
c	> 250	25,167	132.20		120	6.85	3.62	90.55	94.18	9.42	103.60
d	Total	58,847	258.57				8.47	161.46	169.93	16.99	186.92
3	Agriculture										
a	Small farmers	978	8.10	6,278	10	-	0.08	-	0.08		0.08
b	Other farmers	6,093	50.13	38,376	45	-	2.21	-	2.21		2.21
c	Total	7,071	58.23	44,654			2.28	-	2.28	-	2.28
4	Public lighting	51,368	24.48	-	75.00	6.75	4.62	16.52	21.15	2.11	23.26
5	LT Industrial										
a	0 - 1000	6,754	148.02		100.00	5.60	0.81	82.89	83.70	8.37	92.07
b	> 1000						-	-	-		-
c	Water tank	144	37.59		120.00	6.40	0.02	24.06	24.08	2.41	26.49
d	Total	6,898	185.61				0.83	106.95	107.78	10.78	118.56
6	Temporary supply - LT&HT		12.44			9.75	-	12.13	12.13	1.21	13.34
7	Total LT	5,28,317	1,380.37				35.06	518.41	553.47	55.00	608.47
8	HT 1 Industrial	496	822.69	3,29,029	350	5.30	124.37	436.02	560.40	56.04	616.44
	HT 1 Commercial		85.47	41,471	350	5.40	15.68	46.16	61.83	6.18	68.02
9	HT 2 - Others	76	144.08	34,400	450	6.50	15.79	93.65	109.44	10.94	120.39
10	HT 3 - EHT	7	327.16	81,560	420	5.00	39.05	163.58	202.63	20.26	222.89
11	Total HT	579	1,379	4,86,460			194.89	739.41	934.30	93.43	1,027.73
12	Total	5,28,896	2,759.77	4,86,460			229.95	1,257.82	1,487.77	148.43	1,636.20

SUPERINTENDING ENGINEER
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Electricity Department
Puducherry

ANNEXURE – 2: DETAILS OF ARREARS (Rs. Crs)

STATEMENT SHOWING THE DETAILS OF ARREARS DUE TO THE VARIOUS POWER SUPPLYING AGENCIES 2017-18 & 2018-19

2017-18			
Sl.No.	Invoice No. with date	Details of the claim	Amount
NLC INDIA LIMITED			
1	Debit_NoteNo.340/NLCIL/Commercial/2016/17, dt.27.03.2017	TPS II tariff arrear from April-2014 to February -2017	698767815
2	Credit_NoteNo.340/NLCIL/Commercial/2016/17, dt.25.03.2017	Refund of TPS I ExpTariff arrears from April-2014 to Sept. - 2016	-91170066
3	Debit_NoteNo.349/NLCIL/Commercial/2016/17, dt.28.03.2017	TPS I Exp. tariff arrear from April-2014 to February -2017	126773618
4	Debit_NoteNo.357/NLCIL/Commercial/2016/17, dt.28.03.2017	TS II Exp. tariff arrear from April-2014 to February -2017	30773847
5	Debit_NoteNo.186017180007, dt.04.08.2017	TS II Exp. tariff arrear from April-2015 to June - 2017	41305985
		Sub Total (I)	806451199
NLC TAMILNADU POWER LIMITED (NTPL)			
1	Debit_NoteNo.013017180003 dt.29.08.2017	Tariff arrear from June-2015 to June -2017	27215257
2	Debit_NoteNo.013017180003 dt.31.10.2017	Tariff arrear from June-2015 to June -2017 (Revision in PAF)	6175126
3	Credit_NoteNo.013017180003 dt.06.01.2018	Tariff arrear from June-2015 to June -2017 (Revision in PAF)	-4727926
		Sub Total (II)	28662457
TANGEDCO NAGAPATINAM			
1	Letter No. CFC/REV/FC/REV/DFC/AAO/HT/F.Pondicherry/D.270/18, dt. 23/04/2018	Supplementary bill towards revision in Tariff from April-2014 to October-2017	530647422
		Sub Total (V)	530647422
2018-19			
MADRAS ATOMIC POWER STATION			
1	MAPS/F&A/COST/EC/PEB/2017-2018, dt. 28/03/2018	Tariff arrear from April-2017 to February - 2018	26231538
		Sub Total (III)	26231538
KAIGA GENERATING STATION			
1	No.SUPPBILLFEB18EB04,dt.24/03/2018	Supplementary bill towards revision in Tariff from April-2017 to February-2018	126474412
		Sub Total (IV)	126474412


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