

**True up for FY 2020-21,**

**Review of FY 2021-22,**

**AND**

**ARR for Multi Year Tariff Determination for  
Control Period FY 2022-23 to FY 2024-25**

**And**

**Tariff Revision Proposal for FY 2022-23**

**Main Text & Formats (Volume I)**

**Submitted to**

**Joint Electricity Regulatory Commission  
Gurgaon**

**By:**

**Electricity Department of Daman & Diu  
(Daman)**

**December 2021**



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

Filing No.....

Case No.....

IN THE MATTER OF:      Filing of Aggregate Revenue Requirement (ARR) for  
Multi Year Tariff Determination for the Control Period  
FY 2022-23 to FY 2024-25 under Section 62 and 86 of the  
Electricity Act, 2003

AND

IN THE MATTER OF      Electricity Department of Daman & Diu  
(hereinafter referred to as "EDDD" or "The Petitioner")  
Daman - Applicant

The Applicant respectfully submits as under: -

1. The Electricity Department of Daman & Diu ("EDDD") is a statutory body engaged in the electricity transmission and distribution in Daman & Diu. Consequent to the enactment of the Electricity Act, 2003 (hereinafter referred to as the "Act"), the process of approval of proposed tariffs is vested with the State Commission.
2. This is a Petition indicating the True up Petition for FY 2020-21, Review for the FY 2021-22, Aggregate Revenue Requirement (ARR) for Multi Year Tariff determination for the Control Period FY 2022-23 to FY 2024-25 and Tariff Revision Proposal of EDDD for the FY 22-23 (Financial Year 2022-23).



## TABLE OF CONTENTS

CHAPTER I: INTRODUCTION .....	10
1.1 EDDD PROFILE.....	10
1.2 MULTI YEAR TARIFF DISTRIBUTION TARIFF REGULATIONS, 2021.....	11
1.2.1 UNCONTROLLABLE PARAMETERS INCLUDE .....	12
1.2.2 CONTROLLABLE PARAMETERS INCLUDE.....	12
1.3 CONTENTS OF THIS PETITION .....	13
CHAPTER 2: TRUE UP FOR FY 2020-21 .....	14
2.1 PRINCIPLES FOR TRUE UP FOR FY 2020-21 .....	14
2.2 ENERGY SALES FOR FY 2020-21.....	14
2.3 DISTRIBUTION LOSS FOR FY 2020-21 .....	15
2.4 ENERGY REQUIREMENT AND ENERGY BALANCE.....	16
2.5 POWER PURCHASE COST .....	17
2.6 OPERATION AND MAINTENANCE EXPENSES .....	18
2.7 CAPITAL EXPENDITURE & CAPITALIZATION .....	19
2.8 DEPRECIATION .....	20
2.9 INTEREST AND FINANCE CHARGES .....	20
2.10 INTEREST ON WORKING CAPITAL.....	21
2.11 RETURN ON EQUITY.....	22
2.12 INTEREST ON CONSUMER SECURITY DEPOSITS.....	22
2.13 NON - TARIFF INCOME .....	22
2.14 INCENTIVE/DISINCENTIVE TOWARDS OVER/UNDER ACHIEVEMENT OF NORMS OF DISTRIBUTION LOSSES.....	23
2.15 AGGREGATE REVENUE REQUIREMENT FOR FY 20-21 .....	24
2.16 REVENUE FOR FY 20-21 .....	24
2.17 REVENUE (GAP) / SURPLUS FOR FY 20-21.....	25
CHAPTER 3: REVIEW FOR THE FY 2021-22 .....	26
3.1 ENERGY SALES .....	26
3.2 DISTRIBUTION LOSS FOR FY 21-22 .....	27
3.3 ENERGY REQUIREMENT OF THE SYSTEM.....	27
3.4 ENERGY AVAILABILITY AND POWER PURCHASE COST.....	28
3.5 OPERATION & MAINTENANCE COSTS .....	32
3.6 CAPITAL EXPENDITURE PLAN.....	32
3.7 GROSS FIXED ASSETS .....	32
3.8 DEPRECIATION .....	33
3.9 INTEREST & FINANCIAL COSTS .....	34





3.9.1	INTEREST ON LONG-TERM / CAPITAL LOANS.....	34
3.9.2	INTEREST ON WORKING CAPITAL BORROWINGS.....	35
3.10	RETURN ON EQUITY.....	36
3.11	INTEREST ON CONSUMER SECURITY DEPOSITS.....	37
3.12	NON-TARIFF & OTHER INCOME.....	37
3.13	AGGREGATE REVENUE REQUIREMENT.....	38
3.14	REVENUE FROM EXISTING TARIFF.....	38
3.15	COVERAGE OF REVENUE GAP.....	39
CHAPTER 4: ARR FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25		40
4.1	LOAD GROWTH.....	40
4.2	CONSUMER GROWTH .....	41
4.3	ENERGY SALES GROWTH.....	42
4.4	DISTRIBUTION LOSS REDUCTION .....	44
4.5	ENERGY REQUIREMENT OF THE SYSTEM.....	45
4.6	ENERGY AVAILABILITY .....	46
4.6.1	POWER PURCHASE.....	47
4.6.2	ENERGY REQUIREMENT & AVAILABILITY .....	51
4.6.3	POWER PURCHASE COST.....	52
4.6.4	TRANSMISSION AND OTHER CHARGES .....	53
4.7	OPERATION & MAINTENANCE COSTS .....	54
4.7.1	EMPLOYEE EXPENSE .....	54
4.7.2	REPAIRS & MAINTENANCE EXPENSE .....	56
4.7.3	ADMINISTRATION & GENERAL EXPENSE.....	57
4.7.4	TOTAL OPERATION AND MAINTENANCE EXPENSE .....	58
4.8	CAPITAL EXPENDITURE PLAN.....	58
4.9	GROSS FIXED ASSETS .....	60
4.10	DEPRECIATION .....	61
4.11	INTEREST & FINANCE COSTS .....	61
4.11.1	INTEREST ON LONG-TERM / CAPITAL LOANS.....	61
4.11.2	INTEREST ON WORKING CAPITAL BORROWINGS .....	62
4.12	RETURN ON EQUITY.....	64
4.13	INTEREST ON CONSUMER SECURITY DEPOSITS.....	65
4.14	NON-TARIFF & OTHER INCOME.....	65
4.15	AGGREGATE REVENUE REQUIREMENT.....	66
4.16	REVENUE AT EXISTING TARIFF .....	66
4.17	COVERAGE OF REVENUE GAP.....	67
4.18	AVERAGE COST OF SUPPLY.....	68
4.19	TARIFF PROPOSAL FOR FY 22-23.....	69



*[Handwritten signature]*



CHAPTER 5: DETERMINATION OF OPEN ACCESS CHARGES .....	71
4.1 ALLOCATION MATRIX .....	71
4.2 VOLTAGE WISE WHEELING CHARGES .....	71
4.3 CROSS SUBSIDY SURCHARGE.....	72
4.4 ADDITIONAL SURCHARGE .....	74
4.5 APPLICATION AND AGREEMENT FEES.....	74
CHAPTER 6: DIRECTIVES .....	75
TARIFF SCHEDULE .....	79
PRAYER.....	90



**LIST OF TABLES**

TABLE 1: CONSUMER CATEGORY WISE ENERGY SALES FOR FY 2020-21 .....	14
TABLE 2: DISTRIBUTION LOSS.....	16
TABLE 3: APPROVED ENERGY BALANCE FOR FY 2020-21 .....	16
TABLE 4: POWER PURCHASE COST FOR FY 2020-21 .....	17
TABLE 5: OPERATION & MAINTENANCE EXPENSES FOR FY 2020-21 .....	19
TABLE 6: CAPITAL EXPENDITURE AND CAPITALIZATION FOR FY 20-21.....	19
<b>TABLE 7: DEPRECIATION FOR FY 2020-21 .....</b>	<b>20</b>
TABLE 8: INTEREST ON LOAN FOR FY 20-21.....	21
TABLE 9: INTEREST ON WORKING CAPITAL FOR FY 2020-21.....	21
TABLE 10: RETURN ON EQUITY FOR FY 20-21 .....	22
TABLE 11: INTEREST ON CONSUMER SECURITY DEPOSIT FOR FY 20-21.....	22
TABLE 12: NON TARIFF INCOME FOR FY 20-21.....	23
TABLE 13: INCENTIVE DUE TO OVER-ACHIEVEMENT OF INTRA-STATE DISTRIBUTION LOSS TARGET .....	23
TABLE 14: AGGREGATE REVENUE REQUIREMENT FOR FY 20-21.....	24
<b>TABLE 15: REVENUE FOR FY 20-21 .....</b>	<b>24</b>
TABLE 16: REVENUE (GAP)/SURPLUS FOR FY 20-21 .....	25
TABLE 17: CATEGORY WISE SALES FOR FY 21-22 (REVISED ESTIMATE).....	27
TABLE 18: DISTRIBUTION LOSSES FOR FY 21-22.....	27
TABLE 19: ENERGY REQUIREMENT OF THE SYSTEM.....	28
TABLE 20: ENERGY ALLOCATION FROM CENTRAL GENERATING STATIONS .....	29
TABLE 21: REVISED ESTIMATED POWER PURCHASE COST FOR FY 21-22.....	30
TABLE 22: O&M EXPENSE FOR FY 21-22.....	32
TABLE 23: CAPITAL EXPENDITURE & CAPITALIZATION FOR FY 21-22 .....	32
TABLE 24: OPENING AND CLOSING GFA FOR FY 21-22 .....	33
<b>TABLE 25: DEPRECIATION RATE SPECIFIED IN THE MYT REGULATIONS, 2018.....</b>	<b>33</b>
TABLE 26: DEPRECIATION FOR FY 21-22.....	34
TABLE 27: INTEREST ON LONG-TERM/CAPITAL LOANS FOR FY 21-22.....	34
TABLE 28: INTEREST ON WORKING CAPITAL FOR FY 21-22.....	35
TABLE 29: RETURN ON EQUITY FOR FY 21-22.....	36
TABLE 30: INTEREST ON CONSUMER SECURITY DEPOSIT FOR FY 21-22.....	37
TABLE 31: NON-TARIFF INCOME FOR FY 21-22 .....	37
TABLE 32: AGGREGATE REVENUE REQUIREMENT FOR FY 21-22.....	38
TABLE 33: REVENUE FROM SALE OF POWER AT EXISTING TARIFF FOR FY 21-22 .....	39
TABLE 34: REVENUE GAP/SURPLUS FOR FY 21-22 .....	39
TABLE 35: PAST YEAR'S LOAD GROWTH.....	41
TABLE 36: PROJECTED LOAD GROWTH DURING FY 2021-22 AND MYT CONTROL PERIOD.....	41
TABLE 37: PAST YEAR'S CONSUMER GROWTH .....	42
TABLE 38: PROJECTED CONSUMER GROWTH DURING THE FY 2021-22 MYT CONTROL PERIOD.....	42
TABLE 39: PAST YEARS' ENERGY SALES GROWTH.....	43
TABLE 40: PROJECTED CATEGORY WISE ENERGY SALES FOR FY 2021-22 AND MYT CONTROL PERIOD.....	44
TABLE 41: PROPOSED DISTRIBUTION LOSS FOR FY 2021-22 AND THE MYT CONTROL PERIOD.....	45
TABLE 42: ENERGY REQUIREMENT OF THE SYSTEM.....	45
TABLE 43: ENERGY ALLOCATION FROM CENTRAL GENERATING STATIONS .....	47





TABLE 44: SUMMARY OF RENEWABLE PURCHASE OBLIGATION FOR THE FY 2021-22 AND THE MYT CONTROL PERIOD.....	49
TABLE 45: POWER PURCHASE QUANTUM.....	50
TABLE 46: ENERGY BALANCE .....	51
TABLE 47: POWER PURCHASE COST .....	52
TABLE 48: TOTAL POWER PURCHASE COST FOR THE FY 2021-22 AND MYT CONTROL PERIOD.....	54
TABLE 49: EMPLOYEE EXPENSES .....	55
TABLE 50: REPAIRS & MAINTENANCE EXPENSE.....	56
TABLE 51: A&G EXPENSE.....	58
TABLE 52: TOTAL O&M EXPENSE.....	58
TABLE 53: CAPITAL EXPENDITURE FOR THE MYT CONTROL PERIOD.....	59
TABLE 54: CAPITAL EXPENDITURE & CAPITALIZATION FOR THE MYT CONTROL PERIOD..	60
TABLE 55: OPENING AND CLOSING GFA FOR THE FY 2021-22 AND THE MYT CONTROL PERIOD.....	60
TABLE 56: DEPRECIATION .....	61
TABLE 57: TOTAL INTEREST ON LONG-TERM LOANS.....	62
TABLE 58: INTEREST ON WORKING CAPITAL FOR THE MYT CONTROL PERIOD.....	63
TABLE 59: PROPOSED RETURN ON EQUITY .....	64
TABLE 60: INTEREST ON CONSUMER SECURITY DEPOSIT .....	65
TABLE 61: NON-TARIFF INCOME.....	66
TABLE 62: AGGREGATE REVENUE REQUIREMENT .....	66
TABLE 63: REVENUE FROM SALE OF POWER AT EXISTING TARIFF.....	67
TABLE 64: REVENUE GAP FOR FY 2022-23 .....	67
TABLE 65: AVERAGE COST OF SUPPLY & REVENUE REALIZATION .....	68
TABLE 66: PROPOSED TARIFF STRUCTURE FOR FY 22-23 .....	69
TABLE 67: ALLOCATION OF ARR BETWEEN WHEELING AND RETAIL SUPPLY.....	71
TABLE 68: PARAMETERS ASSUMED FOR VOLTAGE WISE ALLOCATION OF WHEELING CHARGES.....	72
TABLE 69: WHEELING CHARGES PROPOSED FOR FY 2022-23.....	72
TABLE 70: ENERGY INPUT AT EACH VOLTAGE LEVEL (MU) .....	72
TABLE 71: PARAMETERS USED FOR ALLOCATION OF FIXED COSTS .....	73
TABLE 72: VOLTAGE WISE COST OF SUPPLY (VCOS).....	73
TABLE 73: PROPOSED CROSS SUBSIDY SURCHARGE FOR FY 2022-23 .....	74
TABLE 74: ADDITIONAL SURCHARGE FOR THE FY 2022-23 .....	74





ACRONYM	DEFINITION
A&G Expenses	Administrative & General Expenses
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
Ckt. Km / ckm	Circuit Kilometres
EA 2003	Electricity Act 2003
G,T and D	Generation, Transmission and Distribution
GFA	Gross Fixed Assets
GoI	Government of India
IPPs	Independent Power Producers
JERC	Joint Electricity Regulatory Commission
EDDD	Electricity Department of Daman & Diu
MU	Million Units
MYT	Multi-Year Tariff
O&M	Operations and Maintenance
PGCIL	Power Grid Corporation of India Limited
R&M Expenses	Repair & Maintenance Expenses
RoE	Return on Equity
T&D	Transmission and Distribution
S/S	Sub Station



**Notes:**

**In this Petition:**

All currency figures used in this Petition, unless specifically stated otherwise, are in Rs. Crore and Million Units.

This petition contains the Main Text of the Petition and Format (Volume I) and Annexure (Volume II).



## Chapter I: Introduction

### 1.1 EDDD Profile

Daman and Diu is part of the Union Territory of Dadra and Nagar Haveli and Daman and Diu in India. Daman District comprises of an area of 72 sq. km whereas Diu District comprises of an area of 40 sq. km. The total population of Daman & Diu as per 2011 census was 242,911 with population density being 2400 persons per sq. km.

The Electricity Department of Daman & Diu (EDDD) is responsible for supply of uninterrupted & quality power to all categories of consumers in Daman & Diu at the most economical rates. The (EDDD) is engaged in the procurement, transmission and distribution of electricity to the various consumer categories in the Union Territory of Daman and Diu. It does not have its own power generation station and completely rely on the Central Sector Generating Stations (CSGS) in Western Region to meet its energy demand. EDDD also has some allocation from Eastern Region Central Generating Stations.

The total installed solar capacity in the UT of Daman and Diu is 14.363 MW out of which 10 MW is ground mounted and the remaining 4.363 MW is solar rooftop plants. Further, as per the renewable energy Policy, 2017 all the HT/EHT consumers were directed to install solar rooftop plants at 5% of the contrast demand. Hence, as of now a total of 25.90 MW of solar rooftop plants have been installed by HT/EHT consumers.

The present transmission and distribution system of EDDD consists of 32.60 circuit kms of 220 kV Double Circuit (D/C) lines, 88.70 kms of 66kV lines, 447.62 circuit kms of 11kV lines O/H as well as U/G lines, 791.71 circuit kms of LT OH & U/G lines along with 926 transformers. Presently, there are 124 no. 11 kV feeders and 6 no. 66 kV feeders in the network of Daman & Diu.

The key duties being discharged by Daman & Diu Electricity Department are:

- Laying and operating of such electric line, sub-station and electrical plant that is primarily maintained for the purpose of distributing electricity in the area of supply of 'Daman & Diu Electricity Department', notwithstanding that such line, sub-station or electrical plant are high pressure cables or overhead lines or associated with such high pressure cables or overhead lines; or used incidentally for the purpose of transmitting electricity for others, in accordance with Electricity Act. 2003 or the Rules framed there under.
- Operating and maintaining sub-stations and dedicated transmission lines connected there with as per the provisions of the Act and the Rules framed there under.





- Arranging, in-coordination with the Generating Company(ies) operating in or outside the State, for the supply of electricity required within the State and for the distribution of the same in the most economical and efficient manner;
- Supplying electricity, as soon as practicable to any person requiring such supply, within its competency to do so under the said Act;
- Preparing and carrying out schemes for distribution and generally for promoting the use of electricity within the State.

The present power allocation of Daman & Diu is approximately 428.67 MW (376.25 MW at peak hours and 484.75 MW at off peak hours) from various generating stations including 70 MW from NTPC-SAIL plant located at Bhilai and 38 MW from Ratnagiri Gas and Power Private Limited (RGPP). At present, Daman gets power at 220/66 KV Magarwada substation and 220/66 KV Ringanwada substation. The 220/66 KV Magarwada substation is getting power from 220 KV (D/C) Ambethi-Magarwada line and from 220 KV (D/C) Magarwada (PGCIL) Magarawada, Daman. The 220/66 KV Ringanwada substation is getting power from 220 KV (D/C) Magarwada (PGCIL) Magarawada, Daman. Diu gets power from 66 kV Una substation through 66 kV double circuit line emanating from 220 /66 kV Kansari substation of GETCO.

The current demand is primarily dependent on the HT and LT Industrial consumers contributing approx. 91% of the total sales in FY 20-21.

Considering the increase in demand from the large industries, the demand is likely to reach to 360-370 MW by FY 2022-23. In view of the power demand in future, EDDD had proposed a number of schemes to be implemented during the coming years for strengthening and augmentation of the transmission and distribution system in the territory. EDDD is also undertaking efforts to get higher allocation from the Central Generating Stations. The EDDD is undertaking all necessary actions to tie-up for long-term power purchase for meeting the deficit in the UT of Daman and Diu.

## 1.2 Multi Year Tariff Distribution Tariff Regulations, 2021

EDDD's tariff determination is now governed by "Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021, hereinafter referred to as "MYT Regulations". The MYT Regulations, 2021 provide a framework for calculating tariffs on a cost-plus basis initially for a period of three years and allow the licensee to recover operational expenses including depreciation, interest on working capital and debt, and return on equity amongst others. The MYT Regulations, 2021 segregate the items impacting tariffs into controllable and uncontrollable factors. Items that are



uncontrollable are passed through to the consumers. Further, the MYT Regulations, 2018 identifies the uncontrollable and controllable parameters as follows:

**1.2.1 Uncontrollable Parameters include**

- 1 Force Majeure events;
- 2 Change in Law, judicial pronouncements and Orders of the Central Government, State Government or Commission;
- 3 Variation in the number or mix of Consumers or quantities of electricity supplied to Consumers;
- 4 Transmission loss;
- 5 Variation in the cost of power purchase due to variation in the rate of power purchase from approved sources, subject to clauses in the power purchase agreement or arrangement approved by the Commission;
- 6 Variation in fuel cost;
- 7 Change in power purchase mix;
- 8 Inflation;
- 9 Transmission Charges for a Distribution Licensee;
- 10 Variation in market interest rates for long-term loans;
- 11 Employee expenses limited to one time payment owing requirements of a pay commission and terminal liability of employees;
- 12 Taxes and Statutory levies;
- 13 Taxes on income;
- 14 Income from the realisation of bad debts written off;

**1.2.2 Controllable Parameters include**

- 1 Variations in capitalisation on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;
- 2 Variation in Interest and Finance Charges, Return on Equity, and Depreciation on account of variation in capitalisation, as specified in clause (a) above;
- 3 Variations in technical and commercial losses of Distribution Licensee;
- 4 Availability of transmission system;
- 5 Variations in performance parameters;



- 6 Failure to meet the standards specified in the Joint Electricity Regulatory Commission for the State of Goa & UTs (Standard of Performance for Distribution Licensees) Regulation, 2015, as amended from time to time;
- 7 Variations in labour productivity;
- 8 Variation in O&M Expenses, except to the extent of inflation;
- 9 Bad debts written off;

### **1.3 Contents of this Petition**

This Petition covers the truing up for FY 20-21, revised estimates for FY 21-22 and the basis, assumptions and projections of individual elements constituting the determination of ARR for the MYT Control Period FY 2022-23 to FY 2024-25. The Joint Electricity Regulatory Commission for the state of Goa and union territories (JERC) had issued the first Tariff Order for Electricity Department of Daman & Diu (EDDD) on 1<sup>st</sup> November 2010 and subsequently the second, third, fourth, fifth, sixth, seventh, eighth, ninth, tenth and eleventh Tariff order for FY 11-12, FY 2012-13, FY 2013-14, FY 2014-15, FY 2015-16, MYT Control Period FY 2016-17 to FY 2018-19, FY 2017-18, FY 2018-19, MYT Control Period FY 2019-20 to FY 2021-22, FY 2020-21 and FY 2021-22 for EDDD were issued on 3<sup>rd</sup> October, 2011, 25<sup>th</sup> August, 2012, 22<sup>nd</sup> March, 2013, 1<sup>st</sup> May, 201, 31<sup>st</sup> March, 2015, 6<sup>th</sup> April, 2016, 29<sup>th</sup> May, 2017, 23<sup>rd</sup> March, 2018, 20<sup>th</sup> May, 2019, 18<sup>th</sup> May, 2020 and 23<sup>rd</sup> March, 2021 respectively. The Commission in its Tariff Order for the FY 2021-22 has approved the ARR for the FY 2021-22 based on the actual cost for FY 19-20 and estimated expenses for FY 20-21.





## Chapter 2: True Up for FY 2020-21

### 2.1 Principles for True Up for FY 2020-21

As per JERC MYT Regulations, 2018, the Hon'ble Commission shall undertake the True Up of licensee for FY 2020-21 based on the comparison of the actual performance of the past year with the approved estimates for such year.

In line with the provisions of JERC MYT Regulations, EDDD is filing its True Up for the year FY 2020-21. Information provided in the True Up for FY 2020-21 is based on the Annual Accounts and principles adopted by the Hon'ble Commission in its previous orders on Interest on Term Loan, Return on Equity, Interest on Working Capital and Depreciation. This actual performance has been compared with the approved parameters as per the order dated 18<sup>th</sup> May, 2020 and 23<sup>rd</sup> March, 2021 for the FY 20-21.

Accordingly, revised Aggregate Revenue Requirement, revenue and gap for FY 20-21 are given in the following paragraphs of this chapter.

### 2.2 Energy Sales for FY 2020-21

The actual energy sale for FY 2020-21 has been shown below along with approved sales by Hon'ble Commission vide Tariff Order dated 18<sup>th</sup> May, 2020 and 23<sup>d</sup> March, 2021. The actual energy sales for FY 2020-21 are as under:

Table 1: Consumer category wise energy sales for FY 2020-21

Particulars	(MU)		
	FY 20-21 Approved (18th May, 2020)	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
Domestic	165.80	139.50	139.73
LIG/ Kutir Jyoti	0.00	0.00	0.00
Commercial	59.19	41.90	41.77
Agriculture	5.12	3.61	3.40
LT Industry	205.19	178.06	184.53
HT/EHT Industry	2239.12	1712.71	1,749.48
Public Lighting	6.66	6.06	5.53
Public Water Works	3.03	2.61	2.46
Temp. Supply	0.00	0.00	0.00
<b>Total Sales</b>	<b>2,684.11</b>	<b>2,084.45</b>	<b>2,126.89</b>

\*LIG sales is included in the Domestic category



It can be observed from the above that there is a slight variation in the actual energy sold as compared to the energy sales approved by the Commission vide the Tariff Order dated 23<sup>rd</sup> March, 2021. The reasons attributable for the same are:

- The actual sales of the HT category for the FY 2020-21 was 1749.48 MUs as compared to 1712.71 MUs approved by the Hon'ble Commission in its Tariff Order dated 18<sup>th</sup> May, 2020.
- The actual sales of the LT category for the FY 2020-21 was 184.53 MUs as compared to 178.06 MUs approved by the Hon'ble Commission in its Tariff Order dated 23<sup>rd</sup> March, 2021.
- The actual sold to the Domestic category was 139.73 MUs as compared to 139.50 MUs approved by the Hon'ble Commission in its Tariff Order dated 23<sup>rd</sup> March, 2021.
- The actual sold to the Commercial category was 41.77 MUs as compared to 41.90 MUs approved by the Hon'ble Commission in its Tariff Order dated 23<sup>rd</sup> March, 2021.
- Overall the actual sales has increased by 42.44 MUs in comparison to the sales approved by the Hon'ble Commission vide its Tariff Order dated 23<sup>rd</sup> March, 2021.

The EDDD requests the Hon'ble Commission to approve the actual sales for FY 20-21.

### **2.3 Distribution Loss for FY 2020-21**

EDDD is making all efforts to reduce the distribution losses in the UT of Daman & Diu. In FY 2020-21, the actual distribution losses were 4.48% as against the approved level of 6.60%.

In the Tariff Order dated 18<sup>th</sup> May, 2020 and 23<sup>rd</sup> March, 2021 the Hon'ble Commission had approved the distribution losses at 6.60% for the FY 2020-21. However, now EDDD has computed the distribution loss based on the actual sales data for FY 20-21. Based on that the distribution loss for FY 20-21 has been worked out at 4.48%. The table below highlights the comparison of actual distribution losses of the EDDD against that approved by the Hon'ble Commission vide its Tariff Order dated 18<sup>th</sup> May, 2020 and 23<sup>rd</sup> March, 2021.





Table 2: Distribution Loss

Particulars	(%)		
	FY 20-21 Approved (18th May, 2020)	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
Distribution Loss	6.60%	6.60%	4.48%

The EDDD requests the Hon'ble Commission to approve the actual T&D losses for FY 20-21.

## 2.4 Energy Requirement and Energy Balance

Based on the actual energy sales and the transmission & distribution loss units, the actual energy requirement for FY 20-21 has been furnished below. The energy requirement had been met through various sources as described in the subsequent sections.

Table 3: Approved Energy Balance for FY 2020-21

Particulars	(MU)	
	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
Retail Sales (a)	2084.45	2126.89
Open Access Sales (b)	0.00	0.00
Less: Energy Savings (c)	0.00	0.00
Total Sales (d=a+b-c)	2084.45	2126.89
Distribution Loss (MU) (e=g-d)	147.30	99.69
Distribution Loss (%) (f=e/g)	6.60%	4.48%
Energy Required at Periphery (g)	2231.75	2226.58
Sale to common pool consumer/UI Sale(h)	0.00	12.40
Own generation (i)	15.69	18.43
Total energy requirement at state periphery(j=g+h-i)	2216.06	2220.55
Less: Energy Purchased through UI at Periphery (k)	56.33	83.00
Less: Open Access Purchase at Periphery (l)	0.00	0.00
Less: Energy Purchased through Renewable Sources (m)	0.00	0.00
Less: Energy Purchased through IEX (n)	112.59	136.05
Energy requirement at state periphery from tied up sources (o=j-k-l-m-n)	2047.14	2001.50
Inter state loss (MU) (p=q-o)	3.66%	3.29%
Inter state loss (%)	77.77	68.14
Energy requirement at state periphery from generator end (q)	2124.91	2069.64





Particulars	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
Total Energy requirement from tied up sources, UI and renewable sources at generator end (r=i+k+m+n)	2309.52	2307.12
Total Energy requirement in ut including Open Access (r=q+l)	2309.52	2307.12

The net energy requirement for sale during FY 2020-21 was 2307.12 MUs.

## 2.5 Power Purchase Cost

EDDD sources power from Central Generating Stations like Korba, Vindychal, Kahalgaon, Kawas of National Thermal Power Corporation (NTPC) and Tarapur and Kakrapar atomic power stations of Nuclear Power Corporation of India Limited (NPCIL) etc. The actual power purchase for the FY 20-21 is provided in the table below and compared with the power purchase approved by the Hon'ble Commission.

**Table 4: Power purchase cost for FY 2020-21**

Particulars	MUs		Cost (Rs. Crore)	
	FY 20-21	FY 20-21	FY 20-21	FY 20-21
	Approved	Actual	Approved	Actual
Power Purchase	2,309.52	2,307.48	966.61	984.27

The power purchase depends on various parameters such as the energy sales, distribution loss, energy requirement and the energy availability. The variation in the power purchase cost from the Tariff Order is on account of variation in sales and variation in actual cost with respect to the base rate along with purchase of power from short-term sources to meet the shortfall during the year.

The Hon'ble Commission had approved the power purchase at Rs. 966.61 Crore in the Tariff Order dated 23rd March, 2021. Now, the EDDD has claimed a power purchase cost of Rs. 984.27 Crore based on the Annual accounts for FY 20-21 and there is an increase in the power purchase cost as compared to the power purchase cost approved by the Hon'ble Commission. The same is attributable to the increase in sales witnessed during the FY 2020-21.

The EDDD also requests the JERC to allow the UI purchase during FY 20-21 without any penalty as the EDDD has already incurred that amount. Therefore, the EDDD has



included that total UI amount paid in the total power purchase cost for FY 20-21.

The EDDD purchased 83.00 MU during FY 20-21 through UI at the cost of Rs. 22.50 Crore to meet the energy shortfall during the year. The EDDD also purchased 135.22 MUs during FY 2020-21 from the energy exchange at the cost of Rs.46.12 Crore to meet its energy demand.

Further, the EDDD procured 18.43 MUs of solar energy from its rooftop and ground mounted solar plants during the FY 2020-21 to meet its solar obligation. The EDDD procured 9000 solar certificates and 9000 non-solar certificates to meet the RPO obligation.

The EDDD, therefore, requests the Hon'ble Commission to approve the actual power purchase cost for FY 20-21 without any deduction.

## 2.6 Operation and Maintenance Expenses

Operations and Maintenance (O&M) Expenses of the department consists of the following elements:

- Employee Expenses
- Repairs and Maintenance Costs
- Administrative and General Expenses

Employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses.

Repairs and Maintenance Expenses go towards the day to day upkeep of the transmission and distribution network of the department and form an integral part of its effort towards reliable and quality power supply as also in the reduction of losses in the system.

Administration expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, other debits.

The Hon'ble Commission had approved the O&M cost at Rs. 46.24 Crore and Rs. 49.03 Crore vide Tariff Orders dated 18<sup>th</sup> May, 2020 and 23<sup>rd</sup> March, 2021 respectively.





During FY 20-21, EDDD incurred actual O&M expense of Rs. 43.71 Crore which was inclusive of employee cost of Rs. 15.34 Crore, Repair & Maintenance Charges of Rs. 14.43 Crore and Administration & General Expenses of Rs. 13.93 Crore as shown in the table below:

**Table 5: Operation & Maintenance Expenses for FY 2020-21**

(Rs. Crore.)

Particulars	FY 20-21 Approved (18th May, 2020)	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
Employee Cost	17.98	16.99	15.34
R&M	19.67	21.07	14.43
A&G	8.59	10.97	13.93
O&M Expenses	46.24	49.03	43.71

The A&G cost has increased by Rs. 2.96 Crores. The increase in the A&G expenses can be attributed to an amount of Rs. 4.24 Crore incurred towards celebration expenses during the FY 2020-21. The revised estimates submitted by the EDDD for FY 2020-21 were based on the half yearly actual cost incurred by the Department. However, the O&M cost as submitted for the truing up purpose is based on the actual cost incurred by the EDDD during the FY 2020-21. The EDDD, therefore, requests the Hon'ble Commission to approve the O&M expenses for FY 20-21 as submitted in herewith.

## 2.7 Capital Expenditure & Capitalization

The actual capital expenditure incurred by EDDD during the FY 20-21 was Rs. 24.88 Crore, which is lower than that of approved by the Hon'ble Commission in its Tariff Order dated 23<sup>rd</sup> March, 2021. The capital expenditure incurred and actual capitalization made by the department for FY 20-21 against that approved by the Hon'ble Commission is as shown below:

**Table 6: Capital expenditure and capitalization for FY 20-21**

(Rs. Crore)

Particulars	FY 20-21 Approved (18th May, 2020)	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
Capital Expenditure	95.00	95.00	24.88
Capitalisation	38.00	38.00	14.26

The EDDD, therefore, requests the Hon'ble Commission to approve the capital expenditure and capitalization for FY 20-21.





## 2.8 Depreciation

The depreciation has been worked out after applying the Depreciation rates as per the JERC MYT Regulations, 2018. Accordingly, the depreciation so arrived and approved depreciation for FY 2020-21 is shown in the table below:

**Table 7: Depreciation for FY 2020-21**

(Rs. Crore.)

Particulars	FY 20-21 Approved (18th May, 2020)	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
Opening GFA	616.88	627.69	627.69
Addition during the year	38.00	38.00	14.26
Closing GFA	654.88	665.69	641.94
Average GFA	635.88	646.69	634.82
Depreciation during the year	21.96	22.48	32.79

The EDDD, requests the Hon'ble Commission to approve the actual depreciation for FY 20-21 without any deduction.

## 2.9 Interest and Finance Charges

For assessing interest on Loans in FY 20-21, EDDD has considered the opening balance of loans for FY 20-21 as approved by the Hon'ble Commission vide its Tariff Order dated 23<sup>rd</sup> March, 2021 for the Review of the ARR for FY 20-21. The normative loan addition in FY 20-21 has been computed as 70% of the capitalization for FY 2020-21 which works out to Rs. 9.98 Crore. The capitalization for FY 20-21 was Rs. 14.26 Crore as per the audited annual accounts for FY 20-21.

As per the JERC (Multi Year Distribution Tariff) Regulations, 2018, the repayment of loan during the year has been considered equal to the depreciation for the FY 2020-21. Further the rate of interest has been considered as equal to the SBI PLR as on April 1, 2020 plus 100 basis points of 8.75%.

The following table depicts the total Interest & Financial charges for FY 20-21 computed by EDDD and compared the same with the approved Interest and Financial charges amount for the consideration of the Hon'ble Commission:



Table 8: Interest on Loan for FY 20-21

(Rs. Crore.)

Particulars	FY 20-21 Approved (18th May, 2020)	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
<b>Opening Loan</b>	129.45	136.34	136.34
Loan for additional Capex (70:30 debt-equity)	26.60	26.60	9.98
Loan Repayment	21.96	22.48	32.79
<b>Closing Loan</b>	134.09	140.46	113.53
<b>Interest Cost on Avg. Loans</b>	<b>11.66</b>	<b>12.11</b>	<b>10.93</b>

The EDDD, requests the Hon'ble Commission to approve the interest on loan computed for FY 20-21.

## 2.10 Interest on Working Capital

The interest on working capital has been calculated based on the normative principles outlined by the Hon'ble Commission in the JERC (Multi Year Distribution Tariff) Regulations, 2018.

EDDD has computed interest on working capital at 9.75% as equal to the SBI PLR as on April 1, 2020 plus 200 basis points. The following table shows the interest on working capital for FY 2020-21 against the approved amount for the consideration of the Hon'ble Commission:

Table 9: Interest on Working Capital for FY 2020-21

(Rs. Crore.)

Particulars	FY 20-21 Approved (18th May, 2020)	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
O&M expense for one month	3.85	4.09	3.64
Maintenance spares at 40% of R&M for one month	0.66	0.70	0.48
Receivables for 2 months	219.36	180.42	181.73
Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt	67.82	87.32	95.87
<b>Total Working Capital requirement</b>	<b>156.05</b>	<b>97.89</b>	<b>89.98</b>
<b>Interest on Working Capital</b>	<b>16.46</b>	<b>9.54</b>	<b>8.77</b>

The EDDD, requests the Hon'ble Commission to approve the interest on working capital computed for FY 20-21.





## 2.11 Return on Equity

As per the JERC (Multi Year Distribution Tariff) Regulations, 2018, EDDD is entitled for a Return on Equity (RoE).

Return on equity has been computed on the actual paid up equity. The rate of return has been taken as 16% as per the MYT Regulations. Accordingly, the 16% post tax return on equity computed for FY 2020-21 is given in the Table below:

**Table 10: Return on Equity for FY 20-21**

Particulars	(Rs. Crore.)		
	FY 20-21 Approved (18th May, 2020)	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
<b>Return on Equity</b>	<b>14.44</b>	<b>14.92</b>	<b>14.37</b>

The EDDD, requests the Hon'ble Commission to approve the return on equity computed for FY 20-21.

## 2.12 Interest on consumer security deposits

The Hon'ble Commission in its last Tariff Order has approved Rs. 4.68 Crore as interest payable on consumer security deposits. The actual interest on consumer security deposit paid by the EDDD was Rs. 3.67 Crores. The details of the interest on consumer security deposit have been given in the table below:

**Table 11: Interest on Consumer Security Deposit for FY 20-21**

Particulars	(Rs. Crore.)		
	FY 20-21 Approved (18th May, 2020)	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
<b>Interest on Security Deposit</b>	<b>4.24</b>	<b>4.68</b>	<b>3.67</b>

The EDDD, requests the Hon'ble Commission to approve the interest on consumer security deposit submitted for FY 20-21.

## 2.13 Non - Tariff Income

The actual Non-Tariff Income of EDDD for FY 20-21 was Rs. 5.92 Crore as against Rs. 4.24 Crore approved by the Hon'ble Commission. The non-tariff income includes meter rent of Rs. 1.20 Crores, Miscellaneous Income of Rs. 4.72 Crores. The following





table presents and approved and actual Non-Tariff Income of EDDD for the approval of the Hon'ble Commission.

**Table 12: Non Tariff Income for FY 20-21**

(Rs. Crore.)

Particulars	FY 20-21 Approved (18th May, 2020)	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
<b>Non tariff Income</b>	<b>10.91</b>	<b>4.24</b>	<b>5.92</b>

The EDDD, requests the Hon'ble Commission to approve the actual Non-Tariff Income for FY 20-21.

#### **2.14 Incentive/Disincentive towards over/under achievement of norms of distribution losses**

In the APR for FY 2020-21, the Commission had approved the T&D loss level of 6.60%. The EDDD has achieved T&D loss of 4.48% against the approved loss level of 6.60%. The EDDD, in accordance with Regulation 14.1 of the JERC MYT Regulations, 2018 (reproduced below) has determined the incentive towards the over-achievement of the target of Intra-State distribution loss for FY 2020-21 as follows:

"14.1 Approved aggregate gain to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be shared equally between Licensee and Consumers:

Provided that the mechanism for sharing of gains or losses on account of controllable factors for a Generating Company shall be as specified in the prevalent CERC Tariff Regulations."

The incentive has been considered at INR 4.57/kWh, which is the Average Power Purchase cost (APPC) of the Petitioner. The APPC has been derived based on the Power Purchase cost approved in the true-up and the Energy sales.

**Table 13: Incentive due to over-achievement of Intra-State Distribution Loss target**

Particulars	Approved	Actual
Retail Sales	2126.89	2126.89
T%D Loss (%)	6.60%	4.48%
Power Purchase at State Periphery	2277.18	2226.58
Gain/Loss (MU)		50.60
Average Power Purchase Cost		4.63
Gain/Loss (MU)		23.42
Sharing of 50% of gain with Petitioner		11.71



## 2.15 Aggregate Revenue Requirement for FY 20-21

Based on above expenses, table below summarizes actual Aggregate Revenue Requirement for FY 20-21 for EDDD vis-à-vis the ARR approved by the Hon'ble Commission in the previous two Tariff Orders.

**Table 14: Aggregate Revenue Requirement for FY 20-21**

(Rs. Crore.)

Particulars	FY 20-21 Approved (18th May, 2020)	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
Power Purchase Cost	1,243.59	966.61	984.27
O&M Expense	46.24	49.03	43.71
Depreciation	21.96	22.48	32.79
Interest Cost on Long-term Capital Loans	11.66	12.11	10.93
Interest on Working Capital Loans	16.46	9.54	8.77
Return on Equity	14.44	14.92	14.37
Provision for Bad Debt	0.00	0.00	0.00
Interest on security deposit	4.24	4.68	3.67
Incentive/Disincentive on achievement of norms	0.00	0.00	11.71
<b>Less:</b>			
Non-Tariff Income	10.91	4.24	5.92
Revenue from Surplus Power Sale	0.00	0.00	
<b>Annual Revenue Requirement</b>	<b>1,347.68</b>	<b>1,075.13</b>	<b>1,104.30</b>

The EDDD, requests the Hon'ble Commission to approve the ARR computed for FY 20-21.

## 2.16 Revenue for FY 20-21

During the FY 20-21, EDDD's actual revenue amounted to Rs. 1090.37 Crore (Including Rs. 70.31 Crore of FPPCA) as against Rs. 1316.16 Crore and Rs. 1082.52 Crore as approved vide its Tariff Order dated 18<sup>th</sup> May, 2020 and 23<sup>rd</sup> March, 2021 respectively by the Hon'ble Commission.

**Table 15: Revenue for FY 20-21**

(Rs. Crore.)

Particulars	FY 20-21 Approved (18th May, 2020)	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
Revenue from sale of power	1,316.16	1,082.52	1,090.37
<b>Total revenue</b>	<b>1,316.16</b>	<b>1,082.52</b>	<b>1,090.37</b>



**2.17 Revenue (Gap)/ Surplus for FY 20-21**

The Hon'ble Commission in Order dated 18<sup>th</sup> May, 2020 has approved a total Aggregate Revenue Requirement (ARR) of Rs. 1347.68 Crore for FY 20-21. Further, the Commission has computed the revised ARR for FY 20-21 in the Order dated and 23<sup>rd</sup> March, 2021 of Rs. 1075.13 Crore. Based on the annual accounts for FY 20-21 and the actual expenses incurred by the EDDD, the revised ARR for FY 2020-21 has been arrived at Rs. 1104.30 Crore.

This revised ARR is compared against the actual income highlighted in the previous section under various heads. Revenue realized from the existing tariff during the FY 2020-21 was Rs. 1090.37 Crore. Accordingly, total revenue gap of EDDD for FY 20-21 is computed at Rs. 13.93 Crore as depicted in the Table below:

**Table 16: Revenue (Gap)/surplus for FY 20-21**

(Rs. Crore.)

Particulars	FY 20-21 Approved (23rd March, 2021)	FY 20-21 Actual
Annual Revenue Requirement (a)	1075.13	1104.30
Revenue from sale of power (b)	1082.52	1090.37
Revenue from open access (c)	0.00	0.00
Revenue (Gap)/Surplus (d=b+c-a)	7.39	(13.93)
Previous Years' (Gap)/Surplus Carried Over (e)	(7.11)	(7.11)
Carrying Cost (f)	(0.30)	(1.23)
Net Revenue (Gap)/surplus (g=d+e+f)	(0.02)	(22.27)

EDDD requests the Hon'ble Commission to approve afore-mentioned gap for FY 20-21.





## Chapter 3: Review for the FY 2021-22

The review of aggregate revenue requirement for FY 21-22 is based on quantum of energy sales, energy loss as well as various cost elements like power purchase cost, O&M expenses, interest cost and depreciation etc. This has been done based on actual data for six months and revised estimates for the remaining six months of FY 21-22. EDDD analysis in respect of items given below is discussed in the following paras:

- a. Category wise Energy Sales & Revenues at existing tariffs;
- b. T&D Losses;
- c. Energy Requirement;
- d. Determination of Aggregate Revenue Requirement (ARR) by forecasting the following costs, other income & returns:
  - i. Power Purchase Cost
  - ii. Employee Cost
  - iii. Repairs & Maintenance Cost
  - iv. Admin & General Cost
  - v. Capital Investment Plan
  - vi. Interest Cost
  - vii. Interest on Working Capital
  - viii. Depreciation
  - ix. Provision for bad & doubtful debts
  - x. Return on Equity
  - xi. Income Tax
  - xii. Non-Tariff Income
- e. Determination of Gap between Revenue & Costs, Additional Revenue through the proposed Tariff Revision and the arrangements to cover the revenue gap.

### 3.1 Energy Sales

Based on the actual retail sales to various consumers for the first six months and revised estimates for the remaining six months, EDDD has estimated the total retail energy sold for FY 21-22 as shown in the Table below:



**Table 17: Category wise sales for FY 21-22 (Revised Estimate)**

(MU)

Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
Domestic	151.49	163.72	155.02
LIG/ Kutir Jyoti	0.10	0.00	0.00
Commercial	75.15	46.13	50.16
Agriculture	6.02	3.37	3.54
LT Industry	247.61	221.36	210.30
HT/EHT Industry	2390.52	2155.94	2,034.44
Public Lighting	12.73	5.64	5.20
Public Water Works	5.92	2.46	2.60
Temp. Supply	6.40	0.00	0.00
<b>Total Sales</b>	<b>2,895.94</b>	<b>2,598.62</b>	<b>2,461.28</b>

\* LIG sales is included in Domestic category

As can be seen, EDDD's overall energy sales are significantly dependent upon HT/EHT Industries to the extent of around 81%. The revised estimates of energy sales for the FY 2021-22 is 2461.28 MUs as against 2598.62 MUs approved by the Hon'ble Commission in the Tariff Order dated 23<sup>rd</sup> March, 2021. There is a significant reduction in the sales during the FY 2021-22 and the same is attributable to the lockdown imposed by the Government during the period April – May, 2021.

### 3.2 Distribution loss for FY 21-22

EDDD has considered the distribution losses of 6.50% for FY 21-22. The Hon'ble Commission had approved a distribution loss of 6.50% for the EDDD vide its Tariff Order dated 23<sup>rd</sup> March, 2021. Hence, the EDDD has proposed the same distribution loss as approved by the Hon'ble Commission for the FY 2021-22.

**Table 18: Distribution losses for FY 21-22**

(%)

Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
Distribution Loss	6.50%	6.50%	6.50%

### 3.3 Energy Requirement of the System

The following Table depicts the energy requirement of the EDDD for FY 21-22.



Table 19: Energy Requirement of the System

(MU)

Particulars	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
Retail Sales (a)	2,598.62	2,461.28
Open Access Sales (b)	0.00	0.00
Less: Energy Savings (c)	0.00	0.00
Total Sales (d=a+b-c)	2,598.62	2,461.28
Distribution Loss (MU) (e=g-d)	180.65	171.10
Distribution Loss (%) (f=e/g)	6.50%	6.50%
Energy Required at Periphery (g)	2,779.27	2,632.38
Sale to common pool consumer/UI Sale(h)	0.00	2.70
Own generation (i)	60.00	11.25
Total energy requirement at state periphery(j=g+h-i)	2,719.27	2,623.83
Less: Energy Purchased through UI at Periphery (k)	0.00	46.39
Less: Open Access Purchase at Periphery (l)	0.00	0.00
Less: Energy Purchased through Renewable Sources (m)	0.00	0.00
Less: Energy Purchased through IEX (n)	406.32	237.64
Energy requirement at state periphery from tied up sources (o=j-k-l-m-n)	2,312.94	2,339.81
Inter state loss (MU) (p=q-o)	87.87	88.89
Inter state loss (%)	3.66%	3.66%
Energy requirement at state periphery from generator end (q)	2,400.81	2,428.70
Total Energy requirement from tied up sources, UI and renewable sources at generator end (r=i+k+m+n)	2,867.13	2,721.97
Total Energy requirement in ut including Open Access (r=q+l)	2867.13	2,721.97

### 3.4 Energy Availability and power purchase cost

EDDD has no generating stations of its own and relies on the firm and infirm allocation of power from Central Generating Stations like Korba, Vindhyachal, Kahalgaon, Kawas, Sipat, Tarapur, Kakrapar, Sholapur etc. to meet its energy requirement.

The EDDD for the purpose of estimation of the power availability during FY 21-22 has considered the following sources of power:





- NTPC Western Region Generating Stations
- NTPC Eastern Region Generating Stations
- NSPCL (NTPC-SAIL Power Company Ltd)
- Nuclear Power Corporation of India Limited
- Ratnagiri Gas Power Plant (RGPPL)
- Renewable energy sources – Solar and Non-Solar
- Other market sources

The Petitioner has allocation from Western as well as Eastern region from coal, gas and nuclear power stations. However, for meeting the supply-demand gap during the peak hours, the Petitioner has relied on energy exchange and over-drawal from the Grid (UI).

For projecting of the energy availability for FY 21-22, six months actual power purchase has been considered. For projection of remaining six months of power purchase for FY 21-22, firm and infirm allocation from various generating stations has been considered as per the allocation specified in the notification no's. WRPC/Comm-I/6/Alloc/2021/1048 dated 29.10.2021 of Western Regional Power Committee. Detailed methodology for projecting the power availability to the Petitioner from various sources is summarized below.

**Table 20: Energy Allocation from Central Generating Stations**

Particulars	Plant Capacity MW	EDDD Allocation MW	Avg. EDDD Allocation (%)
<b>NTPC Stations</b>			
KSTPP	2,100	49	2.35%
KSTPP-III	500	6	1.19%
VSTPP-I	1,260	13	1.05%
VSTPP-II	1,000	9	0.93%
VSTPP- III	1,000	11	1.13%
VSTPP- IV	1,000	13	1.26%
VSTPS-V	500	8	1.64%
KAWAS	656	31	4.73%
JGPP	657	31	4.77%
Bhilai Unit-I &II(NTPC )	500	70	14.00%
Sipat-I	1,980	25	1.28%
Sipat-II	1,000	10	1.00%
MSTPS-I	1,000	13	1.26%

Particulars	Plant Capacity MW	EDDD Allocation MW	Avg. EDDD Allocation (%)
MOUDA-II	1,320	17	1.30%
SOLAPUR	1320	26	1.97%
LARA	800	21	2.65%
GADARWARA	800	29	3.62%
KHTPP	1320	24	1.79%
<b>Subtotal</b>	<b>18,714</b>	<b>407</b>	
<b>Eastern Region</b>			
KHSTPP-II	1000	1.30	0.13%
<b>Subtotal</b>	<b>1000</b>	<b>1.3</b>	
<b>NPCIL</b>			
KAPPS	440	9	2.06%
TAPP 3&4	1080	12	1.16%
<b>Subtotal</b>	<b>1520.00</b>	<b>22</b>	
<b>Others</b>			
Ratnagiri	582	38	6.53%
<b>Subtotal</b>	<b>582</b>	<b>38</b>	
<b>Grand Total</b>	<b>21,815.59</b>	<b>468</b>	

Based on the actual power purchase cost of the first six months of FY 21-22 and the remaining six months projection, the revised estimated power purchase cost for FY 21-22 is presented in the following Table:

**Table 21: Revised estimated Power Purchase cost for FY 21-22**

(Rs. Crore)

Source	Units Purchased	Fixed Charges	Variable Charges	Other Charges	All Charges Total	Per Unit Cost
<b>NTPC Stations</b>						
KSTPP	364.33	23.48	56.34	2.00	81.81	2.25
KSTPP-III	44.16	5.77	6.66	-0.07	12.35	2.80
VSTPP-I	91.38	7.65	15.94	1.06	24.65	2.70
VSTPP-II	61.37	4.06	10.21	0.00	14.28	2.33
VSTPP- III	74.18	7.34	12.18	-0.20	19.32	2.60
VSTPP- IV	91.34	13.79	15.09	0.00	28.89	3.16
VSTPS-V	59.33	9.51	10.25	-0.11	19.65	3.31
KAWAS	43.23	18.85	8.90	0.70	28.46	6.58
JGPP	55.81	22.21	11.58	0.44	34.23	6.13
Sipat-I	178.64	23.03	29.44	-0.28	52.20	2.92
Sipat-II	74.87	8.64	12.94	-0.09	21.49	2.87
MSTPS-I	61.32	16.37	18.92	0.35	35.65	5.81
MOUDA-II	63.25	17.38	20.85	0.65	38.88	6.15
KHSTPP-II	11.01	1.48	2.54	-0.01	4.02	3.65
SOLAPUR	97.04	11.07	34.04	0.39	65.51	6.75
LARA	145.46	24.80	34.13	-0.14	58.79	4.04
GADARWARA	162.69	41.89	47.93	-0.22	89.60	5.51
KHTPP	114.63	26.41	33.90	-0.24	60.07	5.24



Source	Units Purchased	Fixed Charges	Variable Charges	Other Charges	All Charges Total	Per Unit Cost
<b>Subtotal</b>	<b>1794.04</b>	<b>303.73</b>	<b>381.86</b>	<b>4.24</b>	<b>689.83</b>	<b>3.85</b>
NTPC Bhilai						
Bhilai Unit-I &II(NTPC )	480.62	80.77	126.42	0.21	207.40	4.32
<b>Subtotal</b>	<b>480.62</b>	<b>80.77</b>	<b>126.42</b>	<b>0.21</b>	<b>207.40</b>	<b>4.32</b>
NPCIL						
KAPPS	50.60	0.00	11.74	0.00	11.74	2.32
TAPP 3&4	86.34	0.00	29.13	0.00	29.13	3.37
<b>Subtotal</b>	<b>136.94</b>	<b>0.00</b>	<b>40.88</b>	<b>0.00</b>	<b>40.88</b>	<b>2.99</b>
Others						
Ratnagiri	17.10	13.34	10.36	-3.99	19.71	11.53
<b>Subtotal</b>	<b>17.10</b>	<b>13.34</b>	<b>10.36</b>	<b>(3.99)</b>	<b>19.71</b>	<b>11.53</b>
<b>Power purchase from Other Sources</b>						
Power purchase from Indian E. Exchange	235.64	0.00	65.81	0.00	65.81	2.79
UI	46.39	0.00	16.05	0.00	16.05	3.46
Solar	11.25	0.00	0.00	0.00	0.00	0.00
Non Solar (Hydro)	0.00	0.00	0.00	0.00	0.00	0.00
Solar REC	0.00	0.00	0.00	0.00	0.00	0.00
Non Solar REC	0.00	0.00	0.00	0.00	0.00	0.00
<b>Subtotal</b>	<b>293.27</b>	<b>0.00</b>	<b>81.85</b>	<b>0.00</b>	<b>81.85</b>	<b>2.79</b>
<b>Gross Power Purchase</b>	<b>2721.97</b>	<b>397.84</b>	<b>641.38</b>	<b>0.46</b>	<b>1039.68</b>	<b>3.82</b>
External Losses						
<b>Total Power Purchase</b>	<b>2721.97</b>	<b>397.84</b>	<b>641.38</b>	<b>0.46</b>	<b>1039.68</b>	<b>3.82</b>
PGCIL CHARGES					174.48	
WRLDC					0.26	
MSETCL					3.50	
<b>Grand Total of Charges - Net</b>	<b>2721.97</b>				<b>1217.92</b>	<b>4.47</b>

Per unit variable cost, fixed cost and other charges have been considered at the same level as actual from April to September 2021.

Power purchase arrear for the remaining six months has been considered as nil as EDDD has no prior information of arrear bills from the generators and transmission companies.

For FY 21-22, till September, 2021 the EDDD has procured 5.01 MU of solar energy from its ground mounted and rooftop solar plants. For the remaining six months the EDDD will further procure 6.02 MU of solar power from its own generation and will purchase a further 50 MUs for open market. Further, the EDDD will purchase 103.25 MUs as solar certificates to meet its solar obligation till FY 2021-22.

To meet its non-solar obligation for the FY 2021-22, the EDDD has planned to purchase 30 MUs from open market and 191.51 MUs through non-solar certificates during the remaining six months of FY 2021-22.





### 3.5 Operation & Maintenance Costs

The approved and revised estimated O&M cost for FY 21-22 is shown in the following Table:

**Table 22: O&M Expense for FY 21-22**

(Rs. Crore)

Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
Employee Cost	19.36	18.03	16.28
R&M	22.03	22.34	16.35
A&G	7.76	11.56	14.79
O&M Expenses	49.15	51.93	47.42

The revision on the O&M cost for FY 21-22 is mainly on escalation in A&G expenses.

### 3.6 Capital Expenditure Plan

A summary of the capital expenditure and capitalization for FY 21-22 vis-à-vis approved by the Commission is summarized in Table below:

**Table 23: Capital Expenditure & Capitalization for FY 21-22**

(Rs. Crore)

Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
Capital Expenditure	19.60	19.60	20.00
Capitalisation	49.60	49.00	5.00

It is requested to approve the capital expenditure and capitalization as submitted in the above table.

### 3.7 Gross Fixed Assets

The Commission in its last Tariff Order has approved the opening GFA, addition of assets and closing GFA for FY 21-22 at Rs. 665.69 Crore, Rs. 49.60 Crore and Rs. 715.29 Crore respectively.



EDDD had Opening Gross Fixed Assets (GFA) of Rs. 627.69 Crore in FY 20-21. EDDD has further added assets worth Rs.14.26 Crore during FY 20-21. The closing GFA by the end of FY 20-21 stands at Rs. 641.94 Crore.

Based on the capital expenditure and capitalization estimated above, assets amounting to Rs. 5.00 Crore have been estimated to be capitalized during FY 21-22.

A summary of the Opening and Closing GFA and capitalization for FY 21-22 vis-à-vis approved by the Commission has been summarized in Table below:

**Table 24: Opening and Closing GFA for FY 21-22**

(Rs. Crore)

Particulars	Opening GFA	Additions during the Year	Closing GFA
FY 2021-22 (Approved)	665.69	49.60	715.29
FY 2021-22 (RE)	641.94	5.00	646.94

### 3.8 Depreciation

Depreciation is charged on the basis of straight-line method, on the Gross Fixed Assets in use at the beginning of the year and addition in assets during the financial year. The depreciation is based on the original cost of the Gross Fixed Assets.

EDDD has applied the depreciation rates as specified in the MYT Regulations, 2018.

**Table 25: Depreciation rate specified in the MYT Regulations, 2018**

Asset Category	Depreciation Rate %
Plant & Machinery	3.60%
Buildings	1.80%
Vehicles	9.50%
Furniture & Fixtures	6.00%
Computers & Others	6.33%
Land	0.00%

Depreciation for the FY 21-22 is determined by applying aforesaid category-wise assets depreciation rates on the opening balance of Gross Fixed assets and average of the addition during the year projected for FY 21-22. The Table below summarizes the asset-wise depreciation vis-à-vis approved by the Commission and computed by EDDD:





**Table 26: Depreciation for FY 21-22**

(Rs. Crore)

Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
Opening GFA	673.21	665.69	641.94
Addition during the year	49.60	49.60	5.00
Closing GFA	722.81	715.29	646.94
Average GFA	698.01	690.49	644.44
Depreciation during the year	23.86	24.05	22.40

### 3.9 Interest & Financial Costs

#### 3.9.1 Interest on Long-term / Capital Loans

Assets capitalized during the FY 2021-22 have been considered based on normative debt-equity ratio of 70:30 as per the as per the JERC (Multi Year Distribution Tariff) Regulations, 2018.

Interest rate of 8.00% has been considered for computation of interest cost for long-term loans which is similar to the 1 year SBI MCLR plus 100 basis points. The normative interest on long-term/capital loans against approved by the Commission in the Tariff Order dated 23<sup>rd</sup> March, 2021 as against the revised estimates is shown in the Table below:

**Table 27: Interest on Long-term/Capital Loans for FY 21-22**

(Rs. Crore)

Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
Opening Loan	147.94	140.53	113.53
Loan for additional Capex (70:30 debt-equity)	34.72	34.30	3.50
Loan Repayment	23.86	24.05	22.40
Closing Loan	158.80	150.78	94.63
<b>Interest Cost on Avg. Loans</b>	<b>14.65</b>	<b>11.65</b>	<b>8.33</b>

EDDD requests the Hon'ble Commission to approve the interest cost on long-term loans as projected above.





### 3.9.2 Interest on Working Capital Borrowings

EDDD has computed the Interest on Working Capital for the Control Period based on normative basis as per the JERC (Multi Year Distribution Tariff) Regulations, 2018.

The working capital requirement for the FY 2021-22 has been computed considering the following parameters:

- Receivable equivalent to two (2) months of the expected revenue from charges for use of distribution wires at the prevailing tariff;
- O&M Expenses of one month
- Maintenance Spares at 40% of repair and maintenance expenses for one month
- Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt

A rate of interest of 9.00% has been considered on the working capital requirement, being the 1 year SBI MCLR plus 200 basis points. This is in line with the JERC (Multi Year Distribution Tariff) Regulations, 2018 which states that "The rate of interest on working capital shall be equal 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 Financial Year in which the Petition is filed plus 200 basis points."

The normative interest on working capital for FY 21-22 considering the above methodology is summarized in the Table below:

**Table 28: Interest on Working Capital for FY 21-22**

(Rs. Crore)

Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
O&M expense for one month	4.10	4.33	3.95
Maintenance spares at 40% of R&M for one month	0.73	0.74	0.55
Receivables for 2 months	243.09	212.28	218.43
Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt	67.82	87.32	95.87
<b>Total Working Capital requirement</b>	<b>180.10</b>	<b>130.03</b>	<b>127.05</b>
<b>Interest on Working Capital</b>	<b>18.28</b>	<b>12.68</b>	<b>11.43</b>

### 3.10 Return on Equity

As per the JERC (Multi Year Distribution Tariff) Regulations, 2018, EDDD is entitled for a Return on Equity (RoE).

The Regulation 27.2 and 27.3 of the MYT Regulations, 2018 stipulates the following:

“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.”

The EDDD has segregated the approved average equity (average of opening and closing equity) into average equity for Distribution Wires Business and Retail Supply Business based on the Allocation Statement provided in the MYT Regulations, 2018 i.e. 90% allocation for the Distribution Wires Business and 10% allocation for the Retail Supply Business. The Commission has considered a rate of 15.50% for the Distribution Wires Business (as per the prevalent CERC Regulations) and a rate of 16% for the Retail Supply Business. The equity component has been determined in accordance with the Regulation 26 of the MYT Regulations, 2018. The following table provides the Return on Equity for the FY 2021-22.

**Table 29: Return on Equity for FY 21-22**

(Rs. Crore)

Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
Opening Equity	104.07	101.65	94.53
Addition in equity on account of new capitalization	14.88	14.7	1.50
Closing Equity	118.95	116.35	96.03
Average Equity	111.51	109	95.28
Average Equity (Wires Business)	100.36	98.1	85.75
Average Equity (Retail Supply Business)	11.15	10.9	9.53
Return on Equity for Wires Business (%)	15.50%	15.50%	15.50%
Return on Equity for Retail Supply Business (%)	16.00%	16.00%	16.00%



Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
Return on Equity for Wires Business	15.56	15.21	13.29
Return on Equity for Retail Supply Business	1.78	1.74	1.52
<b>Return on Equity</b>	<b>17.34</b>	<b>16.95</b>	<b>14.82</b>

The EDDD, requests the Hon'ble Commission to approve the return on capital base computed for FY 21-22.

### 3.11 Interest on consumer security deposits

The Hon'ble Commission in its last Tariff Order has approved Rs. 4.68 Crore as interest payable on consumer security deposits. EDDD has made a provision to pay Rs. 3.67 Crore as interest on consumer security deposits in FY 21-22. The details of the interest on consumer security deposits have been given in the table below:

**Table 30: Interest on Consumer Security Deposit for FY 21-22**

(Rs. Crore)

Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
<b>Interest on Security Deposit</b>	<b>4.24</b>	<b>4.68</b>	<b>3.67</b>

The EDDD, requests the Hon'ble Commission to approve the interest on consumer security deposits computed for FY 21-22.

### 3.12 Non-Tariff & Other Income

For estimating the non-tariff income for FY 21-22, an increase of 5% p.a. has been considered over the actual non-tariff income of FY 20-21. Details of the non-tariff income is provided in table below:

**Table 31: Non-tariff Income for FY 21-22**

(Rs. Crore)

Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
<b>Non tariff Income</b>	<b>21.79</b>	<b>4.46</b>	<b>6.22</b>



### 3.13 Aggregate Revenue Requirement

The following Table summarizes EDDD's Aggregate Revenue Requirement for FY 21-22 against approved by the Hon'ble Commission in the Tariff Order dated 23<sup>rd</sup> March, 2021.

**Table 32: Aggregate Revenue Requirement for FY 21-22**

(Rs. Crore)

Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
Power Purchase Cost	1,352.79	1,179.06	1,217.92
O&M Expense	49.15	51.93	47.42
Depreciation	23.86	24.05	22.40
Interest Cost on Long-term Capital Loans	14.65	11.65	8.33
Interest on Working Capital Loans	18.28	12.68	11.43
Return on Equity	17.34	16.95	14.82
Provision for Bad Debt	0.00	0.00	0.00
Interest on security deposit	4.24	4.68	3.67
Total	1,480.31	1,301.00	1,325.99
<b>Less:</b>			
Non-Tariff Income	21.79	4.46	6.22
Revenue from Surplus Power Sale	0.00	0.00	0.00
<b>Annual Revenue Requirement</b>	<b>1,458.52</b>	<b>1,296.54</b>	<b>1,319.77</b>

### 3.14 Revenue from Existing Tariff

Revenue from sale of power for FY 21-22 is determined based on the energy sales estimated and category wise tariff prevalent in the UT of Daman and Diu.

Revenue from sale of power at existing tariff is estimated to be Rs. 1310.55 Crore in FY 21-22, as shown in the following Table. The estimated revenue for FY 21-22 is based on the six month actual revenue at the exiting tariff. The revenue for remaining six months of FY 21-22 has been computed based on the retail tariff notified by the Commission in the Tariff Order for the FY 2021-22 dated 23<sup>rd</sup> March, 2021. As directed by the Hon'ble Commission in its Tariff Order dated 23<sup>rd</sup> March, 2021, the fuel purchase adjustment surcharge approved by the Hon'ble Commission is being levied to the consumers of the EDDD. Further, the EDDD has considered the actual FPPCA for the second quarter billed to the consumers while arriving at the total revenue for the FY 2021-22 and the estimated FPPCA for the remaining two quarters.

The Table below summarizes the revenue from sale of power at existing tariff for FY 21-22:

**Table 33: Revenue from Sale of Power at Existing Tariff for FY 21-22**

(Rs. Crore)

Particulars	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
Revenue from sale of power	1,273.67	1,188.45
Revenue from FPPCA	0.00	122.10
<b>Total Revenue</b>	<b>1273.67</b>	<b>1310.55</b>

### 3.15 Coverage of Revenue Gap

Revenue from sale of power within EDDD is determined in the previous Table.

The following Table summarizes the Revenue gap at existing tariff at Rs. 9.22 Crore for FY 21-22.

**Table 34: Revenue Gap/Surplus for FY 21-22**

(Rs. Crore)

Particulars	FY 21-22 Approved (23rd March, 2021)	FY 21-22 RE
Annual Revenue Requirement (a)	1,296.54	1,319.77
Revenue from sale of power (b)	1,273.67	1,188.45
Revenue from FPPCA (c)	0.00	122.10
Revenue (Gap)/ surplus (d=b+c-a)	(22.87)	(9.22)
Previous Years' (Gap)/Surplus Carried Over (e)	(0.01)	(22.27)
Carrying Cost (f)	(0.92)	(2.35)
Net Revenue (Gap)/surplus (j=f+g-h+i)	(23.80)	(33.84)

EDDD requests the Hon'ble Commission to approve afore-mentioned gap for FY 21-22.



## Chapter 4: ARR for the MYT Control period FY 2022-23 to FY 2024-25

EDDD is submitting its ARR for the MYT Control Period FY 2022-23 to FY 2024-25 broadly on the basis of the principles outlined in MYT Tariff Regulations notified by JERC. EDDD has considered the past trends and taken cognizance of other internal and external developments to estimate the likely performance for the MYT Control period.

The following sections explain in detail the basis and forecasts of the following elements for the MYT Control Period.

- a. Category wise Energy Sales & Revenues at existing tariffs
- b. T&D Losses and Energy Requirement
- c. Determination of Aggregate Revenue Requirement by forecasting the following costs, other income & returns:
  - i. Power Purchase Cost
  - ii. Employee Cost
  - iii. Repairs & Maintenance Cost
  - iv. Administration & General Expenses
  - v. Capital Investment Plan
  - vi. Interest Cost
  - vii. Interest on Working Capital
  - viii. Depreciation
  - ix. Provision for bad & doubtful debts
  - x. Return on Equity
  - xi. Non-Tariff Income
- d. Determination of Gap between Revenue & Costs and the arrangements to cover the revenue gap for the MYT Control Period.

### 4.1 Load Growth

1. The Table given below summarizes the growth in sanctioned load over the past 6 years. The HT Industrial category has registered a load growth of 1.10% over this period. Overall growth for the UT has been 1.18%.

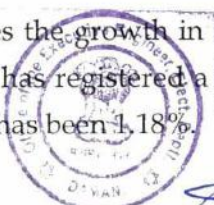




Table 35: Past Year's Load Growth

(kVA)

Consumer Category	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
kVA	Actual	Actual	Actual	Actual	Actual	Actual
Domestic	119557	121827	131652	123187	104658	108229
Commercial	19761	20781	23722	22187	25034	27444
Agriculture	3672	3812	4003	3824	3743	3866
LT Industry	107471	104148	108683	112502	117295	121331
HT/EHT Industry	505321	536544	551163	543648	537595	519668
Public Lighting	1690	880	1405	1447	1488	1536
Public Water Works	795	795	794	748	733	728
Temp. Supply	28	673	1986	1650	1495	0
<b>Total</b>	<b>7,58,295</b>	<b>7,89,460</b>	<b>8,23,408</b>	<b>8,09,193</b>	<b>7,92,041</b>	<b>7,82,802</b>

2. The projected load for the FY 2021-22 and the MYT Control Period for all the categories has been given in the table below:

Table 36: Projected load growth during FY 2021-22 and MYT Control Period

(kVA)

Consumer Category	FY 21-22	FY 22-23	FY 23-24	FY 24-25
kVA	RE	Projected	Projected	Projected
Domestic	110394	112602	114854	117151
Commercial	28810	30244	31750	33331
Agriculture	3906	3947	3988	4029
LT Industry	124310	127363	130490	133694
HT/EHT Industry	522586	525520	528471	531438
Public Lighting	1567	1598	1630	1663
Public Water Works	742	757	772	788
Temp. Supply	0	0	0	0
<b>Total</b>	<b>7,92,316</b>	<b>8,02,031</b>	<b>8,11,955</b>	<b>8,22,094</b>

3. The Hon'ble Commission is requested to approve the sanctioned load for the FY 2021-22 and the MYT Control Period for the various consumer categories as submitted herewith.

#### 4.2 Consumer Growth

1. The Table 37 below summarizes the category wise growth in consumers over the past 6 years.



Table 37: Past Year's Consumer Growth

Consumer Category	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
	Actual	Actual	Actual	Actual	Actual	Actual
Domestic	46,420	47,403	48,287	48,455	49,924	50,957
Commercial	8,209	7,875	7,815	7,373	7,413	7,880
Agriculture	1,243	1,283	1,344	1,299	1,257	1,286
LT Industry	1,817	1,755	1,706	1,705	1,783	1,822
HT/EHT Industry	784	800	807	789	763	720
Public Lighting	529	571	633	635	637	631
Public Water Works	125	127	125	110	104	104
Temp. Supply	11	366	414	510	629	0
<b>Total</b>	<b>59,138</b>	<b>60,180</b>	<b>61,131</b>	<b>60,876</b>	<b>62,510</b>	<b>63,400</b>

2. The projected consumer growth for the FY 2021-22 and the MYT Control Period has been given in the table below:

Table 38: Projected consumer growth during the FY 2021-22 MYT Control Period

Consumer Category	FY 21-22	FY 22-23	FY 23-24	FY 24-25
	RE	Projected	Projected	Projected
Domestic	51,879	52,819	53,775	54,748
Commercial	8,038	8,198	8,362	8,530
Agriculture	1,295	1,304	1,313	1,321
LT Industry	1,858	1,896	1,934	1,972
HT/EHT Industry	734	749	764	779
Public Lighting	647	663	680	697
Public Water Works	312	108	110	113
Temp. Supply	0	0	0	0
<b>Total</b>	<b>64,764</b>	<b>65,737</b>	<b>66,938</b>	<b>68,161</b>

3. The Hon'ble Commission is requested to approve the no. of consumers for the FY 2021-22 and the MYT Control Period for the various consumer categories as submitted herewith.

#### 4.3 Energy Sales Growth

1. EDDD has forecasted the energy sales taking into account the past trends in the number of consumers, connected load and energy sales customer category-wise. Actual data available for the last 7 years has been considered to arrive at the Compound Annual Growth Rate (CAGR) for each of the customer categories. As the data available for FY 2021-22 pertains only to the first 6 months of the year, the



figures for FY 2021-22 were not considered for arriving at the growth rates. However, the figures available for 6 months of FY 2021-22 have been annualized, in line with the past trends to arrive at sales estimates for FY 2021-22. The figures for FY 2021-22 have been further used as the base for forecasting the values for the MYT Control Period.

2. Table 39 below presents the category-wise energy sales for the past 7 years.

**Table 39: Past Years' Energy Sales Growth**

(MU)

Consumer Category	FY 14-15 Actual	FY 15-16 Actual	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Actual	FY 20-21 Actual
Domestic	83.06	88.20	97.89	121.32	134.47	147.83	139.73
LIG/ Kutir Jyoti	0.08	0.09	0.10	0.10	0.00	0.00	0.00
Commercial	41.57	49.93	55.37	57.74	53.27	51.35	41.77
Agriculture	2.30	2.46	2.81	4.83	4.95	4.35	3.40
LT Industry	153.70	160.54	179.85	195.61	197.86	204.68	184.53
HT/EHT Industry	1,327.84	1,379.41	1407.81	1,708.63	2031.44	2078.33	1,749.48
Public Lighting	8.80	7.43	7.89	9.48	8.26	6.32	5.53
Public Water Works	3.28	2.68	3.22	3.49	3.68	2.81	2.46
Temp. Supply	1.09	1.23	2.17	0.00	0.00	0.00	0.00
<b>Total Sales</b>	<b>1,621.72</b>	<b>1,691.98</b>	<b>1,757.11</b>	<b>2,101.22</b>	<b>2,433.91</b>	<b>2,495.67</b>	<b>2,126.89</b>

3. The EDDD is of the view that the factors affecting the actual consumption of electricity are numerous and often beyond the control of the utility including factors such as Government Policy, economic climate, weather conditions and force majeure events like natural disasters, etc. EDDD, therefore for projecting the category-wise consumption for the FY 2021-22 and the MYT Control Period has considered the past growth trends in each of the consumer category including growth trend in number of consumers and connected load.
4. The sales for the FY 2021-22 has been projected by considering the actual sales for the first six months of FY 2021-22 and estimating the sales of the remaining six months on the basis of the four year CAGR for the different consumer categories. EDDD would like to highlight that for estimating energy sales to various consumer categories for FY 21-22, previous years CAGRs have been considered as well as the

new connections that are likely to be released by the EDDD in the remaining period of FY 21-22.

5. The table given below summarizes the projections of category wise increase in energy sales during the FY 2021-22 and the MYT Control Period. As can be observed, the overall energy sales in Daman & Diu are significantly dependent upon HT industrial consumption.
6. EDDD submits to the Hon'ble Commission to approve the energy sales forecasted herein.

**Table 40: Projected Category wise Energy Sales for FY 2021-22 and MYT Control Period**

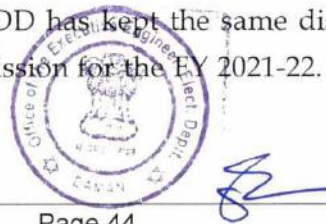
(MU)

Consumer Category	FY 21-22 RE	FY 22-23 Projected	FY 23-24 Projected	FY 24-25 Projected
Domestic	155.02	170.28	187.05	205.46
LIG/ Kutir Jyoti*	0.00	0.00	0.00	0.00
Commercial	50.16	50.96	51.76	52.58
Agriculture	3.54	3.83	4.13	4.47
LT Industry	210.30	217.00	223.91	231.04
HT/EHT Industry	2034.44	2131.00	2232.13	2338.07
Public Lighting	5.20	5.30	5.41	5.52
Public Water Works	2.60	2.63	2.66	2.70
Temp. Supply	0.00	0.00	0.00	0.00
<b>Total Sales</b>	<b>2,461.28</b>	<b>2,581.00</b>	<b>2,707.05</b>	<b>2,839.82</b>

\* LIG sales is included in the Domestic category

#### 4.4 Distribution Loss Reduction

1. The EDDD would like to submit that the system improvement works executed every year under the planned schemes as well as increase in energy sales quantum to the HT consumers have resulted in the reduction of Distribution losses in its distribution area.
2. EDDD has achieved Distribution loss level of 4.48% for the FY 2020-21. Reduction of Distribution losses below 10% involves significant amount of capital expenditure and it is EDDD's endeavor to bring the Distribution loss level further down in the subsequent years. Further, the Hon'ble Commission had set a Distribution loss level target of 6.50% for the FY 2021-22 in the Tariff Order dated 23<sup>rd</sup> March, 2021. The EDDD has kept the same distribution loss level as approved by the Hon'ble Commission for the FY 2021-22. The approved and the





projected Distribution Loss for the FY 2021-22 and the MYT Control period is as given in the table below:

**Table 41: Proposed Distribution Loss for FY 2021-22 and the MYT Control Period**

Particulars	FY 21-22 RE	FY 22-23 Projected	FY 23-24 Projected	FY 24-25 Projected
Distribution Loss	6.50%	6.40%	6.30%	6.20%

3. The EDDD submits to the Commission to approve the Distribution losses submitted herein.

#### 4.5 Energy Requirement of the System

1. Based on the proposed loss levels and projected energy requirement and availability within the state, the Energy Balance is presented in the following table:

**Table 42: Energy Requirement of the System**

Particulars	FY 2021-22 RE	FY 2022-23 Projection	FY 2023-24 Projection	(MU) FY 2024-25 Projection
Retail Sales (a)	2,461.28	2,581.00	2,707.05	2,839.82
Open Access Sales (b)	0.00	0.00	0.00	0.00
Less: Energy Savings (c)	0.00	0.00	0.00	0.00
Total Sales (d=a+b-c)	2,461.28	2,581.00	2,707.05	2,839.82
Distribution Loss (MU) (e=g-d)	171.10	176.48	182.01	187.71
Distribution Loss (%) (f=e/g)	6.50%	6.40%	6.30%	6.20%
Energy Required at Periphery (g)	2632.38	2757.48	2889.07	3027.53
Sale to common pool consumer/UI Sale(h)	0.70	0.78	0.19	0.73
Own generation (i)	11.25	16.00	16.00	16.00
Total energy requirement at state periphery(j=g+h-i)	2621.83	2742.26	2873.26	3012.26
Less: Energy Purchased through UI at Periphery (k)	46.39	0.00	0.00	0.00
Less: Open Access Purchase at Periphery (l)	0.00	0.00	0.00	0.00
Less: Energy Purchased through Renewable Sources (m)	0.00	0.00	0.00	0.00
Less: Energy Purchased through IEX (n)	235.64	288.00	419.00	558.00
Energy requirement at state periphery from tied up sources (o=j-k-l-m-n)	2339.81	2454.26	2454.26	2454.26
Inter state loss (MU) (p=q-o)	88.89	93.24	93.24	93.24
Inter state loss (%)	3.66%	3.66%	3.66%	3.66%
Energy requirement at state periphery from generator end (q)	2428.70	2547.50	2547.50	2547.50

Particulars	FY 2021-22 RE	FY 2022-23 Projection	FY 2023-24 Projection	FY 2024-25 Projection
Total Energy requirement from tied up sources, UI and renewable sources at generator end ( $r=i+k+m+n$ )	2721.97	2851.50	2982.50	3121.50
Total Energy requirement in ut including Open Access ( $r=q+l$ )	2721.97	2851.50	2982.50	3121.50

#### 4.6 Energy Availability

1. Daman & Diu being a Union Territory with no generating stations of its own, mainly relies on the firm and infirm allocations of power from Central Generating Stations like Korba, Vindhyachal, Kahalgaon, Kawas, Tarapur and Kakrapar atomic power stations of NPCIL etc. to meet its energy requirement.
2. The EDDD for the purpose of estimation of the power availability during the FY 2021-22 and the MYT Control Period has considered the following sources of power:
  - NTPC Western Region Generating Stations;
  - NTPC Eastern Region Generating Stations;
  - NSPCL (NTPC-SAIL Power Company Ltd);
  - Nuclear Power Corporation of India Limited;
  - Private sector power generating entities;
  - Renewable energy sources (solar and non-solar); and
  - Other Arrangements, in case of un-scheduled deficit of power
3. The Petitioner has allocation from Western as well as Eastern region power generating stations including coal, gas and nuclear power stations. However, for meeting the supply-demand gap during the peak hours, the Petitioner has relied on the short term arrangement of power.
4. For projecting the energy availability for FY 21-22, actual power purchase for the first six months of FY 21-22 has been considered. For projection of energy availability for the MYT Control period, firm and infirm allocation from various generating stations has been considered. Detailed methodology for projecting the power availability to the Petitioner from various sources is summarized below.





#### 4.6.1 Power Purchase

1. Daman & Diu has firm and infirm allocations in Central Sector Generating Stations of NTPC, Nuclear Power Corporation of India Ltd (NPCIL), NTPC Sail Power Company Ltd (NSPCL) and Ratnagiri Gas and Power Private Limited (RGPPL).
2. Since first six months of FY 21-22 have already elapsed, the actual power purchase data for the same is available with the department. Therefore, the power availability for remaining six months i.e. October 2021 to March 2022 has been estimated based on the revised allocation specified in the notification No. WRPC/Comml-I/6/Alloc/2021/1048 dated 29.10.2021 of Western Regional Power Committee. The energy allocation from various generating stations is summarized in table below:

**Table 43: Energy Allocation from Central Generating Stations**

Particulars	Plant Capacity MW	EDDD Allocation MW	Avg. EDDD Allocation (%)
<b>NTPC Stations</b>			
KSTPP	2,100	49	2.35%
KSTPP-III	500	6	1.19%
VSTPP-I	1,260	13	1.05%
VSTPP-II	1,000	9	0.93%
VSTPP- III	1,000	11	1.13%
VSTPP- IV	1,000	13	1.26%
VSTPS-V	500	8	1.64%
KAWAS	656	31	4.73%
JGPP	657	31	4.77%
Bhilai Unit-I &II(NTPC )	500	70	14.00%
Sipat-I	1,980	25	1.28%
Sipat-II	1,000	10	1.00%
MSTPS-I	1,000	13	1.26%
MOUDA-II	1,320	17	1.30%
SOLAPUR	1320	26	1.97%
LARA	800	21	2.65%
GADARWARA	800	29	3.62%
KHTPP	1320	24	1.79%
<b>Subtotal</b>	<b>18,714</b>	<b>407</b>	
<b>Eastern Region</b>			
KHSTPP-II	1000	1.30	0.13%
<b>Subtotal</b>	<b>1000</b>	<b>1.3</b>	
<b>NPCIL</b>			

Particulars	Plant Capacity MW	EDDD Allocation MW	Avg. EDDD Allocation (%)
KAPPS	440	9	2.06%
TAPP 3&4	1080	12	1.16%
<b>Subtotal</b>	<b>1520.00</b>	<b>22</b>	
<b>Others</b>			
Ratnagiri	582	38	6.53%
<b>Subtotal</b>	<b>582</b>	<b>38</b>	
<b>Grand Total</b>	<b>21,815.59</b>	<b>468</b>	

- Actual power purchase in first six months of FY 21-22 and power allocation of 70 MW from NTPC-SAIL Bhilai power plant has been considered while estimating the power availability from this plant during FY 21-22.
- The EDDD received 8.55 MUs of power from Ratnagiri Gas Power Plant during the first six months of FY 21-22. Further, it is expected that EDDD will be getting same power from Ratnagiri for the rest of the FY 2021-22 and therefore 17.10 MUs have been considered from the plant for the FY 2021-22.
- For projecting the power availability for MYT Control Period, EDDD has considered average allocation of firm and infirm power from the western region generation stations (NTPC and NPCIL) of Western Regional Power Committee. For projecting the power purchase from eastern region NTPC generating stations, an allocation of 1.30 MW from KhSTPP has been taken into account.
- Additionally, EDDD has 70 MW allocations from NSPCL Bhilai power stations. Energy availability from NSPCL Bhilai power stations for MYT Control Period has been considered by taking 70 MW allocation from the plant.
- Power purchase quantum from the NTPC stations of the current year and MYT Control Period has been calculated based on the installed capacity of each plant and by applying the average PLF as approved by the Hon'ble Commission vide. its Order for the Business Plan for the MYT Control Period dated 31st October, 2018 to calculate the plant-wise gross generation.
- For gas based generating stations i.e. Kawas (KGPP) and Gandhar (GGPP) the average PLF as approved by the Hon'ble Commission vide. its Order for the Business Plan for the MYT Control Period dated 31st October, 2018 has been taken into account.





9. Auxiliary consumption of 7.75% and 2.50% has been considered for estimating the net generation from coal and gas based generating stations respectively.
10. Merit Order Dispatch: Further, the NTPC stations have been subjected to merit order dispatch and accordingly the power purchase quantum and variable cost has been projected. However, the fixed charges have been approved for full allocation.
11. The total installed solar capacity in the UT of Daman and Diu is 14.363 MW out of which 10 MW is ground mounted and the remaining 4.363 MW is solar rooftop plants. Additionally, 27 MW of rooftop solar plant has been added to the existing capacity during the 2020-21. Further, the EDDD will also procure 50 MUs of solar power from the open market. Hence, EDDD will procure 93.65 MUs from solar plants during the FY 2021-22 and 98.40 MUs during the MYT Control Period. The remaining solar RPO obligation will be fulfilled by procuring renewable energy certificates. For meeting the non-solar RPOs the EDDD will procure 30 MUs non-solar energy from the open market and the remaining RPO obligation shall be met by purchasing renewable energy certificates during the FY 2021-22 and the MYT Control Period. A summary of the Renewable Purchase Obligation (RPO) to be met by the EDDD during the FY 2021-22 and the MYT Control Period is given in the table below:

**Table 44: Summary of renewable Purchase Obligation for the FY 2021-22 and the MYT Control Period**

(MU)				
Description	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Sales within State (MU)	2,461.28	2,581.00	2,707.05	2,839.82
RPO obligation (%)	17.00%	17.00%	17.00%	17.00%
Solar	8.00%	8.00%	8.00%	8.00%
Non-Solar	9.00%	9.00%	9.00%	9.00%
RPO obligation for the year (MU)	418.42	438.77	460.20	482.77
Solar	93.65	206.48	216.56	227.19
Non-Solar	221.51	232.29	243.63	255.58
RPO Compliance (Procurement and own generation)	123.65	128.40	128.40	128.40
Solar	93.65	98.40	98.40	98.40
Non-Solar	30.00	30.00	30.00	30.00
RPO Compliance (REC certificate purchase)	294.77	310.37	331.80	354.37
Solar	103.25	108.08	118.16	128.79
Non-Solar	191.51	202.29	213.63	225.58

\* The RPO trajectory for the MYT Control Period has been kept 17% as no trajectory has been issued by the Hon'ble JERC for the same.

12. For computing the power availability at the periphery, 3.66% weighted average external transmission losses have been applied on the gross power purchase for FY 2021-22 and the MYT Control Period.
13. Table 45 below depicts the station wise power purchase for FY 2021-22 and the MYT Control Period.

Table 45: Power Purchase Quantum

				(MU)
Source	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
<b>NTPC Stations</b>				
KSTPP	364.33	355.52	355.52	355.52
KSTPP-III	44.16	42.82	42.82	42.82
VSTPP-I	91.38	88.35	88.35	88.35
VSTPP-II	61.37	62.22	62.22	62.22
VSTPP- III	74.18	75.64	75.64	75.64
VSTPP- IV	91.34	84.56	84.56	84.56
VSTPS-V	59.33	55.16	55.16	55.16
KAWAS	43.23	82.19	82.19	82.19
JGPP	55.81	96.46	96.46	96.46
Sipat-I	178.64	179.59	179.59	179.59
Sipat-II	74.87	70.97	70.97	70.97
MSTPS-I	61.32	42.79	42.79	42.79
MOUDA-II	63.25	58.06	58.06	58.06
KHSTPP-II	11.01	8.09	8.09	8.09
SOLAPUR	97.04	128.34	128.34	128.34
LARA	145.46	143.39	143.39	143.39
GADARWARA	162.69	196.34	196.34	196.34
KHTPP	114.63	160.22	160.22	160.22
<b>Subtotal</b>	<b>1794.04</b>	<b>1930.68</b>	<b>1930.68</b>	<b>1930.68</b>
<b>NTPC Bhilai</b>				
Bhilai Unit-I &II(NTPC )	480.62	469.51	469.51	469.51
<b>Subtotal</b>	<b>480.62</b>	<b>469.51</b>	<b>469.51</b>	<b>469.51</b>
<b>NPCIL</b>				
KAPPS	50.60	51.41	51.41	51.41
TAPP 3&4	86.34	78.79	78.79	78.79
<b>Subtotal</b>	<b>136.94</b>	<b>130.20</b>	<b>130.20</b>	<b>130.20</b>
<b>Others</b>				
Ratnagiri	17.10	17.10	17.10	17.10
<b>Subtotal</b>	<b>17.10</b>	<b>17.10</b>	<b>17.10</b>	<b>17.10</b>
<b>Power purchase from Other Sources</b>				
Power purchase from Indian E. Exchange	235.64	288.00	419.00	558.00
UI	46.39	0.00	0.00	0.00



Source	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Solar	11.25	16.00	16.00	16.00
Non Solar (Hydro)	0.00	0.00	0.00	0.00
Solar REC	0.00	0.00	0.00	0.00
Non Solar REC	0.00	0.00	0.00	0.00
Solar (SECI, NTPC)	0.00	0.00	0.00	0.00
<b>Subtotal</b>	<b>293.27</b>	<b>304.00</b>	<b>435.00</b>	<b>574.00</b>
<b>Gross Power Purchase</b>	<b>2721.97</b>	<b>2851.50</b>	<b>2982.50</b>	<b>3121.50</b>
External Losses				
<b>Total Power Purchase</b>	<b>2721.97</b>	<b>2851.50</b>	<b>2982.50</b>	<b>3121.50</b>

14. The Petitioner submits to the Commission to approve the Power Purchase level estimated in table above.

#### 4.6.2 Energy Requirement & Availability

1. Based on the data on estimated & projected sales and power purchase, an Energy Balance has been prepared to assess the T&D losses in FY 2021-22 and the MYT Control Period.

Table 46: Energy Balance

Particulars	(MU)			
	FY 2021-22 RE	FY 2022-23 Projection	FY 2023-24 Projection	FY 2024-25 Projection
Retail Sales (a)	2,461.28	2,581.00	2,707.05	2,839.82
Open Access Sales (b)	0.00	0.00	0.00	0.00
Less: Energy Savings (c)	0.00	0.00	0.00	0.00
Total Sales (d=a+b-c)	2,461.28	2,581.00	2,707.05	2,839.82
Distribution Loss (MU) (e=g-d)	171.10	176.48	182.01	187.71
Distribution Loss (%) (f=e/g)	6.50%	6.40%	6.30%	6.20%
Energy Required at Periphery (g)	2632.38	2757.48	2889.07	3027.53
Sale to common pool consumer/UI Sale(h)	0.70	0.78	0.19	0.73
Own generation (i)	11.25	16.00	16.00	16.00
Total energy requirement at state periphery(j=g+h-i)	2621.83	2742.26	2873.26	3012.26
Less: Energy Purchased through UI at Periphery (k)	46.39	0.00	0.00	0.00
Less: Open Access Purchase at Periphery (l)	0.00	0.00	0.00	0.00
Less: Energy Purchased through Renewable Sources (m)	0.00	0.00	0.00	0.00
Less: Energy Purchased through IEX (n)	235.64	288.00	419.00	558.00
Energy requirement at state periphery from tied up sources (o=j-k-l-m-n)	2339.81	2454.26	2454.26	2454.26
Inter state loss (MU) (p=q-o)	88.89	93.24	93.24	93.24
Inter state loss (%)	3.66%	3.66%	3.66%	3.66%

Particulars	FY 2021-22 RE	FY 2022-23 Projection	FY 2023-24 Projection	FY 2024-25 Projection
Energy requirement at state periphery from generator end (q)	2428.70	2547.50	2547.50	2547.50
Total Energy requirement from tied up sources, UI and renewable sources at generator end (r=i+k+m+n)	2721.97	2851.50	2982.50	3121.50
Total Energy requirement in ut including Open Access (r=q+l)	2721.97	2851.50	2982.50	3121.50

#### 4.6.3 Power Purchase Cost

1. The cost of purchase from the central generating stations for FY 2021-22 and the MYT Control Period has been estimated based on the following assumptions:

- Fixed cost for NTPC for the MYT Control Period has been projected by considering the fixed cost estimated for the various stations for the FY 2021-22.
- Variable cost for each NTPC generating stations for the MYT Control Period has been projected at the same rate as received during the first six months of FY 2021-22.
- For nuclear plants i.e. KAPP and TAPP single part tariff, the actual average variable cost per unit has been considered at the same rate as received during the first six months of FY 2021-22 for projecting the power purchase cost for the MYT Control Period.
- The average power purchase cost for procurement of power from the energy exchange has been considered at Rs. 2.50/unit.

2. The Total Power Purchase cost from various sources for the FY 2021-22 and the MYT Control Period is summarized in the Table below:

Table 47: Power Purchase Cost

(Rs. Crore.)				
Source	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
<b>NTPC Stations</b>				
KSTPP	81.81	78.45	78.45	78.45
KSTPP-III	12.35	12.22	12.22	12.22
VSTPP-I	24.65	23.06	23.06	23.06
VSTPP-II	14.28	14.42	14.42	14.42
VSTPP- III	19.32	19.76	19.76	19.76



Source	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
VSTPP- IV	28.89	27.77	27.77	27.77
VSTPS-V	19.65	19.04	19.04	19.04
KAWAS	28.46	35.78	35.78	35.78
JGPP	34.23	42.22	42.22	42.22
Sipat-I	52.20	52.63	52.63	52.63
Sipat-II	21.49	20.91	20.91	20.91
MSTPS-I	35.65	29.58	29.58	29.58
MOUDA-II	38.88	36.52	36.52	36.52
KHSTPP-II	4.02	3.35	3.35	3.35
SOLAPUR	65.51	76.09	76.09	76.09
LARA	58.79	58.44	58.44	58.44
GADARWARA	89.60	99.74	99.74	99.74
KHTPP	60.07	73.79	73.79	73.79
<b>Subtotal</b>	<b>689.83</b>	<b>723.76</b>	<b>723.76</b>	<b>723.76</b>
<b>NTPC Bhilai</b>				
Bhilai Unit-I &II(NTPC )	207.40	204.27	204.27	204.27
<b>Subtotal</b>	<b>207.40</b>	<b>204.27</b>	<b>204.27</b>	<b>204.27</b>
<b>NPCIL</b>				
KAPPS	11.74	11.93	11.93	11.93
TAPP 3&4	29.13	26.59	26.59	26.59
<b>Subtotal</b>	<b>40.88</b>	<b>38.52</b>	<b>38.52</b>	<b>38.52</b>
<b>Others</b>				
Ratnagiri	19.71	23.70	23.70	23.70
<b>Subtotal</b>	<b>19.71</b>	<b>23.70</b>	<b>23.70</b>	<b>23.70</b>
<b>Power purchase from Other Sources</b>				
Power purchase from Indian E. Exchange	65.81	57.60	104.75	139.50
UI	16.05	0.00	0.00	0.00
Solar	0.00	0.00	0.00	0.00
Non Solar (Hydro)	0.00	0.00	0.00	0.00
Solar REC	0.00	0.00	0.00	0.00
Non Solar REC	0.00	0.00	0.00	0.00
Solar (SECI, NTPC)	0.00	0.00	0.00	0.00
<b>Subtotal</b>	<b>81.85</b>	<b>57.60</b>	<b>104.75</b>	<b>139.50</b>
<b>Gross Power Purchase</b>	<b>1039.68</b>	<b>1047.85</b>	<b>1095.00</b>	<b>1129.75</b>
External Losses				
<b>Total Power Purchase</b>	<b>1039.68</b>	<b>1047.85</b>	<b>1095.00</b>	<b>1129.75</b>

#### 4.6.4 Transmission and Other Charges

Transmission charges payable to PGCIL are based on the total capacity allocation in the transmission network. EDDD has a mix of firm and infirm capacity allocations from various Central Generating Stations which is revised by the Ministry of Power at regular intervals. Therefore, the EDDD has estimated the transmission charges for FY

21-22 based on the actual transmission charges for the first six months and considering the same level of transmission charges for the remaining six months of FY 2021-22. Further, EDDD has taken into account the additional capacity share in the new stations while estimating the Inter-State transmission charges for ensuing year.

For projecting the PGCIL transmission charges for the MYT Control Period, the transmission charges estimated FY 21-22 have been considered. Further, EDDD has taken into account the additional capacity share in the new stations while estimating the Inter-State transmission charges for ensuing year.

**Table 48: Total Power Purchase Cost for the FY 2021-22 and MYT Control Period**

(Rs. Crore.)

Source	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
<b>Total Power Purchase</b>	<b>1039.68</b>	<b>1047.85</b>	<b>1095.00</b>	<b>1129.75</b>
PGCIL CHARGES	174.48	174.48	174.48	174.48
WRLDC	0.26	0.26	0.26	0.26
MSTCL	3.50	3.50	3.50	3.50
<b>Grand Total of Charges - Net</b>	<b>1217.92</b>	<b>1226.10</b>	<b>1273.25</b>	<b>1308.00</b>

#### 4.7 Operation & Maintenance Costs

- Operation and Maintenance expenses comprise of the following heads:
  - Employees Expenses** which includes the basic pay, dearness pay, dearness allowances, house rent allowances, and other allowances paid to the staff;
  - Repair and Maintenance (R&M) Expenses**, which include all expenditure incurred on the maintenance and upkeep of transmission and distribution assets; and
  - Administrative and General Expenses**, which include all expenditure incurred in operating a business such as telephone charges, consultancy and regulatory fee etc.
- The methodology adopted by EDDD for projecting the values of each component of the O&M expense for the MYT Control Period has been explained in the following section.

##### 4.7.1 Employee Expense

- The Employee expense estimated by the Petitioner comprise of all costs related to employees like basic salary, dearness allowances, medical expenses, leave travel





allowances, honorarium, etc. But the Petitioner does not maintain cost related to leave salary contribution, pension and terminal benefits of the employee in the employee cost. Therefore, the Petitioner will claim these expenses relating to the employee cost at an appropriate time when the respective cost items become payable.

2. Based on the various expense head related to employee booked during six months of FY 21-22 EDDD has estimated the total employee cost for full year of FY 21-22 as Rs. 16.28 Crore. Salary expenses for the MYT Control Period is estimated based on the average increase in the Consumer Price Index (CPI) for immediately preceding three years. The average CPI for the last three years is 6.11%.
3. As per the MYT Regulations, 2021, the employees' expenses have been calculated as per the following formulae:

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

where:

$EMP_n$  – Employee expenses of the Distribution Licensee for the  $n$ th Year;

$G_n$  is a growth factor for the  $n$ th 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, approved cost by the Commission in past and any other factor that the Commission feels appropriate:

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

4. The average growth in the CPI for the last three years is 6.11%. Total employee cost of EDDD for the MYT Control period is as given in the table below:

**Table 49: Employee Expenses**

O&M Expenditure	(Rs. Crore)		
	FY 2022-23 Projected	FY 2023-24 Projected	FY 2024-25 Projected
Employee Cost	17.28	18.33	19.45

5. EDDD submits to the Hon'ble Commission to approve the employee costs as projected by the Petitioner.



#### 4.7.2 Repairs & Maintenance Expense

1. Repairs and maintenance expense comprise of expenses incurred by the Petitioner with regard to maintenance and upkeep of the transmission and distribution system. Adequate R&M activities help in reduction of transmission and distribution losses and breakdowns in the system.

2. The actual R&M expense for FY 2020-21 is Rs. 14.43 Crore.

3. As per the JERC Tariff Regulations the R&M expenses shall be calculated as percentage (as per the norm defined) of Opening Gross Fixed Assets for the year governed by following formula:

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

where:

R&M<sub>n</sub> – Repair and Maintenance expenses of the Distribution Licensee for the nth Year;

GFAn-1 – Gross Fixed Asset of the transmission Licensee for the n-1th Year;

'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;

GFA : Gross Fixed Assets at the beginning of the Financial Year

Inflation Index is CPI : WPI :: 60 : 40

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

4. For projecting the R&M expense for the MYT Control Period, the EDDD has considered the WPI inflation as 2.42%. Total repair & maintenance cost of EDDD for the MYT Control Period is summarized in the table below:

**Table 50: Repairs & Maintenance Expense**

O&M Expenditure	(Rs. Crore)		
	FY 2022-23 Projected	FY 2023-24 Projected	FY 2024-25 Projected
R&M Cost	16.48	17.08	17.91

5. The EDDD also requests the Hon'ble Commission to include the following activities as part of Energy Efficiency measures under the R&M Expenses:

- Energy conservation program and workshops



- Publicity and awareness material
- Implementation of demonstration projects
- State Energy Conservation Fund related activities
- Other energy efficiency related activities as per guidelines of SDA and BEE.

We may propose to have yearly requirement of Rs. 1 crore for Daman and Rs. 50 Lakh for Diu.

6. EDDD requests the Commission to approve the R&M expense without any disallowances as the same is necessary for proper maintenance and strengthening of the system and quality of supply in the region in order to ensure consumer satisfaction. Further, Commission should consider the fact that price of most of the basic commodities like iron, copper, zinc and cement used in the repairs and maintenance has increased tremendously over the last 5 years.

#### 4.7.3 Administration & General Expense

1. Administrative and General (A&G) expenses comprise of various expenses as given below:
  - Rent
  - Rates and taxes
  - Travel and conveyance expenses
  - Consultancy and regulatory fees
  - Energy auditing fee and consumer indexing
  - Insurance and other administration expenses
  - Compensation towards accidents etc.
2. The actual A&G expense for FY 20-21 is Rs. 13.93 Crore.
3. For projecting the A&G expenses for the FY 2021-22 the following formula has been used as given in the MYT Regulations:

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

where:

A&G<sub>n</sub> – Administrative and General expenses of the Distribution Licensee for the nth Year;

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



The A&G expenses projected for the MYT Control Period have been given in the table below:

**Table 51: A&G Expense**

O&M Expenditure	(Rs. Crore)		
	FY 2022-23	FY 2023-24	FY 2024-25
	Projected	Projected	Projected
A&G Expenditure	15.69	16.65	17.67

4. The Regulatory & Consultancy expenses for the MYT Control Period has been projected as per the existing agreements, contracts with the consultants and the best estimates for the future regulatory and consultancy works.
5. In line with the above, the Hon'ble Commission is requested to approve the A&G costs without any disallowance.

#### 4.7.4 Total Operation and Maintenance Expense

Based on the employee cost, R&M and A&G expense projected above, the total O&M expenditure for is summarized in table below.

**Table 52: Total O&M Expense**

O&M Expenditure	(Rs. Crore.)		
	FY 2022-23	FY 2023-24	FY 2024-25
	Projected	Projected	Projected
Employee Cost	17.28	18.33	19.45
R&M Cost	16.48	17.08	17.91
A&G Expenditure	15.69	16.65	17.67
<b>Total O&amp;M Exp</b>	<b>49.45</b>	<b>52.06</b>	<b>55.03</b>

The EDDD requests the Hon'ble Commission to approve the O&M expense as projected above.

#### 4.8 Capital Expenditure Plan

1. As has been discussed above, the (EDDD) is engaged in the procurement, transmission and distribution of electricity to the various consumer categories in the Union Territory of Daman and Diu. Apart from the upcoming solar plants, it does not have its own power generation station and completely rely on the Central Sector Generating Stations (CSGS) in Western Region to meet its energy demand.





2. The scheme wise capital expenditure plan for the MYT Control Period is given in the table below:

Table 53: Capital Expenditure for the MYT Control Period

(Rs. Crore.)

Sr.No.	Name of Scheme	Proposed Expenditure			
		Total Scheme Amount	2022-23	2023-24	2024-25
1	Scheme for establishment of 2x100 MVA, 220/66 KV GIS Sub-station at Dabhel, Daman alongwith associated 220 KV multicircuit Magarwada-Dabhel transmission line via Kachigam	49.60	0.00	0.00	20.00
2	Scheme for establishment of 66/11 KV, 2x20 MVA GIS Sub-station alongwith associated line at Dabhel, Daman	31.52	10.00	10.00	11.52
3	Scheme for establishment of 66/11 KV GIS Sub-station at Bhimpore, Daman	32.58	16.00	16.58	0.00
4	Establishment of new hybrid bays at Dalwada Sub-station (2 Nos.) and Zari Sub-station (2 Nos.), Daman	3.19	3.19	0.00	0.00
5	Scheme for inter connection of 66 KV line from Zari Sub-station to Eurocoustic and replacement of Panther conductor from Kachigam Sub-station to EPL	6.36	6.36	0.00	0.00
6	Scheme for shifting and commissioning of newly procured/existing equipment in the newly constructed control room building near existing 66 KV Sub station at Dalwada and Dabhel Sub station	14.00	7.00	7.00	0.00
	<b>Total</b>	<b>137.25</b>	<b>42.55</b>	<b>33.58</b>	<b>31.52</b>

3. The EDDD requests the Hon'ble Commission to approve the capital expenditure against the scheme as submitted herewith.



4. A summary of the capital expenditure and capitalization for the MYT Control Period is summarized in Table below:

**Table 54: Capital Expenditure & Capitalization for the MYT Control Period**

(Rs. Crore)

Sr.No.	Particulars	Total Scheme Amount	Proposed Expenditure		
			2022-23 (Projected)	2023-24 (Projected)	2024-25 (Projected)
1	Capital Expenditure	137.25	42.55	33.58	31.52
2	Capitalization	87.65	23.55	32.58	31.52

5. The EDDD requests the Hon'ble Commission to approve the capital expenditure and capitalization as projected above.

#### 4.9 Gross Fixed Assets

- EDDD had Rs. 627.69 Crore of Opening Gross Fixed Assets (GFA) in FY 20-21. Assets amounting to Rs. 14.26 Crore have been added to the GFA during the FY 2020-21.
- Assets amounting to Rs.5.00 Crore have been estimated to be added in the GFA during FY 21-22.
- Similarly, based on the capital expenditure plan as detailed above, Rs. 23.55 Crore, Rs. 32.58 Crore and Rs. 31.52 Crore is proposed to be capitalized during the FY 2022-23, FY 2023-24 and the FY 2024-25 respectively.
- A summary of the Opening and Closing GFA and capitalization has been summarized in table below:

**Table 55: Opening and Closing GFA for the FY 2021-22 and the MYT Control Period**

(Rs. Crore)

Particulars	Opening GFA	Additions during the Year	Closing GFA
FY 2021-22 (Revised Estimate)	641.94	5.00	646.94
FY 2022-23 (Projected)	646.94	23.55	670.49
FY 2023-24 (Projected)	670.49	32.58	703.07
FY 2024-25 (Projected)	703.07	31.52	734.59

5. The EDDD requests the Hon'ble Commission to approve the GFA as projected above.





#### 4.10 Depreciation

1. Depreciation is charged on the basis of straight-line method, on the GFA in use at the beginning of the year and addition in assets during the financial year. The depreciation is based on the original cost of the Gross Fixed Assets.
2. EDDD has applied the depreciation rates as specified in the MYT Regulations, 2021.
3. Depreciation for the MYT Control Period is determined by applying aforesaid category-wise assets depreciation rates on the opening balance of Gross Fixed assets and average of the addition during the MYT Control Period. The EDDD would like to submit to the Hon'ble Commission that it has computed the depreciation based on the closing value of GFA for FY 2021-22 and the estimated capitalization for the MYT Control Period.
4. Therefore, the EDDD requests the Hon'ble Commission to approve the depreciation as given in the table below:

Table 56: Depreciation

Particulars	(Rs. Crore)			
	FY 21-22 Revised Estimate	FY 22-23 Projected	FY 23-24 Projected	FY 24-25 Projected
Opening GFA	641.94	646.94	670.49	703.07
Additions	5.00	23.55	32.58	31.52
Closing GFA	646.94	670.49	703.07	734.59
Average GFA	644.44	658.72	686.78	718.83
Depreciation Amount	22.40	22.92	23.93	25.08
Average Depreciation Rate	3.46%	3.42%	3.40%	3.41%

5. The EDDD requests the Hon'ble Commission to approve the depreciation as projected above.

#### 4.11 Interest & Finance Costs

##### 4.11.1 Interest on Long-term/ Capital Loans

1. The entire capital expenditure of EDDD since its inception has been funded by the Central Government through budgetary support each year. Therefore, the department does not have any loan liabilities.

2. However, EDDD is now migrating from a Government owned utility to a commercial utility under the Electricity Act, 2003, it has come under the direction of the Joint Electricity Regulatory Commission. It has been assumed that EDDD would work as a separate commercial utility and therefore would be utilizing the debt facilities in the coming years.
3. Assets capitalized during the MYT Control Period have been considered based on normative debt-equity ratio of 70:30 as per the MYT Regulations, 2021.
4. Interest rate of 8.00% has been considered for computation of interest cost for long-term loans which is similar to the prevailing 1 year SBI MCLR plus 100 basis points. Details of the loan amounts and interest cost computed for MYT Control period is summarized in Table below:

Table 57: Total Interest on Long-term Loans

Interest on Debt	(Rs. Crore)		
	FY 2022-23 Projected	FY 2023-24 Projected	FY 2024-25 Projected
Opening Loan	94.63	88.20	87.08
Loan for additional Capex (70:30 debt-equity)	16.49	22.81	22.06
Loan Repayment	22.92	23.93	25.08
Closing Loan	88.20	87.08	84.06
Interest Cost on Avg. Loans	7.31	7.01	6.85

5. The EDDD requests the Hon'ble Commission to approve the interest on long-term capital loans as given in the table above.

#### 4.11.2 Interest on Working Capital Borrowings

- 1 EDDD has computed the Interest on Working Capital for the MYT Control Period is based on normative basis as per the MYT Regulations, 2021.
- 2 The working capital requirement for the FY 2021-22 has been computed considering the following parameters:

- 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 Consumers at the prevailing tariff;  
Less
  - d. Power Purchase Cost for 1 month; plus
  - e. Amount, if any, held as security deposits under clause (b) of sub-section (1) of Section 47 of the Act from Consumers except the security deposits held in the form of Bank Guarantees:
- 3 A rate of interest of 9.00% has been considered on the working capital requirement, being the 1 year SBI MCLR as on 1<sup>st</sup> April of the year plus 200 basis points. This is in line with the MYT Regulations, 2018 which states that "The rate of interest on working capital shall be equal 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 Financial Year in which the Petition is filed plus 200 basis points."
  - 4 The normative interest on working capital for the MYT Control Period considering the above methodology is summarized in the Table below:

**Table 58: Interest on Working Capital for the MYT Control Period**

Particulars	(Rs. Crore)		
	FY 2022-23 Projected	FY 2023-24 Projected	FY 2024-25 Projected
O&M expense for one month	4.12	4.34	4.59
Maintenance spares at 40% of R&M for one month	0.55	0.57	0.60
Receivables for 2 months	210.20	214.13	224.26
Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt	95.87	95.87	95.87
Less one month of power purchase cost	102.17	106.10	109.00
<b>Total Working Capital requirement</b>	<b>16.83</b>	<b>17.07</b>	<b>24.58</b>
<b>Interest on Working Capital</b>	<b>1.51</b>	<b>1.54</b>	<b>2.21</b>

- 5 The EDDD requests the Hon'ble Commission to approve the interest on working capital as given above.



#### 4.12 Return on Equity

1. As per the JERC (Multi Year Distribution Tariff) Regulations, 2021, EDDD is entitled for a Return on Equity (RoE).
2. The Regulation 28.2 and 28.3 of the MYT Regulations, 2021 stipulates the following:  
 "28.2 The return on equity for the Distribution Wires Business shall be allowed on the equity capital determined in accordance with Regulation 27 for the assets put to use at post-tax rate of return on equity specified in the prevalent CERC Tariff Regulations for transmission system.  
 28.3 The return on equity for the Retail Supply Business shall be allowed on the equity capital determined in accordance with Regulation 27 for the assets put to use, at the rate of sixteen (16) per cent per annum."
3. The Commission has segregated the approved average equity (average of opening and closing equity) into average equity for Distribution Wires Business and Retail Supply Business based on the Allocation Statement provided in the MYT Regulations, 2021 i.e. 90% allocation for the Distribution Wires Business and 10% allocation for the Retail Supply Business. The Commission has considered a rate of 15.50% for the Distribution Wires Business (as per the prevalent CERC Regulations) and a rate of 16% for the Retail Supply Business.
4. The equity component has been determined in accordance with Regulation 27 of the MYT Regulations. The following table provides the ROE for the MYT Control Period:

**Table 59: Proposed Return on Equity**

(Rs. Crore)

Particulars	FY 2022-23 Projected	FY 2023-24 Projected	FY 2024-25 Projected
Opening Equity	96.03	103.09	112.87
Addition in equity on account of new capitalization	7.07	9.77	9.46
Closing Equity	103.09	112.87	122.32
Average Equity	99.56	107.98	117.59
Average Equity (Wires Business)	89.60	97.18	105.84
Average Equity (Retail Supply Business)	9.96	10.80	11.76
Return on Equity for Wires Business (%)	15.50%	15.50%	15.50%



Particulars	FY 2022-23 Projected	FY 2023-24 Projected	FY 2024-25 Projected
Return on Equity for Retail Supply Business (%)	16.00%	16.00%	16.00%
Return on Equity for Wires Business	13.89	15.06	16.40
Return on Equity for Retail Supply Business	1.59	1.73	1.88
<b>Return on Equity</b>	<b>15.48</b>	<b>16.79</b>	<b>18.29</b>

5. The EDDD requests the Hon'ble Commission to approve the return on equity as given above.

#### 4.13 Interest on consumer security deposits

1. The Hon'ble Commission in its last Tariff Order has approved Rs. 4.68 Crore as interest payable on consumer security deposits. EDDD has made a provision to pay Rs. 3.67 Crore as interest on consumer security deposits during the MYT Control Period. The details of interest on consumer security deposits for the MYT control Period have been given in the table below:

Table 60: Interest on Consumer Security Deposit

Particulars	(Rs. Crore)		
	FY 2022-23 Projected	FY 2023-24 Projected	FY 2024-25 Projected
Interest on Security Deposit	3.67	3.67	3.67

2. The EDDD requests the Hon'ble Commission to approve the interest on consumer security deposits as given above.

#### 4.14 Non-Tariff & Other Income

1. Non-tariff income includes meter rent/service line rentals, recovery for theft of power/malpractices, miscellaneous charges from consumers. Other income includes Interest on Staff loans & advances, Interest on advances to suppliers/contractors, and Miscellaneous receipts.
2. For projecting the non-tariff income for the MYT Control Period, an increase of 5% p.a. has been considered over the estimated non-tariff income for FY 21-22. Details of the non-tariff income for the MYT Control Period is provided in table below:



Table 61: Non-tariff Income

Particulars	(Rs. Crore)		
	FY 2022-23 Projected	FY 2023-24 Projected	FY 2024-25 Projected
Non-Tariff Income	6.53	6.85	7.20

3. The EDDD requests the Hon'ble Commission to approve the return on equity as given above.

#### 4.15 Aggregate Revenue Requirement

1. Table 62 summarizes EDDD's Aggregate Revenue Requirement for MYT Control Period.

Table 62: Aggregate Revenue Requirement

Particulars	(Rs. Crore)		
	FY 2022-23 Projected	FY 2023-24 Projected	FY 2024-25 Projected
Power Purchase Cost	1,226.10	1,273.25	1308.00
O&M Expense	49.45	52.06	55.03
Depreciation	22.92	23.93	25.08
Interest Cost on Long-term Capital Loans	7.31	7.01	6.85
Interest on Working Capital Loans	1.51	1.54	2.21
Return on Equity	15.48	16.79	18.29
Provision for Bad Debt			
Interest on Security Deposit	3.67	3.67	3.67
<b>Less:</b>			
Non-Tariff Income	6.53	6.85	7.20
Revenue from Surplus Power Sale			
<b>Annual Revenue Requirement</b>	<b>1,319.91</b>	<b>1,371.38</b>	<b>1,411.92</b>

#### 4.16 Revenue at Existing Tariff

- Revenue from sale of power for the FY 2022-23 is determined based on the energy sales estimated in Table 40 and category wise tariff prevalent in the UT of Daman & Diu.
- EDDD has computed the revenue for the FY 2022-23 based on the tariff notified by the Hon'ble Commission in the Tariff Order for the FY 2021-22 dated 23<sup>rd</sup> March, 2021.
- The table below summarizes the revenue from sale of power at existing tariff for FY 2022-23:

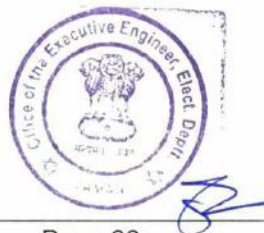




Table 63: Revenue from Sale of Power at Existing Tariff

(Rs. Crore.)	
Revenue @ Existing Tariff (Rs Crore)	FY 22-23 Projected
Domestic	39.34
LIG	0.00
Commercial	20.33
Agriculture	0.29
LT Industry	98.30
HT/EHT Industry	1099.59
Public Lighting	2.39
Public Water Works	0.95
Temp. Supply	0.00
<b>Total</b>	<b>1261.18</b>
Revenue from Open access	0.00
<b>Total Revenue</b>	<b>1261.18</b>

## 4.17 Coverage of Revenue Gap

1. Revenue from sale of power with-in the UT (category-wise) is determined in Table 63.
2. Table 64 summarizes the ARR for EDDD for FY 2020-21, FY 2021-22 and FY 2022-23 along with the revenue and the resulting revenue (gap)/surplus. The cumulative revenue gap for the three years is Rs. 98.09 Crores as given in the table below.

Table 64: Revenue Gap for FY 2022-23

(Rs. Crore.)				
Sr. No.	Particulars	FY20-21 Actual	FY21-22 Revised Estimates	FY22-23 Projected
1	Total ARR	1,104.30	1,319.77	1,319.91
2	Revenue @ Existing Tariff (including open access)	1,090.37	1,310.55	1,261.18
3	Total Revenue	1,090.37	1,310.55	1,261.18
4	Revenue (Gap) /Surplus(3-1)	(13.93)	(9.22)	(58.72)
	Covered By			
5	Previous Years' (Gap)/Surplus Carried Over	(21.04)	(22.27)	(33.84)
6	Revenue (Gap) /Surplus(4+5)	(21.04)	(31.49)	(92.56)

Sr. No.	Particulars	FY20-21 Actual	FY21-22 Revised Estimates	FY22-23 Projected
7	Carrying Cost	(1.23)	(2.35)	(5.53)
8	Total (Gap)/Surplus for three years(6+7)	(22.27)	(33.84)	(98.09)

3. It is evident from Table 64 that there is a cumulative revenue gap of Rs. 98.09 Crore at the end of FY 2022-23. Further, there is a standalone revenue gap of Rs. 58.72 Crores during the FY 2022-23.
4. The EDDD therefore does not propose any tariff hike for the FY 2022-23. It is prayed to the Hon'ble Commission that considering the above submissions the proposal of EDDD for keeping the tariff unchanged for the FY 2022-23 may kindly be approved.

#### 4.18 Average Cost of Supply

1. Table 65 summarizes Average Cost of supply and total average realization at the existing tariff approved by the Hon'ble Commission.

**Table 65: Average Cost of Supply & Revenue Realization**

Average Realization & Cost of Supply (Rs/Unit)	FY20-21 Actual	FY21-22 Revised Estimate	FY22-23 Projected
Average Cost of Supply of EDDD	5.16	5.36	5.11
Average Realization	5.10	5.32	4.88
Revenue Gap at Existing Tariff	(0.07)	(0.04)	(0.23)
Net Revenue (Gap)/Surplus (Includes gap of previous year)	(0.10)	(0.13)	(0.13)
Additional revenue through proposed tariff	0.00	0.00	0.00
Net Revenue (Gap)/Surplus	(0.10)	(0.14)	(0.38)





#### 4.19 Tariff Proposal for FY 22-23

1. As discussed above the EDDD does not propose any tariff hike for the FY 2022-23. The table below summarizes the existing and proposed tariff structure for various consumer categories for FY 2022-23.

**Table 66: Proposed Tariff Structure for FY 22-23**

Tariff Structure	Phase	Existing (FY 2021-22)		Proposed (FY 2022-23)	
		Energy Charges (Rs/Kwh)	Fixed Charges	Energy Charges (Rs/Kwh)	Fixed Charges
<b>LT-D/Domestic</b>					
0 to 100 Units	Single	1.40	20 Rs./Con/Month	1.40	20 Rs./Con/Month
101 to 200 Units	Single	2.00	20 Rs./Con/Month	2.00	20 Rs./Con/Month
201 to 400 Units	Single	2.50	20 Rs./Con/Month	2.50	20 Rs./Con/Month
Beyond 401 Units	Single	3.00	20 Rs./Con/Month	3.00	20 Rs./Con/Month
0 to 100 Units	Three	1.40	45 Rs./Con/Month	1.40	45 Rs./Con/Month
101 to 200 Units	Three	2.00	45 Rs./Con/Month	2.00	45 Rs./Con/Month
201 to 400 Units	Three	2.50	45 Rs./Con/Month	2.50	45 Rs./Con/Month
Beyond 401 Units	Three	3.00	45 Rs./Con/Month	3.00	45 Rs./Con/Month
<b>Low Income Group</b>			Rs. 15/connection /month		Rs. 15/connection /month
<b>LT-C/Commercial</b>					
1st 100 Units	Single	3.00	25 Rs./Con/Month	3.00	25 Rs./Con/Month
Beyond 100 Units	Single	4.05	25 Rs./Con/Month	4.05	25 Rs./Con/Month
1st 100 Units	Three	3.00	50 Rs./Con/Month	3.00	50 Rs./Con/Month
Beyond 100 Units	Three	4.05	50 Rs./Con/Month	4.05	50 Rs./Con/Month
<b>HT Commercial</b>					
For the category		4.20/kVAh	Rs. 100/kVA/month	4.20/kVAh	Rs./100/kVA/month
<b>LT- Ag/ Agriculture</b>					
Upto 10 HP		0.75		0.75	
Beyond 10 HP and upto 99HP		1.05		1.05	
<b>LT Industry</b>					
For the category		3.60/kVAh	Rs. 40/HP/month	3.60/kVAh	Rs. 40/HP/month
<b>LT-PL/Public Lighting</b>					
Public Lighting		4.50		4.50	

Tariff Structure		Existing (FY 2021-22)		Proposed (FY 2022-23)	
	Phase	Energy Charges (Rs/Kwh)	Fixed Charges	Energy Charges (Rs/Kwh)	Fixed Charges
LT-Public Water Works					
For the category		4.10	Rs. 25/HP/month	4.10	Rs. 25/HP/month
HT					
HTC General Industrial / Motive Power 11KV or 66KV having CMD above 100KVA					
For all units		4.20/kVAh	Rs. 315/kVA/month	4.20/kVAh	Rs. 315/kVA/month
HT Industrial((Ferro Metallurgical/ Steel Melting/ Steel Rerolling Power Intensive)					
For all units		4.15/kVAh	Rs. 505/kVA/month	4.15kVAh	Rs. 505/kVA/month
Hoardings/Sign Boards					
For all units		6.70	Rs. 100/kVA/month	6.70	Rs. 100/kVA/month
Electric Vehicle Charging Station					
For the category		4.50	-	4.50	-

2. EDDD, requests the Hon'ble Commission to approve the fuel purchase adjustment formula including the "k" factor for FY 22-23 as well, which can take care of any variation in the ARR over and above the approved level by the Commission for FY 22-23.





## Chapter 5: Determination of Open access charges

### 4.1 Allocation Matrix

The allocation between wheeling and retail supply business for FY 2022-23 as per the ARR proposed for FY 2022-23 is provided in the table below:

Table 67: Allocation of ARR between Wheeling and Retail Supply

Annual Revenue Requirement Rs. Crs	Allocation (%)		Allocation FY 2022-23	
	Wheeling	Supply	Wheeling	Supply
Fuel Cost	0%	100%	0.00	0.00
Power Purchase Cost	0%	100%	0.00	1,226.10
Employee	40%	60%	6.91	10.37
R&M	90%	10%	14.83	1.65
A&G	50%	50%	7.84	7.84
Depreciation	90%	10%	20.62	2.29
Interest Cost on Long-term Capital Loans	90%	10%	6.58	0.73
Interest on Working Capital Loans	10%	90%	0.15	1.36
Interest on Security Deposit	10%	90%	0.37	3.30
Return on Equity	90%	10%	13.93	1.55
Provision for Bad Debt	0%	100%	-	-
<b>Annual Revenue Requirement</b>			<b>71.25</b>	<b>1255.19</b>
Less: Non-Tariff Income	10%	90%	0.65	5.87
Income from other business	50%	50%	0.00	0.00
<b>Net Revenue Requirement</b>			<b>70.59</b>	<b>1249.31</b>

### 4.2 Voltage wise Wheeling Charges

The EDDD has considered the voltage wise losses for FY 2022-23 as considered by the Hon'ble Commission in its Tariff Order for the FY 2021-22.

In order to determine the wheeling charges prudently, the wheeling costs has been allocated on the basis of voltage levels. The wheeling charges are levied for the distribution network utilized by Open Access consumers and primarily comprise of O&M Expenses and other costs as provided in the table above. The criteria for allocation of wheeling costs is elaborated as follows:

- O&M Expenses are allocated on the basis of number of consumers under each category.
- All expenses other than the O&M expenses are allocated on the basis of voltage wise asset allocation.



The voltage wise asset allocation assumed and the number of consumers in each category has been shown as follows:

**Table 68: Parameters assumed for voltage wise allocation of wheeling charges**

Category	Sales (MU)	Voltage wise losses (%)	Energy Input	Consumers	Asset Allocation (%)
LT	450.00	22.93%	583.88	64998	30%
HT & EHT	2,131.00	1.96%	2173.60	749	70%
<b>Total</b>	<b>2581.00</b>	<b>6.40%</b>	<b>2757.48</b>	<b>65737</b>	<b>100%</b>

HT/EHT wheeling charges have been allocated to HT/EHT and LT consumers based on the energy input at HT/EHT level for sale at HT/EHT and LT consumers. LT wheeling charges were allocated to LT consumers only. Accordingly, the Wheeling Charges have been computed as follows:

**Table 69: Wheeling charges proposed for FY 2022-23**

Category	O&M	Others	Total	Wheeling Charges (Rs./kWh)
LT	29.26	12.30	41.56	0.71
HT & EHT	0.33	28.70	29.04	0.13
<b>Total</b>	<b>29.59</b>	<b>41.00</b>	<b>70.59</b>	<b>0.26</b>

### 4.3 Cross Subsidy Surcharge

The Cross Subsidy Surcharge has been determined as considered by the Hon'ble Commission in its Tariff Order for the FY 2021-22. The cross-subsidy surcharge has been calculated with respect to the voltage wise cost of supply.

The following approach has been adopted to determine the voltage wise cost of supply:

Voltage Wise losses at each voltage level are assumed for LT & HT/EHT voltage categories. The remaining losses are adjusted in the LT voltage level in order to maintain the Intra-State distribution losses at 6.40%, as proposed in the ARR for FY 2022-23. Using these losses the energy input at each voltage level is determined based on the energy sales. The table below shows the energy input at each voltage level

**Table 70: Energy Input at each voltage level (MU)**

Category	Sales (MU)	Voltage wise losses (%)	Energy Input
LT	450.00	22.93%	583.88



Category	Sales (MU)	Voltage wise losses (%)	Energy Input
HT & EHT	2,131.00	1.96%	2173.60
<b>Total</b>	<b>2581</b>	<b>4.00%</b>	<b>2757.48</b>

Now the overall ARR proposed for FY 2022-23 is divided into variable and fixed ARR with variable ARR comprising of variable power purchase cost and fixed ARR comprising of all the other costs.

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 HT/EHT level is then further allocated to LT level on the basis of input energy, as the HT/EHT network is utilized by both HT/EHT 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 71: Parameters used for allocation of fixed costs**

Category	Energy Input	Asset Allocation (%)	Consumers
LT	583.88	30.00%	64988
HT & EHT	2,173.60	70.00%	749
<b>Total</b>	<b>2757.48</b>	<b>100.00%</b>	<b>65737</b>

The Variable component of the Power purchase cost is allocated on the basis of energy input. The Voltage wise cost of supply (VCoS) is then determined on the basis of energy sales of respective categories.

Accordingly, the VCoS is determined as shown in the table below:

**Table 72: Voltage Wise Cost of Supply (VCoS)**

Category	Allocated Fixed Cost (Rs. Cr)	Allocated Variable Cost (Rs. Cr)	Total Cost (Rs. Cr)	Energy Sales (MU)	VCoS (Rs./kWh)
LT	200.97	195.00	395.97	450.00	8.80
HT & EHT	468.93	455.01	923.93	2,131.00	4.34

The VCoS as determined above is used to determine the Cross-Subsidy Surcharge. Accordingly, the approved Cross-subsidy surcharge is shown in the table below.

Table 73: Proposed Cross Subsidy Surcharge for FY 2022-23

Category	VCoS (Rs./kWH)	ABR (Rs./kWH)	Cross Subsidy
LT	8.80	3.59	(5.21)
HT & EHT	4.34	5.16	0.82

#### 4.4 Additional Surcharge

The Additional Surcharge has been determined as considered by the Hon'ble Commission in its Tariff Order for the FY 2021-22.

Table 74: Additional Surcharge for the FY 2022-23

Particulars	FY 2022-23
Total Power Purchase cost (Rs. Cr)	1,226.10
Fixed Cost component in Power Purchase Cost (Rs. Cr)	397.84
Energy Sales (MU)	2,581.00
Additional Surcharge (Rs/kWh)	1.54

#### 4.5 Application and Agreement Fees

The application and agreement fees are proposed as Rs 50,000/- and Rs 1,00,000/- per MW respectively.





## **Chapter 6: Directives**

---

The Hon'ble Commission vide Tariff Order dated 23<sup>rd</sup> March, 2021 had issued a set of directives to be followed by EDDD to comply with the "The Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Multi Year Distribution Tariff) Regulations, 2018."

In line with the directives, EDDD has been taken several steps to comply with the directives. The purpose of this section is to appraise the Hon'ble Commission on progress made by EDDD on this matter since the issuance of the aforesaid tariff order.

### **A. Directives continued in this Order**

#### **1. Directive 1: Assets created from consumer contribution**

The Petitioner has failed to submit the details of assets created through consumer contribution, if any. The Petitioner is not entitled to get depreciation on these assets. The Commission has currently considered the entire GFA towards depreciation and will reduce the depreciation in future, once the details of the consumer contribution are made available. The Commission directs the Petitioner to submit detailed scheme wise consumer contributions, the impact of which shall be accounted by Commission in future Tariff Orders.

#### **Petitioner's Submission**

The EDDD would like to submit that the details of assets created from consumer contribution shall be submitted to the Hon'ble Commission shortly.

#### **Commission's Response**

The Commission has noted with concern that Petitioner is yet to submit the details of assets created from consumer contribution. The absence of this data constraints the Commission in fair determination of average cost of supply and tariff. The Commission directs the petitioner to submit the data pertaining to the assets created from consumer contribution along with the Tariff petition for determination of retail Tariff for FY 2020-21.

#### **Petitioner's Submission**

The EDDD would like to submit to the Hon'ble Commission that the assets created out of consumer contribution are not included in the asset register being prepared by the Department for the FY 2018-19. Further, the depreciation on the assets created out of consumer contribution is not included in the ARR being filed by the Department for determination of Tariff.



### **Commission's Response**

The Commission has noted that the Petitioner has submitted that the assets created out of consumer contribution are not included in the asset register being prepared by the Department for FY 2018-19 but as per Commissions direction petitioner has still failed to submit the details of assets created through consumer contribution, if any. The Petitioner is not entitled to get depreciation on these assets. The Commission has currently considered the entire GFA towards depreciation and will reduce the depreciation in future, once the details of the consumer contribution are made available. The Commission directs the Petitioner to submit detailed scheme wise consumer contributions, the impact of which shall be accounted by the Commission in future Tariff Orders.

### **Petitioner's Submission**

The EDDD would like to submit that the assets created out of consumer contribution are not included in the asset register prepared for FY 2019-20. Further, the EDDD is not claiming any depreciation on the assets created out of consumer contribution in the ARR petition.

### **Commission's Response**

The Commission in the directive to petitioner in Tariff Order dated May 18th 2020 noted that the Petitioner has submitted that the assets created out of consumer contribution is not included in the asset register being prepared by the Department for FY 2018-19.

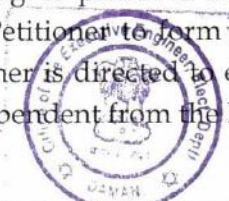
However as per Commissions directions, the petitioner has again failed to submit the details of assets created through consumer contribution, if any. The Petitioner is not entitled to get depreciation on these assets. The Commission has currently considered the entire GFA towards depreciation and will reduce the depreciation in future, once the details of the consumer contribution are made available. The Commission directs the Petitioner to submit detailed scheme wise consumer contributions, the impact of which shall be accounted by the Commission in future Tariff Orders.

### **Petitioner's Submission**

The EDDD would like to submit that the assets created out of consumer contribution are not included in the asset register prepared for FY 2020-21. Further, the EDDD is not claiming any depreciation on the assets created out of consumer contribution in the ARR petition.

## **2. Directive 2: Creation of SLDC**

Currently the functions of scheduling of power is being performed by the ED DD itself. The Commission directs the Petitioner to form a separate SLDC which is ring fenced from the ED DD. The Petitioner is directed to employ employees dedicated to the SLDC operations, which are independent from the ED DD.





### **Petitioner's Submission**

Electricity Department would like to submit that, presently Department acts as a vertically integrated entity, looking after transmission, distribution, and system operation. However, as per the direction of Hon'ble Commission, ring-fencing has been initiated for SLDC operation. Till now, we have implemented following,

- Head of the SLDC is nominated
- Necessary staff to SLDC has been provided for independent operation
- Budget of SLDC is separately provided by Administration.

### **Commission's Response**

The Commission appreciates the efforts of the Petitioner towards creating an independent SLDC. The Commission directs the Petitioner to expedite the process of creation of separate SLDC and submit a detailed implementation plan for the same within 3 months of the issuance of this Order.

### **Petitioner's Submission**

The EDDD would like to submit that the Department has provided a separate infrastructure for the functioning of the SLDC.

### **Commission's Response**

The Commission has noted with concern that Petitioner has not submit any report regarding detailed implementation plan to expedite the process of creation of separate SLDC. The Commission directs the petitioner to submit the detailed implementation plan along with the current status in regard to the creation of separate SLDC within 3 months of the issuance of this Order.

### **Petitioner's Submission**

The EDDD would like to submit that the Department is functioning as a vertically integrated utility and looks after the transmission and distribution functions. However, the EDDD has provided a separate head for SLDC along with necessary staff and also the budgetary allocation has been done separately for the functioning of SLDC.

### **Commission's Response**

The Commission appreciates the efforts of the Petitioner towards creating an independent SLDC. The Commission directs the Petitioner to expedite the process of creation of separate SLDC and submit a detailed implementation plan for the same within 3 months of the issuance of this Order.



### **Petitioner's Submission**

The EDDD would like to submit that presently the UT of Dadra and Nagar Haveli and UT of Daman and Diu have merged into a single UT. The Competent Authority is yet to decide the location of the SLDC and other related matters of the merged UT. Hence, the process of creation of separate SLDC other matters shall be initiated once decision regarding the SLDC is taken by the Competent Authority.





## Tariff Schedule

### General Terms and Conditions:

1. The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.
2. Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.
3. Supply to consumers having contracted load between 100 KVA to 5000 KVA (including licensee common feeders and express feeders/dedicated feeders) shall generally be at 11 KV and for more than 5000 KVA up to 25000 KVA at 66 KV. For the consumer who requires load more than 25000 KVA, the supply voltage shall be at 220 KV level.
4. 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 a 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.
5. If connected load of a domestic category is found to be at variance with 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.
6. **Power Factor Charges** - LT and Agriculture Connection running without proper capacitors installed so as to maintain Power Factor of 0.85 as per the JERC Supply Code Regulations, 2018 and subsequent amendments thereof, shall be charged extra 2.5% of units consumed as additional power factor charges. Payment of the power factor charge won't exempt the consumer from his responsibility to maintain the power factor. The conditions for disconnection of a consumer supply in case of non-achievement of minimum level of power factor as prescribed in the Supply Code Regulations notified by JERC, shall apply. ED-DD reserves the right to install a suitable capacitor at its own cost and recover the cost thereof as arrears of energy charges. In case the monthly average power factor is less than 0.70 lagging, the installation is liable for disconnection after due notice.



7. 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 the provisions of the Act and the Supply Code Regulations.
8. 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.
9. 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 JERC Supply Code Regulation. If such over-drawal 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.

10. Unless specifically stated to the contrary, the figures of energy charges relate to paisa per unit (kWh) charge for the energy consumed during the month.
11. Delayed payment surcharge shall be applicable to all categories of consumers. Delayed payment surcharge of 2% per month or part thereof shall be levied on all arrears of bills. 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 the next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only up to the month of permanent disconnection.

12. **Advance Payment Rebate:** If payment is made in advance well before commencement of the consumption period for which the 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.

13. **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.

14. **TOD Tariff:** For the purpose of TOD Tariff, the peak/off-peak/normal hours and charges for the corresponding period provided in the table as follows:

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

15. The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with the FPPCA formula notified in Chapter 8 of this Tariff Order. Such charges shall be recovered/refunded in accordance with the terms and conditions specified in the FPPCA formula.
16. The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order.

## **DETAILED TARIFF SCHEDULE**

### **I. (A) Domestic Category**

This schedule shall apply to private houses, hostels, hospitals run on Non-commercial lines, Religious Institutions, Government Schools & associated facilities for Light, Fans, Radios, Domestic Heating and other household appliances including water pumps up to 24HP.

#### **1. Energy Charges**



Usage(Units/Month)	Energy Charge (Ps./kWh)
0-100 units	140
101-200 units	200
201-400 units	250
401 and above	300

## 2. Fixed Charges

Usage (Rs./Consumer/month)	Fixed Charges
For category as defined above	Single Phase: Rs. 20 Three Phase: Rs. 45

### (B) Power Supply to Low Income Group (Up to 2x40 W bulbs only)

Power supply to low income group connections will be charged at INR 15 per service connection per month. For any unauthorized increase in the load beyond 2\*40 watts, penal charges at the rate of INR 20 per month per point will be levied and the installation will be liable for disconnection.

## II. Non-Domestic Category/Commercial

This schedule shall apply to Shops, Offices, Restaurants, Bus Stations, Photo Studios, Laundries, Cinema Theatres, Industrial Lighting, clubs and other Commercial installations.

**Point of Supply/Notes:** This includes all categories which are not covered by other tariff categories including Domestic Category, Low Income Group, Industrial LT, HT/EHT Category (A&B), Agriculture and Poultry, Public Lighting.

## 1. Energy Charges

Usage(Units/Month)	Energy Charge (Ps./kWh)
1-100 units	300
101 units and above	405

## 2. Fixed Charges





Usage(Rs./Consumer/month)	Fixed Charge
For category as defined above	Single Phase: Rs. 25 Three Phase: Rs. 50

### III. HT Commercial

This schedule shall apply to all the consumers falling under the LT Commercial category above but connected at 11 kV or above voltage level.

#### 1. Energy Charges

Usage(Units/Month)	Energy Charge (Ps./kVAh)
For all units	420

#### 2. Fixed Charges

Usage(Rs./kVA/month)	Fixed Charge
For category as defined above	100

### IV. LT Industrial Category

This schedule shall apply to all Low-Tension Industrial Motive Power Connections including water works/pumps with sanctioned load up to 120 HP.

#### i. Energy Charges

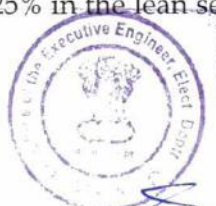
Usage(Units/month)	Energy Charge (Ps./kVAh)
For all units	360

#### ii. Fixed Charges

	Fixed charge (Rs./HP/month) or part thereof
For category as defined above	Rs 40.00/- per HP or part thereof

Fixed Charges shall be reduced by 25% in the lean season from May to August for Fishery Industry.

### V. LT Public Water Works



## i. Energy Charges

Usage(Units/month)	Energy Charge (Ps./kWh)
For all units	410

## ii. Fixed Charges

	Fixed charge (Rs./HP/month) or part thereof
For category as defined above	Rs 25.00/- per HP or part thereof

## VI. HT/EHT Category

## A. High Tension Consumer

This schedule shall apply to all Industrial/Motive power consumers drawing through 11 kV and 66 kV systems having contract demand of 100 kVA and above.

## 1. Fixed Charges(Demand Charges)

For Billing Demand	Charges (Rs./KVA/month) or part thereof
Up to Contract Demand	Rs 315/kVA/month or part thereof

## 2. Energy Charges

Usage(Units/Month)	Tariff (Ps./kVAh)
For all units	420

## B. HT Industrial (Ferro Metallurgical/ Steel Melting/ Steel Re-rolling/Power Intensive)

## 1. Fixed Charges(Demand Charges)

For Billing Demand	Tariff (Rs./KVA/month) or part thereof
--------------------	--





For Billing Demand	Tariff (Rs./KVA/month) or part thereof
Up to Contract Demand	Rs 505/- per kVA per month

Fixed Charges shall be reduced by 25% in the lean season from May to August for Fishery Industry.

## 2. Energy Charges

Usage(Units/Month)	Tariff (Ps./kVAh)
For all units	415

## VII. Agriculture

This schedule shall apply to Agriculture or poultry loads up to 99 HP sanctioned load will be considered in this category.

### 1. Energy Charges

Usage	Tariff (Ps./Unit)
For connected load upto 10 HP	75
Beyond 10 HP and upto 99 HP connected load	105

## VII. Public Lighting

### 1. Energy Charges

Usage	Tariff (Ps./kWh)
For all units	450

## VIII. Hoardings /Signboards

This schedule shall apply to 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.

Energy Charges Paise/kWh	Fixed Charge
670	Rs 100 per kVA per Month or part Thereof

#### IX. Electric Vehicle Charging Stations

This tariff schedule shall apply to consumers that have set up Public Charging Stations (PCS) in accordance with the technical norms/ standards/specifications laid down by the Ministry of Power, GoI and Central Electricity Authority (CEA) from time to time.

The tariff for domestic consumption shall be applicable for domestic charging (LT/HT).

Energy Charges Paise/kWh	Fixed Charge
450	-

**X. Temporary Supply:** Tariff for Temporary Connection shall be Fixed/ Demand charges (if any) plus energy charges (for relevant slab, if any) under corresponding permanent supply category plus 50% of both.

For multi activity pursuit, applicable Tariff for temporary connection shall be with reference to that of non-domestic category for permanent supply.

The Temporary Tariff is applicable for a temporary period of supply for a period of maximum one (1) year at a time, which may be further extended, as per the provisions of Supply Code Regulations.

#### VIII. Schedule of Other Charges

##### a. Meter Rent

S.No.	Meter type	Tariff (in Rs.)/Month or part thereof
1	Single Phase	Rs.10 per month or part Thereof





S.No.	Meter type	Tariff (in Rs.)/Month or part thereof
2	Three Phase	Rs 25 per month or part Thereof
3	LT Meter with MD indicator	Rs 200 per month or part thereof
4	Tri- vector Meter	Rs 500 per month or part thereof

Note: The type of meters to be installed in consumer premises will be decided by the department. Generally, the consumers having connected load above 50 HP will be provided with L.T.M.D meters.

**b. Reconnection Charges:** Reconnection Charges(as per provisions of Regulation 9.3 (c) of JERC (Electricity Supply Code) Regulations 2010

S.No.	Connection type	Tariff (in Rs.)/Month or part thereof
1	Single Phase LT	Rs 100
2	Three Phase LT	Rs 500
3	HT	Rs 1500

**Note:** If the same consumer seeks reconnection within 12 months from the date of reconnection or disconnection, 50% will be added to above charges.

**c. Service Connection Charges**(as per provisions of Regulation 3.3 (3) of JERC (Electricity Supply Code) Regulations 2010

S.No.	Connection type	Tariff (in Rs.)/Month or part thereof
1	Single Phase LT	Rs 250
2	Three Phase LT	Rs 1000
3	HT (First 500 KVA)	Rs 10000
4	HT (Beyond 500 KVA)	Rs 1000 per 100 KVA or part thereof

**d. Extra Length Charge**

S.No.	Connection type	Tariff /Meter (in Rs.)
1	Single Phase	Rs 50/meter
2	Three Phase	Rs 100/meter



Note: Extra length chargeable will be beyond the permissible 30 meters free length from existing network for new connections for all categories except agriculture. Free length in respect of new agriculture consumer is 300 meters.

**e. Cost of HT connection**

Entire Cost of setting up HT connection would be borne by the consumer and 15% supervision charges shall be recovered by the EDDD on labour component only, as per the JERC Supply Code 2018.

**f. Testing Fee for various Metering Equipment**

S.No.	Types of Metering Equipment	Fee per unit (in Rs.)
1	Single Phase	200
2	Three Phase	500
3	Three Phase Tri-vector Meter (0.5 Class) Industrial LT Consumer	1000
4	Three Phase Tri-vector Meter (0.5 Class) 11 KV HT Consumer	1000
5	Three Phase Tri-vector Meter (0.2 Class) 66KV EHT Consumers	1500
6	ABT meter 0.2 class-66 kV/11kV Consumer	3000
7	Combined CTPT Unit for 11 KV Consumer	1000
8	66 KV CT / PT Unit	1000
9	Three Phase CT Block	500
10	CT Coil	500

**g. Fees (Non-refundable) for submission of Test Report of wiring Completion**

S.No.	Types of Connection	Fee per test report (in Rs.)
1	Single Phase Lighting / Domestic	20
2	Three Phase Lighting / Domestic	50
3	Single Phase Lighting / Non Domestic	100
4	Three Phase Lighting / Non Domestic	200
5	Three Phase LT Industries	500
6	Single Phase / Three phase Agriculture / Streetlight / Public Lighting & others	100





S.No.	Types of Connection	Fee per test report (in Rs.)
7	HT Industries upto 500 KVA	2000
8	HT Industries upto 2500 KVA	8000
9	HT Industries above 2500 KVA	15000



## Prayer

1. EDDD requests the Hon'ble Commission to:
  - Admit the Aggregate Revenue Requirement for the MYT Control Period FY 2022-23 to FY 2024-25 as submitted herewith as well as the revised estimates for FY 2021-22.
  - Admit and approve the Trued up ARR for FY 2020-21.
  - Approve the tariff schedule as proposed by the EDDD under Table no. 66.
  - Condone any inadvertent omissions/ errors/ shortcomings and permit the Petitioner to add/ change/ modify/ alter this filing and make further submissions as may be required at a future date.
  - Submit necessary additional information required by the Commission during the processing of this petition.
  - And pass such other and further orders as are deemed fit and proper in the facts and circumstances of the case.

**BY THE APPLICANT THROUGH**



**PETITIONER**

**Electricity Department Daman and Diu**

**Daman**

**Dated:**





Format -1

Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
ENERGY DEMAND  
FY 2020-21

Sr.No.	Category of Consumer	No. of Consumers at the end of FY 20-21 (Nos.)	Connected Load	Energy Sale/Demand (MUs)
1	2	3	5	6
1	Domestic	50,957	1,08,229.44	139.73
2	LIG/ Kutir Jyoti			0.00
3	Commercial	7,880	27,444.02	41.77
4	Agriculture	1,286	3,866.34	3.40
5	LT Industry	1,822	1,21,330.55	184.53
6	HT/EHT Industry	720	5,19,668.00	1,749.48
7	Public Lighting	631	1,536.06	5.53
8	Public Water Works	104	727.94	2.46
9	Temp. Supply	0	0.00	0.00
10	Total	63,400	7,82,802.35	2,126.89



Format -1

**Electricity Department of Daman & Diu**  
**ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25**  
**ENERGY DEMAND**  
**FY 2021-22**

Sr.No.	Category of Consumer	No. of Consumers at the end of FY 21-22 (Nos.)	Connected Load	Energy Sale/Demand (MUs)
1	2	3	5	6
1	Domestic	51,879	1,10,394.03	155.02
2	LIG/ Kutir Jyoti			0.00
3	Commercial	8,038	28,810.22	50.16
4	Agriculture	1,295	3,906.43	3.54
5	LT Industry	1,858	1,24,309.96	210.30
6	HT/EHT Industry	734	5,22,585.92	2,034.44
7	Public Lighting	647	1,566.78	5.20
8	Public Water Works	106	742.50	2.60
9	Temp. Supply	0	0.00	0.00
10	Total	64,558	7,92,315.83	2,461.28





Format -1

**Electricity Department of Daman & Diu**  
**ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25**  
**ENERGY DEMAND**  
**FY 2022-23**

Sr.No.	Category of Consumer	No. of Consumers at the end of FY 22-23 (Nos.)	Connected Load	Energy Sale/Demand (MUs)
1	2	3	5	6
1	Domestic	52,819	1,12,601.91	170.28
2	LIG/ Kutir Jyoti			0.00
3	Commercial	8,198	30,244.43	50.96
4	Agriculture	1,304	3,946.93	3.83
5	LT Industry	1,896	1,27,362.54	217.00
6	HT/EHT Industry	749	5,25,520.21	2,131.00
7	Public Lighting	663	1,598.12	5.30
8	Public Water Works	108	757.35	2.63
9	Temp. Supply	0	0.00	0.00
10	<b>Total</b>	<b>65,737</b>	<b>8,02,031.48</b>	<b>2,581.00</b>



*[Handwritten signature]*

Format -1

Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
ENERGY DEMAND  
FY 2023-24

Sr.No.	Category of Consumer	No. of Consumers at the end of FY 23-24 (Nos.)	Connected Load	Energy Sale/Demand (MUs)
1	2	3	5	6
1	Domestic	53,775	1,14,853.95	187.05
2	LIG/ Kutir Jyoti			0.00
3	Commercial	8,362	31,750.03	51.76
4	Agriculture	1,313	3,987.85	4.13
5	LT Industry	1,934	1,30,490.08	223.91
6	HT/EHT Industry	764	5,28,470.99	2,232.13
7	Public Lighting	680	1,630.08	5.41
8	Public Water Works	110	772.50	2.66
9	Temp. Supply	0	0.00	0.00
10	Total	66,938	8,11,955.47	2,707.05



*[Handwritten signature]*



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
ENERGY DEMAND  
FY 2024-25

Sr.No.	Category of Consumer	No. of Consumers at the end of FY 24-25 (Nos.)	Connected Load	Energy Sale/Demand (MUs)
1	2	3	5	6
1	Domestic	54,748	1,17,151.03	205.46
2	LIG/ Kutir Jyoti			0.00
3	Commercial	8,530	33,330.59	52.58
4	Agriculture	1,321	4,029.19	4.47
5	LT Industry	1,972	1,33,694.42	231.04
6	HT/EHT Industry	779	5,31,438.33	2,338.07
7	Public Lighting	697	1,662.68	5.52
8	Public Water Works	113	787.95	2.70
9	Temp. Supply	0	0.00	0.00
10	Total	68,161	8,22,094.18	2,839.82



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Information regarding AT&C Loss OF Licensee

S. No.	Particulars	Calculation	Unit	Previous Year FY 2020-21 (Actual)	Current Year FY 2021-22 (RE)	Ensuing Year FY 2022-23 (Projections)	Ensuing Year FY 2023-24 (Projections)	Ensuing Year FY 2024-25 (Projections)
1	Generation (own as well as any other connected generation net after deducting auxiliary consumption) within area of supply of DISCOM.	A	MU	18.43	11.25	16.00	16.00	16.00
2	Input energy (metered Import) received at interface points of DISCOM network.	B	MU					
3	Input energy (metered Export) by the DISCOM at interface points of DISCOM network.	C	MU	2221	2622	2742	2873	3012
4	Total energy available for sale within the licensed area to the consumers of the DISCOM	D=A+B+C	MU	2227	2632	2757	2889	3028
5	Energy billed to metered consumers within the licensed area of the DISCOM	E	MU	2127	2461	2581	2707	2840
6	Energy billed to unmetered consumers within the licensed area of the DISCOM	F	MU					
7	Total energy billed	G=E+F	MU	2127	2461	2581	2707	2840
8	Amount billed to consumer within the licensed area of DISCOM.	H	Rs.	1020.06	1188.45	1261.18	1284.79	1345.57
9	Amount realized by the DISCOM out of the amount Billed at H#	I	Rs.	1020.06	1188.45	1261.18	1284.79	1345.57
10	Collection efficiency (%) (= Revenue realized/ Amount billed)	J=(I/H)x100	%	100.00%	100.00%	100.00%	100.00%	100.00%
11	Energy realized by the DISCOM	K=JxG	MU	2127	2461	2581	2707	2840
12	Distribution loss (%)	L=((DG)/D)x100	%	4.48%	6.50%	6.40%	6.30%	6.20%
13	AT&C Loss (%)*	M=((DK)/D)x100	%	4.48%	6.50%	6.40%	6.30%	6.20%



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
ENERGY BALANCE

(all figures in Mus)

Sr.No.	Category of Consumer	Previous Year FY 2020-21 (Actual)	Current Year FY 2021-22 (RE)	Ensuing Year FY 2022-23 (Projections)	Ensuing Year FY 2023-24 (Projections)	Ensuing Year FY 2024-25 (Projections)
1	2	3	4	5	6	7
A)	<b>ENERGY REQUIREMENT</b>					
1	Energy sales to metered category within the State/UT	2,126.89	2,461.28	2,581.00	2,707.05	2,839.82
2	Energy sales to Agriculture consumers					
3	Open Access Sales	0.00	0.00	0.00	0.00	0.00
4	Total sales within the State/UT	2,126.89	2,461.28	2,581.00	2,707.05	2,839.82
5	Sales to common pool consumers/ UI	12.40	0.70	0.78	0.19	0.73
6	Sales outside state/UT					
7	Sales to electricity traders & through PX					
	Sales to other distribution licensees					
	a) Bilateral Trade					
8	b) Banking Arrangement					
9	Total sales	2,139.29	2,461.98	2,581.78	2,707.25	2,840.55
10	T&D losses					
(i)	%	4.48%	6.50%	6.40%	6.30%	6.20%
(ii)	MU	99.69	171.10	176.48	182.01	187.71
11	<b>Total energy requirement</b>	<b>2,238.98</b>	<b>2,633.08</b>	<b>2,758.26</b>	<b>2,889.26</b>	<b>3,028.26</b>
B)	<b>ENERGY AVAILABILITY</b>					
1	Net own generation	18.43	11.25	16.00	16.00	16.00
2	Net Purchase	2,288.69	2,710.72	2,835.50	2,966.50	3,105.50
3	Injection through Open access	0.00	0.00	0.00	0.00	0.00
4	Net power purchase (1 +2 +3)	2,307.12	2,721.97	2,851.50	2,982.50	3,121.50
12	<b>Total energy availability</b>	<b>2,307.12</b>	<b>2,721.97</b>	<b>2,851.50</b>	<b>2,982.50</b>	<b>3,121.50</b>





Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
POWER PURCHASE COST  
FY 21-22 (RE)

(Rs. Crores)

Sr.No.	Source	Capacity (MW)	Firm allocation to Licensee (in MW)	Gen. (MU)	Availability/ PLF (in %)	Licensee share (%)	Purchase (MU)	VC (Pa/ Unit)	FC (Rs. Cr)	VC (Rs. Cr)	Others (Rs. Cr)	Rebate	Credit for URS	Total (Rs. Cr)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
I	NTPC Stations													
1	KSTPP	2,100	49.43	16,372	89%	2.35%	364	155	23.48	56.34	2.00			81.81
2	KSTPP-III	500	5.95	3,898	86%	1.19%	44	151	5.77	8.66	-0.07			12.35
3	VSTPP-I	1,260	13.17	9,161	83%	1.05%	91	174	7.65	15.94	1.06			24.65
4	VSTPP-II	1,000	9.28	7,271	83%	0.93%	61	166	4.06	10.21	0.00			14.28
5	VSTPP-III	1,000	11.28	7,271	83%	1.13%	74	164	7.34	12.18	-0.23			19.32
6	VSTPP-IV	1,000	12.61	7,271	83%	1.26%	91	165	13.79	15.09	0.00			28.89
7	VSTPP-V	500	8.22	3,635	83%	1.64%	59	173	8.51	10.25	-0.11			19.65
8	KAWAS	656	31.04	1,782	31%	4.73%	43	208	18.85	8.90	0.70			28.46
9	JGRP	657	31.37	2,073	36%	4.77%	56	207	22.21	11.58	0.44			34.23
10	Sipat-I	1,980	25.25	15,263	88%	1.28%	179	165	23.03	29.44	-0.28			52.20
11	Sipat-II	1,000	9.98	7,709	88%	1.00%	75	173	8.64	12.94	-0.09			21.49
12	MSTPS-I	1,000	12.61	3,679	42%	1.26%	61	309	16.37	18.92	0.35			35.65
13	MOUDA-II	1,320	17.11	4,857	42%	1.30%	63	330	17.38	20.85	0.65			38.88
14	KHSTPP-II	1,000	1.30	6,745	77%	0.13%	11	231	1.48	2.54	-0.01			4.02
15	KHSTFST-I	0	0.00	0	0%	0.00%	0	0	0.00	0.00	0.00			0.00
16	RSTPS	0	0.00	0	0%	0.00%	0	0	0.00	0.00	0.00			0.00
17	SCOLAPUR	1,320	26.04	7,054	61%	1.97%	97	351	31.07	34.04	0.39			65.51
18	LARA	800	21.16	5,957	85%	2.85%	145	0	24.80	34.13	-0.14			58.79
19	GADARWARA	800	26.98	5,957	85%	3.82%	163	0	41.89	47.93	-0.22			89.60
20	KHTPP	1,320	23.65	9,829	85%	1.79%	115	296	26.41	33.90	-0.24			60.07
21	Subtotal	19,214	338	1,25,784	13	0	1,794	213	304	382	4	0.00	0	689.63
II	NTPC Bhilai													
1	Bhilai Unit-I & II (NTPC)	500	70.00	3,635	83%	14.00%	481	263	80.77	126.42	0.21			207.40
2	Subtotal	500	70.00	3,635			481	263	80.77	126.42	0.21			207.40
III	NPCIL													
1	KAPPS	440	9.08	2,775	72%	2.08%	51	232	0.00	11.74	0.00			11.74
2	TAPP 3&4	1,080	12.49	7,569	80%	1.16%	86	337	0.00	29.13	0.00			29.13
3	KAPPS (III & IV)	100	0.00	745	85%	0.00%	0	0	0.00	0.00	0.00			0.00
4	Subtotal	1,620	22	11,088			137	299	0.00	40.88	0.00			40.88
IV	Others													
1	Ratnagiri	582	38.00	4,334	85%	6.53%	17	0	13.34	10.36	-3.99			19.71
2	Subtotal	582	38	4,334			17	0	13	10	-3.99			19.71
V	Power purchase from Other Sources													
1	Power purchase from Indian E. Exchange	0	0.00	0			236	279	0.00	65.81	0.00			65.81
2	UI	0	0.00	0			46	346	0.00	16.05	0.00			16.05
3	Solar	0	0.00	0			11	0	0.00	0.00	0.00			0.00
4	Non Solar (Hydro)	0	0.00	0			0	#DIV/0!	0.00	0.00	0.00			0.00
5	Solar REC	0	0.00	0			0	0	0.00	0.00	0.00			0.00
6	Non Solar REC	0	0.00	0			0	0	0.00	0.00	0.00			0.00
7	Solar (SEC, NTPC)	170	0.00	283			0	0	0.00	0.00	0.00			0.00
8	Subtotal	170	0	283			293	279	0	82	0			82
VI	Misc. Arrears													0.00
VII	NTPC Rebate													0.00
	Gross Power Purchase Cost	22,086	468	1,45,124			2,721.97		397.54	641.38	0.46			1,039.68
	External Losses						0							
VIII	Total Power Purchase						2,721.97		397.54	641.38	0.46			1,039.68
1	PGCIL CHARGES													174.48
2	WRIDC													0.26
3	MSTCL													3.50
4	REC													0.00
5	GETCO													0.00
6	PGVCL													0.00
7	POSCO													0.00
8	Grand Total of Charges						2,721.97							1,217.92



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
POWER PURCHASE COST  
FY 22-23 (Projected)

(Rs. Crores)

Sr.No.	Source	Capacity (MW)	Firm allocation to Licensee (in MW)	Gen. (MU)	Availability/ PLF (in %)	Licensee share (%)	Purchase (MU)	VC (Rs./ Unit)	FC (Rs. Cr)	VC (Rs. Cr)	Others (Rs. Cr)	Total (Rs. Cr)
1	NTPC Stations											
1	KSTPP	2,100	49.43	16,372	89%	2.35%	356	155	23.48	54.97	0.00	78.45
2	KSTPP-III	500	5.95	3,898	89%	1.19%	43	151	5.77	6.46	0.00	12.22
3	VSTPP-I	1,280	13.17	9,181	83%	1.05%	88	174	7.65	15.42	0.00	23.08
4	VSTPP-II	1,000	9.28	7,271	83%	0.93%	62	166	4.06	10.35	0.00	14.42
5	VSTPP-III	1,000	11.28	7,271	83%	1.13%	76	164	7.34	12.42	0.00	19.76
6	VSTPP-IV	1,000	12.61	7,271	83%	1.26%	85	165	13.79	13.97	0.00	27.77
7	VSTPP-V	500	8.22	3,635	83%	1.64%	55	173	9.51	9.53	0.00	19.04
8	KAWAS	656	31.04	1,782	31%	4.73%	82	206	18.85	16.93	0.00	35.78
9	JGPP	657	31.37	2,073	36%	4.77%	96	207	22.21	20.01	0.00	42.22
10	Sipat-I	1,980	25.25	15,263	88%	1.28%	180	165	23.03	29.60	0.00	52.63
11	Sipat-II	1,000	9.98	7,709	88%	1.00%	71	173	8.64	12.27	0.00	20.91
12	MSTPS-I	1,000	12.61	3,679	42%	1.26%	43	309	16.37	13.20	0.00	29.58
13	MOUDA-II	1,320	17.11	4,857	42%	1.30%	58	330	17.38	19.14	0.00	36.52
14	KHSTPP-II	1,000	1.30	6,745	77%	0.13%	8	231	1.48	1.87	0.00	3.35
15	KHS1/FST1	0	0.00	0	0%	0.00%	0	0	0.00	0.00	0.00	0.00
16	RSTPS	0	0.00	0	0%	0.00%	0	0	0.00	0.00	0.00	0.00
17	SOLAPUR	1,320	26.04	7,054	61%	1.97%	128	351	31.07	45.02	0.00	76.09
18	LARA	800	21.16	5,957	85%	2.65%	143	0	24.80	33.64	0.00	58.44
19	GADARWARA	800	28.98	5,957	85%	3.62%	196	0	41.89	57.84	0.00	99.74
20	KHTPP	1,320	23.65	9,829	85%	1.79%	160	0	26.41	47.38	0.00	73.79
21	Subtotal	19,214	338	1,25,784			1,931	218	304	420	0	724
II	NTPC Bhilai											
1	Bhilai Unit-I & II(NTPC)	500	70.00	3,635	83%	14.00%	470	263	80.77	123.50	0.00	204.27
2	Subtotal	500	70.00	3,635			470	263	80.77	123.50	0.00	204.27
III	NPCIL											
1	KAPPS	440	9.06	2,775	72%	2.06%	51	232	0.00	11.93	0.00	11.93
2	TAPP 3&4	1,080	12.49	7,569	80%	1.16%	79	337	0.00	26.59	0.00	26.59
3	KAPPS (III & IV)	100	0.00	745	85%	0.00%	0	0	0.00	0.00	0.00	0.00
4	Subtotal	1,620	22	11,088			130	296	0.00	38.52	0.00	38.52
IV	Others											
1	Ratnagiri	582	38.00	4,334	85%	6.53%	17	0	13.34	10.36	0.00	23.70
2	Subtotal	582	38	4,334			17	0	13	10	0.00	23.70
V	Power purchase from Other Sources											
1	Power purchase from Indian E. Exchange	0	0.00	0			288	200	0.00	57.60	0.00	57.60
2	UI	0	0.00	0			0	#DIV/0!	0.00	0.00	0.00	0.00
3	Solar	0	0.00	0			16	0	0.00	0.00	0.00	0.00
4	Non Solar (Hydro)	0	0.00	0			0	#DIV/0!	0.00	0.00	0.00	0.00
5	Solar REC	0	0.00	0			0	0	0.00	0.00	0.00	0.00
6	Non Solar REC	0	0.00	0			0	0	0.00	0.00	0.00	0.00
7	Solar (SECI, NTPC)	170	0.00	283			0	0	0.00	0.00	0.00	0.00
8	Subtotal	170	0	283			304	189	0	58	0	58
VI	Misc. Arrears											0.00
VII	NTPC Rebate											0.00
	Gross Power Purchase Cost	22,086	468	1,45,124			2,851.50		397.84	650.01	0.00	1,047.85
	External Losses						0					
VIII	Total Power Purchase						2,851.50		397.84	650.01	0.00	1,047.85
1	PGCIL CHARGES											174.48
2	WRLDC											0.26
3	MSTCL											3.50
4	REC											0.00
5	GETCO											0.00
6	PGVCL											0.00
7	POSCO											0.00
8	Grand Total of Charges						2,851.50					1,226.10





Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
POWER PURCHASE COST  
FY 23-24 (Projected)

(Rs. Crores)

Sr.No.	Source	Capacity (MW)	Firm allocation to Licensee (in MW)	Gen. (MU)	Availability/ PLF (in %)	Licensee share (%)	Purchase (MU)	VC (Ps/ Unit)	FC (Rs. Cr)	VC (Rs. Cr)	Others (Rs. Cr)	Total (Rs. Cr)
1	2	3	4	5	6	7	8	9	10	11	12	13
I	NTPC Stations											
1	KSTPP	2,100	49.43	16,372	89%	2.35%	356	155	23.48	54.97	0.00	78.45
2	KSTPP-III	500	5.95	3,898	89%	1.19%	43	151	5.77	6.46	0.00	12.22
3	VSTPP-I	1,260	13.17	9,161	83%	1.05%	88	174	7.65	16.42	0.00	23.06
4	VSTPP-II	1,000	9.28	7,271	83%	0.93%	62	166	4.06	10.35	0.00	14.42
5	VSTPP-III	1,000	11.28	7,271	83%	1.13%	76	164	7.34	12.42	0.00	19.76
6	VSTPP-IV	1,000	12.61	7,271	83%	1.26%	85	165	13.79	13.97	0.00	27.77
7	VSTPS-V	500	8.22	3,635	83%	1.64%	55	173	9.51	9.53	0.00	19.04
8	KAWAS	656	31.04	1,782	31%	4.73%	82	206	18.85	16.93	0.00	35.78
9	JGPP	657	31.37	2,073	36%	4.77%	96	207	22.21	20.01	0.00	42.22
10	Sipat-I	1,980	25.25	15,263	88%	1.28%	180	165	23.03	29.60	0.00	52.63
11	Sipat-II	1,000	9.98	7,709	88%	1.00%	71	173	6.64	12.27	0.00	20.91
12	MSTPS-I	1,000	12.61	3,679	42%	1.26%	43	309	16.37	13.20	0.00	29.58
13	MOUDA-II	1,320	17.11	4,857	42%	1.30%	58	330	17.38	19.14	0.00	36.52
14	KHSTPP-II	1,000	1.30	6,745	77%	0.13%	8	231	1.48	1.87	0.00	3.35
15	KHS1/FST1	0	0.00	0	0%	0.00%	0	0	0.00	0.00	0.00	0.00
16	RSTPS	0	0.00	0	0%	0.00%	0	0	0.00	0.00	0.00	0.00
17	SOLAPUR	1,320	26.04	7,054	81%	1.97%	128	351	31.07	45.02	0.00	76.09
18	LARA	800	21.16	5,957	85%	2.85%	143	0	24.80	33.64	0.00	58.44
19	GADARWARA	800	28.99	5,957	85%	3.62%	196	0	41.89	57.84	0.00	99.74
20	KHTPP	1,320	23.65	9,829	85%	1.79%	160	0	26.41	47.38	0.00	73.79
21	Subtotal	19,214	338	1,25,784			1,931	218	304	420	0	724
II	NTPC Bhilai											
1	Bhilai Unit-I & II (NTPC)	500	70.00	3,635	83%	14.00%	470	263	80.77	123.50	0.00	204.27
2	Subtotal	500	70.00	3,635			470	263	80.77	123.50	0.00	204.27
III	NPCL											
1	KAPPS	440	9.06	2,775	72%	2.06%	51	232	0.00	11.93	0.00	11.93
2	TAPP 3&4	1,080	12.49	7,569	80%	1.16%	79	337	0.00	26.59	0.00	26.59
3	KAPPS (III & IV)	100	0.00	745	85%	0.00%	0	0	0.00	0.00	0.00	0.00
4	Subtotal	1,620	22	11,088			130	296	0.00	38.52	0.00	38.52
IV	Others											
1	Ratnagiri	582	38.00	4,334	85%	6.53%	17	0	13.34	10.36	0.00	23.70
2	Subtotal	582	38	4,334			17	0	13	10	0.00	23.70
V	Power purchase from Other Sources											
1	Power purchase from Indian E. Exchange	0	0.00	0			419	250	0.00	104.75	0.00	104.75
2	UI	0	0.00	0			0	#DIV/0!	0.00	0.00	0.00	0.00
3	Solar	0	0.00	0			16	0	0.00	0.00	0.00	0.00
4	Non Solar (Hydro)	0	0.00	0			0	#DIV/0!	0.00	0.00	0.00	0.00
5	Solar REC	0	0.00	0			0	0	0.00	0.00	0.00	0.00
6	Non Solar REC	0	0.00	0			0	0	0.00	0.00	0.00	0.00
7	Solar (SECI, NTPC)	170	0.00	283			0	0	0.00	0.00	0.00	0.00
8	Subtotal	170	0	283			435	241	0	105	0	105
VI	Misc. Arrears											0.00
VII	NTPC Rebate											0.00
	Gross Power Purchase Cost	22,086	468	1,45,124			2,982.50		397.84	697.16	0.00	1,095.00
	External Losses						0					
VIII	Total Power Purchase						2,982.50		397.84	697.16	0.00	1,095.00
1	PGCIL CHARGES											174.48
2	WRLDC											0.26
3	MSTCL											3.50
4	REC											0.00
5	GETCO											0.00
6	PGVCL											0.00
7	POSCO											0.00
8	Grand Total of Charges						2,982.50					1,273.25





Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
POWER PURCHASE COST  
FY 24-25 (Projected)

(Rs. Crores)

Sr.No.	Source	Capacity (MW)	Firm allocation to Licensee (in MW)	Gen. (MU)	Availability/ PLF (in %)	Licensee share (%)	Purchase (MU)	VC (Ps/ Unit)	FC (Rs. Cr)	VC (Rs. Cr)	Others (Rs. Cr)	Total (Rs. Cr)
1	2	3	4	5	6	7	8	9	10	11	12	13
I	NTPC Stations											
1	KSTPP	2,100	49.43	16,372	89%	2.35%	356	155	23.48	54.97	0.00	78.45
2	KSTPP-II	500	5.95	3,898	89%	1.19%	43	151	5.77	6.46	0.00	12.22
3	VSTPP-I	1,260	13.17	9,161	83%	1.05%	88	174	7.65	15.42	0.00	23.06
4	VSTPP-II	1,000	9.28	7,271	83%	0.93%	62	166	4.06	10.35	0.00	14.42
5	VSTPP-III	1,000	11.28	7,271	83%	1.13%	76	164	7.34	12.42	0.00	19.76
6	VSTPP-IV	1,000	12.61	7,271	83%	1.26%	85	165	13.79	13.97	0.00	27.77
7	VSTPP-V	500	8.22	3,635	83%	1.64%	55	173	9.51	9.53	0.00	19.04
8	KAWAS	656	31.04	1,782	31%	4.73%	82	206	18.85	16.93	0.00	35.78
9	JGPP	657	31.37	2,073	36%	4.77%	96	207	22.21	20.01	0.00	42.22
10	Sipat-I	1,980	25.25	15,263	88%	1.28%	180	165	23.03	29.60	0.00	52.63
11	Sipat-II	1,000	9.98	7,709	88%	1.00%	71	173	8.64	12.27	0.00	20.91
12	MSTPS-I	1,000	12.51	3,679	42%	1.26%	43	309	16.37	13.20	0.00	29.58
13	MOUDA-II	1,320	17.11	4,857	42%	1.30%	58	330	17.38	19.14	0.00	36.52
14	KHSTPP-II	1,000	1.30	6,745	77%	0.13%	8	231	1.48	1.87	0.00	3.35
15	KHSI/FS1	0	0.00	0	0%	0.00%	0	0	0.00	0.00	0.00	0.00
16	RSTPS	0	0.00	0	0%	0.00%	0	0	0.00	0.00	0.00	0.00
17	SOLAPUR	1,320	26.04	7,054	61%	1.97%	128	351	31.07	45.02	0.00	76.09
18	LARA	800	21.16	5,957	85%	2.55%	143	0	24.80	33.54	0.00	58.44
19	GADARWARA	800	28.98	5,957	85%	3.62%	196	0	41.89	57.84	0.00	99.74
20	KHTPP	1,320	23.65	9,829	85%	1.79%	160	0	26.41	47.38	0.00	73.79
21	Subtotal	19,214	338	1,25,784			1,931	218	304	420	0	724
II	NTPC Bhilai											
1	Bhilai Unit-I & II (NTPC)	500	70.00	3,635	83%	14.00%	470	263	80.77	123.50	0.00	204.27
2	Subtotal	500	70.00	3,635			470	263	80.77	123.50	0.00	204.27
III	NPCL											
1	KAPPS	440	9.06	2,775	72%	2.06%	51	232	0.00	11.93	0.00	11.93
2	TAPP 3&4	1,080	12.49	7,569	80%	1.16%	79	337	0.00	26.59	0.00	26.59
3	KAPPS (III & IV)	100	0.00	745	85%	0.00%	0	0	0.00	0.00	0.00	0.00
4	Subtotal	1,620	22	11,088			130	296	0.00	38.52	0.00	38.52
IV	Others											
1	Ratnagiri	582	38.00	4,334	85%	6.53%	17	0	13.34	10.36	0.00	23.70
2	Subtotal	582	38	4,334			17	0	13	10	0.00	23.70
V	Power purchase from Other Sources											
1	Power purchase from Indian E. Exchange	0	0.00	0			558	250	0.00	139.50	0.00	139.50
2	UI	0	0.00	0			0	#DIV/0!	0.00	0.00	0.00	0.00
3	Solar	0	0.00	0			16	0	0.00	0.00	0.00	0.00
4	Non Solar (Hydro)	0	0.00	0			0	#DIV/0!	0.00	0.00	0.00	0.00
5	Solar REC	0	0.00	0			0	0	0.00	0.00	0.00	0.00
6	Non Solar REC	0	0.00	0			0	0	0.00	0.00	0.00	0.00
7	Solar (SECI, NTPC)	170	0.00	283			0	0	0.00	0.00	0.00	0.00
8	Subtotal	170	0	283			574	243	0	140	0	140
VI	Misc. Arrears											0.00
VII	NTPC Rebate											0.00
	Gross Power Purchase Cost	22,086	468	1,45,124			3,121.50		397.84	731.91	0.00	1,129.75
	External Losses						0					
VIII	Total Power Purchase						3,121.50		397.84	731.91	0.00	1,129.75
1	PGCIL CHARGES											174.48
2	WRLDC											0.26
3	MSTCL											3.50
4	REC											0.00
5	GETCO											0.00
6	PGVCL											0.00
7	POSCO											0.00
8	Grand Total of Charges						3,121.50					1,308.00



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Investment Plan (year-wise)

Project Details							SOURCE OF FINANCING FOR SCHEME				
Name of scheme	Year of Start	Nature of Project (Select appropriate code from below)	Approved by the Commission* (YES/NO)	Project Start Date (DD-MM-YY)	Project Completion date (DD-MMY)	Total capital expenditure approved by JERC (Rs. Cr.)	Equity component		Subsidies / grants component	Consumer Contribution component	Actual Expenditure
							Internal Accrual (from free reserves and surplus)	Equity infused**			
1	2	3	4	5	6	7	8	9	10	11	12
Scheme for establishment of 2x100 MVA, 220/66 KV GIS Sub-station at Dabhel, Daman alongwith associated 220 KV multicircuit Maganwada-Dabhel transmission line via Kachigam	FY 2024-25	a	No						Yes		
Scheme for establishment of 66/11 KV, 2x20 MVA GIS Sub-station alongwith associated line at Dabhel, Daman	FY 2022-23	b II	No						Yes		
Scheme for establishment of 66/11 KV GIS Sub-station at Bhimpore, Daman	FY 2022-23	b II	No						Yes		
Establishment of new hybrid bays at Dalwada Sub-station (2 Nos.) and Zari Sub-station (2 Nos.), Daman	FY 2022-23	b II	No						Yes		
Scheme for inter connection of 66 KV line from Zari Sub-station to Eurocoustic and replacement of Panther conductor from Kachigam Sub-station to EPI	FY 2022-23	b II	No						Yes		
Scheme for shifting and commissioning of newly procured/existing equipment in the newly constructed control room building near existing 66 KV Sub station at Dalwada and Dabhel Sub station	FY 2022-23	f	No						Yes		

## Notes:

\* Support with appropriate paper work i.e. Detailed Project Reports and other documents, as necessary

\*\* Provide break up of Government and Licensee/Private share

Codes for selecting Nature of work

a. EHV Schemes

b. Distribution schemes

I. System augmentation

II. System improvement

III. Schemes for loss reduction

c. Metering schemes

d. Capacitor

e. SCADA / DMS etc

f. Miscellaneous



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Capital Base and Return

(all figures in Crs)

Sr.No.	Category of Consumer	Previous Year FY 2020-21 (Actual)	Current Year FY 2021-22 (RE)	Ensuing Year FY 2022-23 (Projections)	Ensuing Year FY 2023-24 (Projections)	Ensuing Year FY 2024-25 (Projections)
1	2	4	5	6	7	8
1	Gross block at beginning of the year	627.69	641.94	646.94	670.49	703.07
2	Less accumulated depreciation	303.04	325.44	348.36	372.29	397.37
3	Net block at beginning of the year	324.64	316.50	298.58	298.21	305.71
4	Less accumulated consumer contribution	0.00	0.00	0.00	0.00	0.00
5	Net fixed assets at beginning of the year	324.64	316.50	298.58	298.21	305.71
6	Reasonable return @3% of NFA	9.74	9.49	8.96	8.95	9.17



*[Handwritten Signature]*



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Original Cost of Fixed Assets

(Rs. Crores)

Sr.No.	Particulars Name of the Assets	Value of assets at the beginning of the year	Addition during the FY2020-21	Closing balance at the end of FY2020-21	Addition during FY2021-22	Closing balance at the end of FY2021-22	Addition during FY2022-23	Closing balance at the end of FY2022-23	Addition during FY2023-24	Closing balance at the end of FY2023-24	Addition during FY2024-25	Closing balance at the end of FY2024-25
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Plant & Machinery	561.11	13.46	574.56	5.00	579.56	23.55	603.11	32.58	635.69	31.52	667.21
2	Buildings	23.70	0.16	23.86	0.00	23.86	0.00	23.86	0.00	23.86	0.00	23.86
3	Vehicles	0.67	0.00	0.67	0.00	0.67	0.00	0.67	0.00	0.67	0.00	0.67
4	Furniture & Fixtures	2.87	0.00	2.87	0.00	2.87	0.00	2.87	0.00	2.87	0.00	2.87
5	Computers & Others	14.56	0.64	15.20	0.00	15.20	0.00	15.20	0.00	15.20	0.00	15.20
6	Land	24.79	0.00	24.79	0.00	24.79	0.00	24.79	0.00	24.79	0.00	24.79
7	Total	627.69	14.26	641.94	5.00	646.94	23.55	670.49	32.58	703.07	31.52	734.59



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Interest Capitalized

(Rs. in crores)

Sr.No.	Particulars	Previous Year FY 2020-21 (Actual)	Current Year FY 2021-22 (RE)	Ensuing Year FY 2022-23 (Projections)	Ensuing Year FY 2023-24 (Projections)	Ensuing Year FY 2024-25 (Projections)
1	2	3	4	5	6	7
1	WIP*					
2	GFA* at the end of the year					
3	WIP+GFA at the end of the year					
4	Interest(excluding interest on WCL*)					
5	Interest Capitalized					

NA



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Details of loans for the year

(Rs. Crores)

Sr.No.	Particulars (Source)	Opening Balance	Rate of Interest	Addition during the year	Repayment during the year	Closing Balance	Amount of interest paid	
							Current year	Ensuing year
1	SLR Bonds							
2	Non SLR Bonds							
3	LIC							
4	REC							
5	Commercial Banks							
6	Bills discounting							
7	Lease rental							
8	PFC							
9	GPF							
10	CSS							
11	Working capital loan							
12	Others							
13	Total				N/A			
14	Add Govt. loan -State Govt. -Central Govt. Total							
15	Total (13+14)							
16	Less capitalization							
17	Net interest							
18	Add prior period							
19	Total interest							
20	Finance charges							
21	Total interest and finance charges							



[Signature]



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Information regarding restructuring of outstanding loans during the year

(Rs. Crores)

Sr.No.	Source of Loan	Amount of original loan (Rs. in crores)	Old rate of interest	Amount already restructured (Rs. in crores)	Revised rate of interest	Amount now being restructured (Rs. in crores)	New rate of interest
1	2	3	6	7	8	9	10
N/A							



ANNUAL REVENUE REQUIREMENT FOR THE MT CONTROL PERIOD FY 2022-23 TO FY 2024-25

Value of Assets and Depreciation Charges

(Rs. Crores)

Sl. No.	Particulars Name of the Assets	Rate of Depreciation	Previous Year		Current Year		Estimating Year		Estimating Year		Estimating Year	
			Assets value at the beginning of FY 2020-21	Depreciation charges	Assets value at the beginning of FY 2021-22	Depreciation charges	Assets value at the beginning of FY 2022-23	Depreciation charges	Assets value at the beginning of FY 2023-24	Depreciation charges	Assets value at the beginning of FY 2024-25	Depreciation charges
1	Buildings	3.00%	56.11	1.68	54.43	1.63	52.80	1.58	51.26	1.53	49.72	1.48
2	Buildings Machinery	1.00%	2.11	0.02	2.09	0.02	2.07	0.02	2.05	0.02	2.03	0.02
3	Vehicle	6.50%	4.10	0.27	3.83	0.25	3.58	0.23	3.33	0.21	3.08	0.20
4	Furniture & Fixtures	6.00%	2.67	0.16	2.51	0.15	2.36	0.14	2.21	0.13	2.06	0.12
5	Computers & Others	6.33%	14.56	0.92	13.64	0.87	12.72	0.81	11.80	0.76	10.88	0.71
6	Land	0.00%	24.79	0.00	24.79	0.00	24.79	0.00	24.79	0.00	24.79	0.00
7	TOTAL		627.69	32.79	641.94	22.40	646.94	22.92	670.49	23.93	703.07	24.98



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Repair and Maintenance Expenses

(Rs. in crores)

Sr.No.	Particulars	Previous Year FY 2020-21 (Actual)	Current Year FY 2021-22 (RE)	Ensuing Year FY 2022-23 (Projections)	Ensuing Year FY 2023-24 (Projections)	Ensuing Year FY 2024-25 (Projections)
1	2	4	5	6	7	8
1	Plant & machinery	Breakup not available				
	-Plant & Apparatus					
	-EHV substations					
	- 33kV substation					
	- 11kV substation					
	- Switchgear and cable connections					
	- Others					
	Total					
2	Building					
3	Hydraulic works & civil works					
4	Line cable & network					
	-EHV Lines					
	- 33kV lines					
	- 11kV lines					
	- LT Lines					
	- Meters and metering equipment					
	- Others					
	Total					
5	Vehicles					
6	Furniture & fixtures					
7	Office equipments					
8	Operating expenses					
9	Total					
10	Add/Deduct share of others (To be specified)					
11	Total expenses					
12	Less capitalized					
13	Net expenses					
14	Add prior period *					
15	Total expenses charged to revenue as R&M expenses	14.43	16.35	16.48	17.08	17.91





Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Total Number of Employees

Sr.No.	Particulars	Previous Year FY 2020-21 (Actual)	Current Year FY 2021-22 (RE)	Ensuing Year FY 2022-23 (Projections)	Ensuing Year FY 2023-24 (Projections)	Ensuing Year FY 2024-25 (Projections)
1	2	3	4	5	6	7
1	Number of employees as on 1st April	267	269	270	272	274
2	Employees on deputation/ foreign service as on 1st April	0	0	0	0	0
3	Total number of employees (1+2)	267	269	270	272	274
4	Number of employees retired/retiring during the year	2	1	1	1	1
5	Number of employees added	4	2	3	3	3
6	Number of employees at the end of the year (4-5)	269	270	272	274	276



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Employee Cost

(Rs. in crores)

Sr.No.	Particulars	Previous Year FY 2020-21 (Actual)	Current Year FY 2021-22 (RE)	Ensuing Year FY 2022-23 (Projections)	Ensuing Year FY 2023-24 (Projections)	Ensuing Year FY 2024-25 (Projections)
		Total	Total	Total	Total	Total
1	2	3	4	5	6	7
	Salaries & Allowances					
1	Basic Pay	7.52	7.98	8.47	8.99	9.54
2	Dearness Pay	1.93	2.05	2.17	2.31	2.45
3	Dearness Allowance	3.93	4.17	4.42	4.69	4.98
4	House Rent Allowance	0.82	0.87	0.92	0.98	1.04
5	Fixed medical allowance	0.00	0.00	0.00	-	-
6	Medical reimbursement charges	0.00	0.00	0.00	-	-
7	Over time payment	0.00	0.00	0.00	-	-
8	Other allowances (detailed list to be attached)	0.00	0.00	0.00	-	-
a.	Washing allowance	0.00	0.00	0.00	-	-
b.	Transport allowance	0.82	0.87	0.92	0.98	1.04
c.	L.T.C.	0.00	0.00	0.00	-	-
d.	Children Education All.	0.13	0.14	0.15	0.16	0.17
e.	Family Planning Allow.	0.03	0.03	0.04	0.04	0.04
9	Generation incentive	0.00	0.00	0.00	-	-
10	Bonus	0.16	0.17	0.18	0.20	0.21
11	<b>Total</b>	<b>15.34</b>	<b>16.28</b>	<b>17.28</b>	<b>18.33</b>	<b>19.45</b>
	<b>Terminal Benefits</b>					
12	Leave encashment	-	-	-		
13	Gratuity	-	-	-		
14	Commutation of Pension	-	-	-		
15	Workmen compensation	-	-	-		
16	Ex-gratia	-	-	-		
17	<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>		
	<b>Pension Payments</b>					
18	Basic Pension	-	-	-		
19	Dearness Pension	-	-	-		
20	Dearness Allowance	-	-	-		
21	Any other expenses	-	-	-		
22	<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>		
23	<b>Total (11+17+22)</b>	<b>15.34</b>	<b>16.28</b>	<b>17.28</b>	<b>18.33</b>	<b>19.45</b>
24	Amount capitalized	-	-	-		
25	Net amount	-	-	-		
26	Add prior period expenses	-	-	-		
27	<b>Grand total</b>	<b>15.34</b>	<b>16.28</b>	<b>17.28</b>	<b>18.33</b>	<b>19.45</b>



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Administration and General Expenses

(Rs. in crores)

Sr.No.	Particulars	Previous Year FY 2020-21 (Actual)	Current Year FY 2021-22 (RE)	Ensuing Year FY 2022-23 (Projections)	Ensuing Year FY 2023-24 (Projections)	Ensuing Year FY 2024-25 (Projections)
1	2	3	4	5	6	7
1	Advertisement expenses	0.02	0.02	0.02	0.02	0.02
2	Amc expense	0.96	1.02	1.08	1.15	1.22
3	Annual Subscription Membership Fee	0.03	0.03	0.03	0.04	0.04
4	Building Maintenance	0.21	0.23	0.24	0.25	0.27
5	Celebration expenses	4.24	4.50	4.77	5.07	5.38
6	Data download charges & Internet Expenses	0.31	0.33	0.35	0.37	0.39
7	Diesel expenses	0.04	0.05	0.05	0.05	0.06
8	Digital document & data entry charge	0.11	0.12	0.13	0.13	0.14
9	Electricity expenses	0.21	0.22	0.24	0.25	0.27
10	E-tendering expenses	0.00	0.00	0.00	0.00	0.00
11	Garden expense	0.75	0.80	0.84	0.90	0.95
12	JERC fees	2.34	2.49	2.64	2.80	2.97
13	Meter reading expense	0.16	0.17	0.18	0.19	0.20
14	News paper & magazine expense	0.01	0.01	0.01	0.01	0.01
15	Office cleaning expense	0.29	0.31	0.33	0.34	0.37
16	Office expense daman & diu	0.81	0.86	0.91	0.97	1.03
17	Postage stamp	0.00	0.00	0.00	0.00	0.00
18	Printing & stationery expenses	0.24	0.25	0.26	0.28	0.30
19	Professional charges	2.59	2.75	2.92	3.10	3.29
20	Security service charges	0.41	0.43	0.46	0.48	0.51
21	Telephone expenses	0.07	0.07	0.08	0.08	0.09
22	Vehicles maintenance & repairs	0.01	0.01	0.01	0.01	0.01
23	Water charge expenses	0.02	0.02	0.02	0.02	0.02
24	WRLDC Fees	0.10	0.10	0.11	0.12	0.12
25	<b>Total</b>	<b>13.93</b>	<b>14.79</b>	<b>15.69</b>	<b>16.65</b>	<b>17.67</b>
26	Add/Deduct share of others (to be specified)					
27	<b>Total expenses</b>	<b>13.93</b>	<b>14.79</b>	<b>15.69</b>	<b>16.65</b>	<b>17.67</b>
28	Less capitalized	0.00	0.00	0.00	0.00	0.00
29	<b>Net expenses</b>	<b>13.93</b>	<b>14.79</b>	<b>15.69</b>	<b>16.65</b>	<b>17.67</b>
30	Add prior period	0.00	0.00	0.00	0.00	0.00
31	<b>Total expenses charges to revenue</b>	<b>13.93</b>	<b>14.79</b>	<b>15.69</b>	<b>16.65</b>	<b>17.67</b>





Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Information regarding Bad and Doubtful Debts

Sr.No.	Particulars	Previous Year FY 2020-21 (Actual)	Current Year FY 2021-22 (RE)	Ensuing Year FY 2022-23 (Projections)	Ensuing Year FY 2023-24 (Projections)	Ensuing Year FY 2024-25 (Projections)
1	2	4	5	6	7	8
1	Amount of receivable	1,020.06	1,188.45	1,261.18	1,284.79	1,345.57
1	Provision made for debts in ARR	0.00	0.00	0.00	0.00	0.00



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Information regarding Working Capital for the current and ensuing year

Sr.No.	Particulars	Amount (in Crores Rs.)				
		Previous Year FY 2020-21 (Actual)	Current Year FY 2021-22 (RE)	Ensuing Year FY 2022-23 (Projections)	Ensuing Year FY 2023-24 (Projections)	Ensuing Year FY 2024-25 (Projections)
1	2	3	4	5	6	7
1	O&M expense for one month	3.64	3.95	4.12	4.34	4.59
2	Maintenance spares at 40% of R&M for one month	0.48	0.55	0.55	0.57	0.60
3	Receivables for 2 months	181.73	218.43	210.20	214.13	224.26
4	Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt	95.87	95.87	95.87	95.87	95.87
5	Less one month of power purchase cost	0.00	0.00	102.17	106.10	109.00
6	<b>Total Working Capital requirement</b>	<b>89.98</b>	<b>127.05</b>	<b>16.83</b>	<b>17.07</b>	<b>24.58</b>



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Information regarding Foreign Exchange Rate Variation (FERV)

(Rs. in crores)

Sr.No.	Particulars	Previous Year FY 2020-21 (Actual)	Current Year FY 2021-22 (RE)	Ensuing Year FY 2022-23 (Projections)	Ensuing Year FY 2023-24 (Projections)	Ensuing Year FY 2024-25 (Projections)
1	2	3	4	5	6	7
1	Amount of liability provided					
2	Amount recovered					
3	Amount adjusted					

NA





Format -20

**Electricity Department of Daman & Diu**  
**ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25**  
**Non Tariff Income**

(Rs. in crores)

Sr.No.	Particulars	Previous Year FY 2020-21 (Actual)	Current Year FY 2021-22 (RE)	Ensuing Year FY 2022-23 (Projections)	Ensuing Year FY 2023-24 (Projections)	Ensuing Year FY 2024-25 (Projections)
1	2	3	4	5	6	7
1	Meter/service rent	1.20	1.26	1.33	1.39	1.46
2	Late payment surcharge	0.00	0.00	0.00	0.00	0.00
3	Theft/pilferage of energy	0.00	0.00	0.00	0.00	0.00
4	Wheeling charges under	0.00	0.00	0.00	0.00	0.00
5	open access	0.00	0.00	0.00	0.00	0.00
6	Interest on staff loans &	0.00	0.00	0.00	0.00	0.00
7	advance	0.00	0.00	0.00	0.00	0.00
8	Income from trading	0.00	0.00	0.00	0.00	0.00
9	Income staff welfare activities	0.00	0.00	0.00	0.00	0.00
10	Investment & bank	0.00	0.00	0.00	0.00	0.00
11	balances	0.00	0.00	0.00	0.00	0.00
12	Misc. Receipts/income	4.72	4.95	5.20	5.46	5.73
13	<b>Total income</b>	<b>5.92</b>	<b>6.22</b>	<b>6.53</b>	<b>6.85</b>	<b>7.20</b>
14	Add prior period income*	0.00	0.00	0.00	0.00	0.00
15	<b>Total non tariff income</b>	<b>5.92</b>	<b>6.22</b>	<b>6.53</b>	<b>6.85</b>	<b>7.20</b>



Format -21

Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Information regarding Revenue from Other Business

(Rs. in crores)

Sr.No.	Particulars	Previous Year FY 2020-21 (Actual)	Current Year FY 2021-22 (RE)	Ensuing Year FY 2022-23 (Projections)	Ensuing Year FY 2023-24 (Projections)	Ensuing Year FY 2024-25 (Projections)
1	2	3	4	5	6	7
1	Total revenue from other business					
2	Income from other business to be considered for licensed business as per regulations			NA		



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Lease Details

Sr.No.	Name of Lesser	Gross Assets (Rs.in crores)	Lease entered on	Lease Rentals	Primary period ended/ ending by	Secondary period ending by
1	2	3	4	5	6	7
Not Applicable						





Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25  
Information regarding Wholesale Price Index (All Commodities)

Sr.No.	Period	WPI/CPI	Increase over previous year
1	2	3	4
1	FY 2018-19	119.76	2.97%
2	FY 2019-20	121.80	2.96%
3	FY 2020-21	123.38	2.97%
4	FY 2021-22	134.99	2.54%



*[Handwritten Signature]*

**Electricity Department of Daman & Diu**  
**ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25**  
**Information regarding amount of equity and loan**

(Rs. in crores)

Sr.No.	Period	Amount of equity (Rs. In crore)	Amount of loan (Rs. in crore)	Ratio of equity & loan
1	2	3	4	5
1	As on March 31 of Previous Year	NA		
2	As on March31 of Current Year			
3	As on March 31 of Ensuing Year			



**Electricity Department of Daman & Diu**  
**ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25**

(Rs. in crores)

Sr.No.	Particular	FY 2020-21 Approved by the Commission (Tariff Order dated 23rd March, 2021)	FY 2020-21 Actuals
1	Cost of power purchase	966.61	984.27
2	Employee costs	16.99	15.34
3	R&M expenses	21.07	14.43
4	Administration and General expenses	10.97	13.93
5	Depreciation	22.48	32.79
6	Interest charges (including interest on working capital	21.65	19.71
7	Return on NFA / Equity	14.92	14.37
8	Provision for Bad Debt	0.00	0.00
9	Interest on security deposit	4.68	3.67
10	RPO provisioning to cover backlog of the previous years upto current year	0.00	0.00
11	Incentive/Disincentive on achievement of norms	0.00	11.71
12	<b>Total revenue requirement</b>	<b>1,079.37</b>	<b>1,110.22</b>
13	Less: non tariff income	4.24	5.92
14	<b>Net revenue requirement (10-11)</b>	<b>1,075.13</b>	<b>1,104.30</b>
15	Revenue from tariff	1,082.52	1,090.37
16	Revenue from UI	0.00	0.00
17	<b>(Gap)/surplus (12-13)</b>	<b>7.39</b>	<b>-13.93</b>
18	Gap for previous year	-7.11	-7.11
19	Carrying cost	-0.30	-1.23
20	<b>Total gap (14+15)</b>	<b>-0.02</b>	<b>-22.27</b>
21	Revenue surplus carried over	0.00	0.00
22	Carrying Cost	0.00	0.00
23	Additional revenue from proposed tariff		
24	Energy sales (MU)	139.50	2,126.89





**Electricity Department of Daman & Diu**  
**ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25**

(Rs. in crores)

Sr.No.	Particular	FY 2021-22 Approved by the Commission (Tariff Order dated 23rd March, 2021)	FY 2021-22 RE
1	Cost of power purchase	1,179.06	1,217.92
2	Employee costs	18.03	16.28
3	R&M expenses	22.34	16.35
4	Administration and General expenses	11.56	14.79
5	Depreciation	24.05	22.40
6	Interest charges (including interest on working capital	24.33	19.76
7	Return on NFA / Equity	16.95	14.82
8	Provision for Bad Debt	0.00	0.00
9	Interest on security deposit	4.68	3.67
10	RPO provisioning to cover backlog of the previous years upto current year	0.00	0
11	<b>Total revenue requirement</b>	<b>1,301.00</b>	<b>1,325.99</b>
12	Less: non tariff income	4.46	6.22
13	<b>Net revenue requirement (10-11)</b>	<b>1,296.54</b>	<b>1,319.77</b>
14	Revenue from tariff	1,273.67	1,310.55
15	Revenue from UI	0.00	0.00
16	<b>(Gap)/surplus (12-13)</b>	<b>-22.87</b>	<b>-9.22</b>
17	(Gap)/surplus for previous year	-0.01	-22.27
18	Carrying cost	-0.92	-2.35
19	<b>Total gap (14+15)</b>	<b>-23.80</b>	<b>-33.84</b>
20	Revenue surplus carried over	0.00	0.00
21	Carrying Cost	0.00	0.00
22	Additional revenue from proposed tariff		
23	Energy sales (MU)	2,598.62	2,461.28



**Electricity Department of Daman & Diu**  
**ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25**  
**Revenue from Existing Tariff**

FY 2021-22

S.No.	Category of Consumers	No. of Consumers	Energy Sales (MU)	Tariff Rates (P/unit)	Energy Charges (Rs. In Crore)	Contracted Max Demand KVA	Demand Charges (Rs/KVA)	Demand Charges (Rs. In Crore)	Total Revenue (Rs. In Crore)
1	Domestic								
	Up to 100 units		65.11	1.40	9.12		20		
	101-200 units		43.41	2.00	8.68		20		
	201-400 units		23.25	2.50	5.81		20		
	401 units and above		23.25	3.00	6.98		20		
	<b>Total Domestic</b>	<b>51,879</b>	<b>155.02</b>		<b>30.59</b>	<b>110394</b>	<b>20</b>	<b>0.21</b>	<b>30.79</b>
2	LIGH								
	All units						10	0.00	0.00
2	NRS/Commercial								
	0-100 units		5.02	3	1.50		25		
	above 100 units		45.15	4.05	18.28		50		
	<b>Total Commercial</b>	<b>8,038</b>	<b>50.16</b>		<b>19.79</b>	<b>28810</b>	<b>50</b>	<b>0.08</b>	<b>19.87</b>
3	Public Lighting	647	5.20	4.50	2.34	1567	0	0.00	2.34
4	Public Water Work	106	2.60			742	25	0.00	0.00
	Above 20 HP Connected Load		2.60	4.10	1.07	742	25	0.00	
5	Industrial								
a)	HT								
i)	HT (A) General	730	1956.87		838.66	510776	315	180.52	1019.18
	For all units		1996.81	4.20	838.66		315		
ii)	HT (B) Furnace	4	77.57		32.85	11810	505	6.78	39.63
	For all units		79.15	4.15	32.85		505		
	<b>Total HT Industrial</b>	<b>734</b>	<b>2034.44</b>		<b>871.51</b>	<b>522586</b>		<b>187.31</b>	<b>1058.82</b>
b)	LT	1,858	210.30		75.71	124310		0.62	76.33
	For all units		210.30	3.60	75.71	124310	25	0.62	
	<b>Total HT+LT Industrial</b>	<b>2593</b>	<b>2244.75</b>		<b>947</b>	<b>646896</b>		<b>187.93</b>	<b>1135.15</b>
6	Agriculture Consumption	1,295	3.54		0.30	3906	0		0.30
	Upto 10 HP		2.46	0.75	0.18				
	Beyond 10 HP		1.08	1.05	0.11				
7	Temporary	0.00				0			
	All units					0			0.00
7	<b>Total Revenue Billed</b>	<b>64558</b>	<b>2461</b>		<b>1000.23</b>	<b>792315.83</b>		<b>188.22</b>	<b>1188.45</b>
8	FPPCA								
9	OA Charges								
10	Other Charges								
11	REC charges								
12	UI								
13	<b>Grand Total</b>	<b>64558</b>			<b>1000.23</b>	<b>792315.8308</b>		<b>188.22</b>	<b>1188.45</b>

1. Figures of HT Industrial for Connected load are in KVA





**Electricity Department of Daman & Diu**  
**ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 2022-23 TO FY 2024-25**  
**Revenue from Existing Tariff**

Format -26

2022-23

S.No.	Category of Consumers	No. of Consumers	Energy Sales (MU)	Contracted Max Demand KVA	Demand Charges (Rs/KVA)	Tariff Rates (P/unit)	Demand Charges (Rs. In Crore)	Energy Charges (Rs. In Crore)	Total Revenues (Rs. In Crore)
1	Domestic								
	Up to 100 units	17392	56.07		20	1.40	0.42	7.85	8.27
	101-200 units	9751	31.43		20	2.00	0.23	6.29	6.52
	201-400 units	8189	26.40		20	2.50	0.20	6.60	6.80
	401 units and above	17487	56.38		20	3.00	0.42	16.91	17.33
	<b>Total Domestic</b>	<b>52,819</b>	<b>170.28</b>	<b>112602</b>	<b>20</b>		<b>1.27</b>	<b>37.65</b>	<b>38.92</b>
2	LIGH								
	All units		0.00		15		0.01		0.01
2	NRS/Commercial								
	0-100 units	4030	25.05		25	3.00	0.12	7.51	7.64
	above 100 units	4168	25.91		50	4.05	0.25	10.49	10.74
	<b>Total Commercial</b>	<b>8,198</b>	<b>50.96</b>	<b>30244</b>	<b>50</b>		<b>0.37</b>	<b>18.01</b>	<b>18.38</b>
3	Public Lighting	663	5.30	1598	0	4.50	0.00	2.39	2.39
4	Public Water Work	108	2.63	757	25		0.02	1.08	1.10
	Above 20 HP Connected Load		2.63	757	25	4.10	0.02	1.08	
5	Industrial								
a)	HT								
i)	HT (A) General	745	2049.75	513710	315		192.24	869.59	1061.83
	For all units		2070.45		315	4.20		869.59	
ii)	HT (B) Furnace	4	81.25	11810	505		7.06	34.06	41.12
	For all units		82.07		505	4.15		34.06	
	<b>Total HT Industrial</b>	<b>749</b>	<b>2131.00</b>	<b>525520</b>			<b>199.30</b>	<b>903.65</b>	<b>1102.95</b>
b)	LT	1,896	217.00	127363			5.21	91.91	97.11
	For all units		255.29	127363	40	3.60	5.21	91.91	97.11
	<b>Total HT+LT Industrial</b>	<b>2645</b>	<b>2348.00</b>	<b>652883</b>			<b>204.51</b>	<b>995.55</b>	<b>1200.07</b>
6	Agriculture Consumption	1,304	3.83	3947	0			0.32	0.32
	Upto 10 HP		2.66			0.75		0.20	
	Beyond 10 HP		1.17			1.05		0.12	
7	Temporary	0.00	0.00	0				0.00	0.00
	All units		0.00	0				0.00	0.00
7	<b>Total Revenue Billed</b>	<b>65737</b>	<b>2581.00</b>	<b>802031.48</b>			<b>204.54</b>	<b>1055</b>	<b>1261.18</b>
8	FPPCA								0.00
9	OA Charges								0.00
10	Other Charges								0.00
11	REC charges								0.00
12	UI								0.00
13	<b>Grand Total</b>	<b>65737</b>	<b>2581.00</b>	<b>802031.4826</b>			<b>204.54</b>	<b>1055</b>	<b>1261.18</b>

1. Figures of HT Industrial for Connected load are in KVA

