

True up for FY 2019-20,

Review of FY 2020-21,

AND

ARR and Tariff Revision Proposal for FY 2021-22

Main Text & Formats (Volume I)

Submitted to

Joint Electricity Regulatory Commission  
Gurgaon

By:

Electricity Department of Daman & Diu  
(Daman)

December 2020

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 the  
FY 2021-22 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

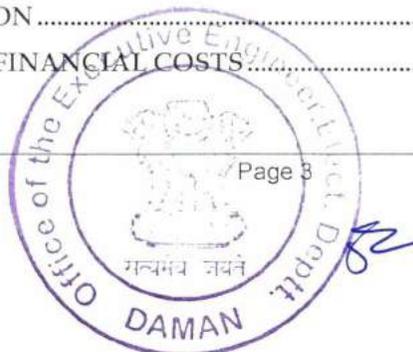
The Applicant respectfully submits as under: -

1. The Electricity Department of Daman & Diu ("EDDD") is a statutory body engaged in the electricity transmission and distribution in the Union Territory of 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. Based on the provisions of Section 62 of the Act, EDDD is filing the current petition, in order to meet its financial requirements.
2. This is a Petition indicating the True up Petition for FY 2019-20, Review for the FY 2020-21, Aggregate Revenue Requirement (ARR) and Tariff Revision Proposal of EDDD for the FY 21-22 (Financial Year 2021-22).



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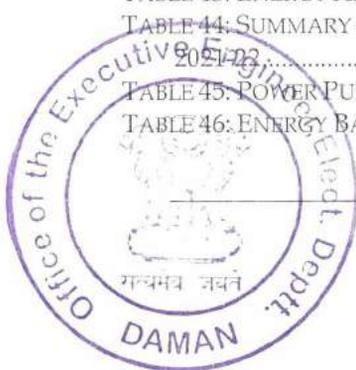
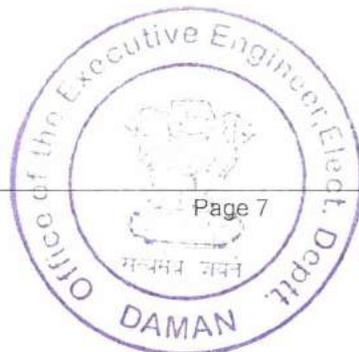


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ACRONYM	DEFINITION
A&G Expenses	Administrative & General Expenses
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
Ckt. Km / ckm	Circuit Kilometres
EA 2003	Electricity Act 2003
G,T and D	Generation, Transmission and 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

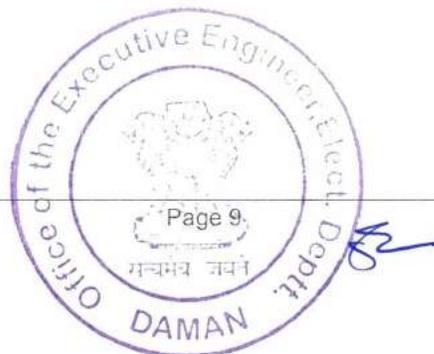


Notes:

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 a union territory 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 20.591 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.

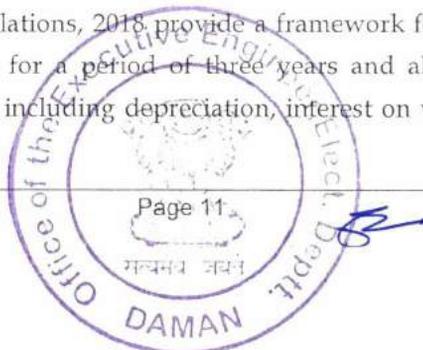
The present power allocation of Daman & Diu is approximately 435.92 MW (353.70 MW at peak hours and 450.80 MW at off peak hours) from various generating stations including 70 MW from NTPC-SAIL plant located at Bhilai and 38 MW from Ratnagiri Gas and Power Private Limited (RGPPL). At present, Daman gets 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 19-20.

Considering the increase in demand from the large industries, the demand is likely to reach to 360-370 MW by FY 2021-22. 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, 2018

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, 2018, hereinafter referred to as "MYT Regulations". The MYT Regulations, 2018 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



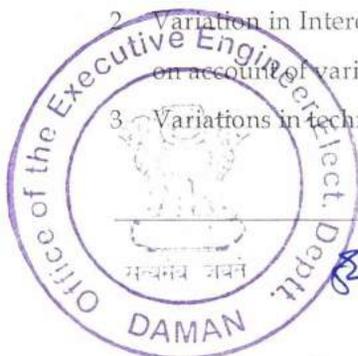
debt, and return on equity amongst others. The MYT Regulations, 2018 segregate the items impacting tariffs into controllable and uncontrollable factors. Items that are uncontrollable are passed through to the consumers. Further, the MYT Regulations, 2018 identifies the uncontrollable and controllable 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 19-20, revised estimates for FY 20-21 and the basis, assumptions and projections of individual elements constituting the determination of ARR for the FY 2021-22. 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 and tenth 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 and FY 2020-21 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 and 18<sup>th</sup> May, 2020 respectively. The Commission in its Tariff Order for the FY 2020-21 has approved the ARR for the FY 2020-21 based on the actual cost for FY 18-19 and estimated expenses for FY 19-20.



## Chapter 2: True Up for FY 2019-20

### 2.1 Principles for True Up for FY 2019-20

As per JERC MYT Regulations, 2018, the Hon'ble Commission shall undertake the True Up of licensee for FY 2019-20 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 2019-20. Information provided in the True Up for FY 2019-20 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 20<sup>th</sup> May, 2019 and 18<sup>th</sup> May, 2020 for the FY 19-20.

Accordingly, revised Aggregate Revenue Requirement, revenue and gap for FY 19-20 are given in the following paragraphs of this chapter.

### 2.2 Energy Sales for FY 2019-20

The actual energy sale for FY 2019-20 has been shown below along with approved sales by Hon'ble Commission vide Tariff Order dated 20<sup>th</sup> May, 2019 and 18<sup>th</sup> May, 2020. The actual energy sales for FY 2019-20 are as under:

Table 1: Consumer category wise energy sales for FY 2019-20

Particulars	(MU)		
	FY 19-20 Approved (20th May, 2019)	FY 19-20 Approved (18th May, 2020)	FY 19-20 Actual
Domestic	135.57	150.96	147.83
LIG/ Kutir Jyoti	0.10	0.00	0.00
Commercial	65.87	55.63	51.35
Agriculture	5.39	4.65	4.35
LT Industry	220.08	192.64	204.68
HT/EHT Industry	2178.22	2125.12	2,078.33
Public Lighting	10.99	6.43	6.32
Public Water Works	4.55	2.84	2.81
Temp. Supply	6.40	0.00	0.00
<b>Total Sales</b>	<b>2,627.17</b>	<b>2,538.27</b>	<b>2,495.67</b>

LIG sales are 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 18<sup>th</sup> May, 2020. The reasons attributable for the same are:

- The actual sales of the HT category for the FY 2019-20 was 2078.33 MUs as compared to 2125.12 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 2019-20 was 204.68 MUs as compared to 192.64 MUs approved by the Hon'ble Commission in its Tariff Order dated 18<sup>th</sup> May, 2020.
- The actual sold to the Domestic category was 147.83 MUs as compared to 150.96 MUs approved by the Hon'ble Commission in its Tariff Order dated 18<sup>th</sup> May, 2020.
- The actual sold to the Commercial category was 51.35 MUs as compared to 55.63 MUs approved by the Hon'ble Commission in its Tariff Order dated 18<sup>th</sup> May, 2020.
- Overall the actual sales has decreased by 42.60 MUs in comparison to the sales approved by the Hon'ble Commission vide its Tariff Order dated 18<sup>th</sup> May, 2020.

The EDDD requests the Hon'ble Commission to approve the actual sales for FY 19-20.

### 2.3 Distribution Loss for FY 2019-20

EDDD is making all efforts to reduce the distribution losses in the UT of Daman & Diu. In FY 2019-20, the actual distribution losses were 4.07% as against the approved level of 6.70%.

In the Tariff Order dated 20<sup>th</sup> May, 2019 and 18<sup>th</sup> May, 2020 the Hon'ble Commission had approved the distribution losses at 6.70% for the FY 2019-20. However, now EDDD has computed the distribution loss based on the actual sales data for FY 19-20. Based on that the distribution loss for FY 19-20 has been worked out at 4.07%. 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 20<sup>th</sup> May, 2019 and 18<sup>th</sup> May, 2020.



*[Handwritten signature]*

Table 2: Distribution Loss

Particulars	(%)		
	FY 19-20 Approved (20th May, 2019)	FY 19-20 Approved (18th May, 2020)	FY 19-20 Actual
Distribution Loss	6.70%	6.70%	4.07%

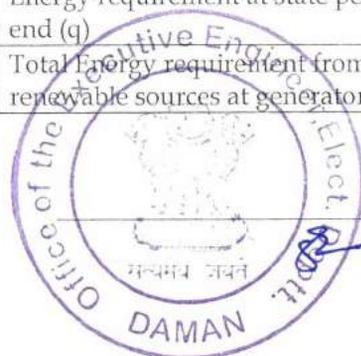
The EDDD requests the Hon'ble Commission to approve the actual T&D losses for FY 19-20.

#### 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 19-20 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 2019-20

Particulars	(MU)	
	FY 19-20 Approved (18th May, 2020)	FY 19-20 Actual
Retail Sales (a)	2538.27	2495.67
Open Access Sales (b)	0.00	0.00
Less: Energy Savings (c)	0.00	0.00
Total Sales (d=a+b-c)	2538.27	2495.67
Distribution Loss (MU) (e=g-d)	182.28	105.82
Distribution Loss (%) (f=e/g)	6.70%	4.07%
Energy Required at Periphery (g)	2720.55	2601.49
Sale to common pool consumer/UI Sale(h)	0.61	20.78
Own generation (i)	29.82	21.69
Total energy requirement at state periphery(j=g+h-i)	2691.34	2600.57
Less: Energy Purchased through UI at Periphery (k)	69.97	159.64
Less: Open Access Purchase at Periphery (l)	0.00	0.00
Less: Energy Purchased through Renewable Sources (m)	70.00	0.00
Less: Energy Purchased through IEX (n)	0.00	465.91
Energy requirement at state periphery from tied up sources (o=j-k-l-m-n)	2551.37	1975.02
Inter state loss (MU) (p=q-o)	3.66%	1.24%
Inter state loss (%)	96.93	24.83
Energy requirement at state periphery from generator end (q)	2648.30	1999.85
Total Energy requirement from tied up sources, UI and renewable sources at generator end (r=i+k+m+n)	2818.09	2647.10



Particulars	FY 19-20	FY 19-20
	Approved (18th May, 2020)	Actual
Total Energy requirement in ut including Open Access ( $r=q+1$ )	2818.09	2647.10

The net energy requirement for sale during FY 2019-20 was 2647.10 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 19-20 is provided in the table below and compared with the power purchase approved by the Hon'ble Commission.

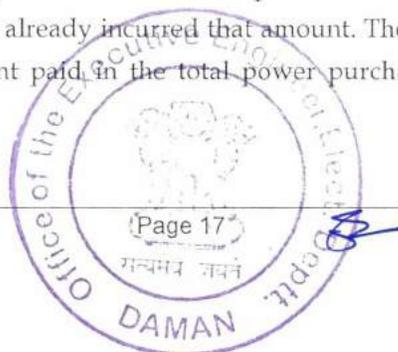
Table 4: Power purchase cost for FY 2019-20

Particulars	MUs		Cost (Rs. Crore)	
	FY 19-20	FY 19-20	FY 19-20	FY 19-20
	Approved	Actual	Approved	Actual
Power Purchase	2,818.09	2,647.10	1,202.62	1,154.43

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. 1202.62 Crore in the Tariff Order dated 18<sup>th</sup> May, 2020. Now, the EDDD has claimed a power purchase cost of Rs. 1028.43 Crore based on the Annual accounts for FY 19-20 and there is a decrease in the power purchase cost as compared to the power purchase cost approved by the Hon'ble Commission. The same is attributable to the decrease in sales witnessed during the FY 2019-20.

The EDDD also requests the JERC to allow the UI purchase during FY 19-20 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 19-20.



The EDDD purchased 159.64 MU during FY 19-20 through UI at the cost of Rs. 46.78 Crore to meet the energy shortfall during the year. The EDDD also purchased 465.91 MUs during FY 2019-20 from the energy exchange at the cost of Rs.155.17 Crore to meet its energy demand.

Further, the EDDD procured 21.69 MUs of solar energy from its rooftop and ground mounted solar plants during the FY 2019-20 to meet its solar obligation. The EDDD procured 1147 solar certificates and 64602 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 19-20 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. 44.36 Crore and Rs. 44.79 Crore vide Tariff Orders dated 20<sup>th</sup> May, 2019 and 18<sup>th</sup> May, 2020 respectively. During FY 19-20, EDDD incurred actual O&M expense of Rs. 40.82 Crore which was inclusive of employee cost of Rs. 16.07 Crore, Repair & Maintenance Charges of Rs. 14.34 Crore



and Administration & General Expenses of Rs. 10.41 Crore as shown in the table below:

Table 5: Operation & Maintenance Expenses for FY 2019-20

(Rs. Crore.)

Particulars	FY 19-20	FY 19-20	FY 19-20
	Approved (20th May, 2019)	Approved (18th May, 2020)	Actual
Employee Cost	17.61	17.19	16.07
R&M	19.62	19.36	14.34
A&G	7.13	8.24	10.41
O&M Expenses	44.36	44.79	40.82

The A&G cost has increased by Rs. 2.17 Crores. The increase in the A&G expenses can be attributed to the license fees paid to the JERC for Rs. 1.66 Crore and an amount of Rs. 1.67 Crore incurred towards celebration expenses during the FY 2019-20. The revised estimates submitted by the EDDD for FY 2019-20 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 2019-20. The EDDD, therefore, requests the Hon'ble Commission to approve the O&M expenses for FY 19-20 as submitted in herewith.

## 2.7 Capital Expenditure & Capitalization

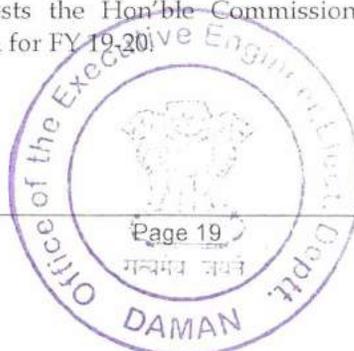
The actual capital expenditure incurred by EDDD during the FY 19-20 was Rs. 27.50 Crore, which is higher than that of approved by the Hon'ble Commission in its Tariff Order dated 18<sup>th</sup> May, 2020. The capital expenditure incurred and actual capitalization made by the department for FY 19-20 against that approved by the Hon'ble Commission is as shown below:

Table 6: Capital expenditure and capitalization for FY 19-20

(Rs. Crore)

Particulars	FY 19-20	FY 19-20	FY 19-20
	Approved (20th May, 2019)	Approved (18th May, 2020)	Actual
Capital Expenditure	50.55	26.50	27.50
Capitalisation	9.55	10.00	20.24

The EDDD, therefore, requests the Hon'ble Commission to approve the capital expenditure and capitalization for FY 19-20.



## 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 2019-20 is shown in the table below:

Table 7: Depreciation for FY 2019-20

Particulars	(Rs. Crore.)		
	FY 19-20 Approved (20th May, 2019)	FY 19-20 Approved (18th May, 2020)	FY 19-20 Actual
Opening GFA	599.56	606.88	607.45
Addition during the year	9.55	10.00	20.24
Closing GFA	609.11	616.88	627.69
Average GFA	604.34	611.88	617.57
Depreciation during the year	20.66	21.13	31.54

The EDDD, requests the Hon'ble Commission to approve the actual depreciation for FY 19-20 without any deduction.

## 2.9 Interest and Finance Charges

For assessing interest on Loans in FY 19-20, EDDD has considered the opening balance of loans for FY 19-20 as approved by the Hon'ble Commission vide its Tariff Order dated 18<sup>th</sup> May, 2020 for the Review of the ARR for FY 19-20. The normative loan addition in FY 19-20 has been computed as 70% of the capitalization for FY 2019-20 which works out to Rs. 14.17 Crore. The capitalization for FY 19-20 was Rs. 20.24 Crore as per the audited annual accounts for FY 19-20.

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 2019-20. Further the rate of interest has been considered as equal to the SBI PLR as on April 1, 2019 plus 100 basis points of 9.55%.

The following table depicts the total Interest & Financial charges for FY 19-20 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 19-20

(Rs. Crore.)

Particulars	FY 19-20	FY 19-20	FY 19-20
	Approved (20th May, 2019)	Approved (18th May, 2020)	Actual
Opening Loan	138.96	143.58	152.14
Loan for additional Capex (70:30 debt-equity)	6.69	7.00	14.17
Loan Repayment	20.66	21.13	31.54
Closing Loan	124.99	129.45	134.77
Interest Cost on Avg. Loans	12.60	13.04	13.70

The EDDD, requests the Hon'ble Commission to approve the interest on loan computed for FY 19-20.

#### 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 10.55% as equal to the SBI PLR as on April 1, 2019 plus 200 basis points. The following table shows the interest on working capital for FY 2019-20 against the approved amount for the consideration of the Hon'ble Commission:

Table 9: Interest on Working Capital for FY 2019-20

(Rs. Crore.)

Particulars	FY 19-20	FY 19-20	FY 19-20
	Approved (20th May, 2019)	Approved (18th May, 2020)	Actual
O&M expense for one month	3.70	3.73	3.40
Maintenance spares at 40% of R&M for one month	0.65	0.65	0.48
Receivables for 2 months	204.60	194.33	185.47
Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt	67.82	67.82	87.32
Total Working Capital requirement	141.13	130.89	102.03
Interest on Working Capital	14.32	13.81	10.76

The EDDD, requests the Hon'ble Commission to approve the interested on working capital computed for FY 19-20.



### 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 2019-20 is given in the Table below:

Table 10: Return on Equity for FY 19-20

Particulars	(Rs. Crore.)		
	FY 19-20 Approved (20th May, 2019)	FY 19-20 Approved (18th May, 2020)	FY 19-20 Actual
Return on Equity	12.97	13.32	13.10

The EDDD, requests the Hon'ble Commission to approve the return on equity computed for FY 19-20.

### 2.12 Interest on consumer security deposits

The Hon'ble Commission in its last Tariff Order has approved Rs. 4.24 Crore as interest payable on consumer security deposits. The actual interest on consumer security deposit paid by the EDDD was Rs. 4.68 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 19-20

Particulars	(Rs. Crore.)		
	FY 19-20 Approved (20th May, 2019)	FY 19-20 Approved (18th May, 2020)	FY 19-20 Actual
Interest on Security Deposit	4.24	4.24	4.68

The EDDD, requests the Hon'ble Commission to approve the interest on consumer security deposit submitted for FY 19-20.

### 2.13 Non - Tariff Income

The actual Non-Tariff Income of EDDD for FY 19-20 was Rs. 4.04 Crore as against Rs. 10.45 Crore approved by the Hon'ble Commission. The non-tariff income includes



meter rent of Rs. 1.33 Crores, Miscellaneous Income of Rs. 2.71 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 19-20

Particulars	(Rs. Crore.)		
	FY 19-20 Approved (20th May, 2019)	FY 19-20 Approved (18th May, 2020)	FY 19-20 Actual
Non tariff Income	19.76	10.45	4.04

The EDDD, requests the Hon'ble Commission to approve the actual Non-Tariff Income for FY 19-20.

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

In the APR for FY 2019-20, the Commission had approved the T&D loss level of 6.70%. The EDDD has achieved T&D loss of 4.07% against the approved loss level of 6.70%. 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 2019-20 as follows:

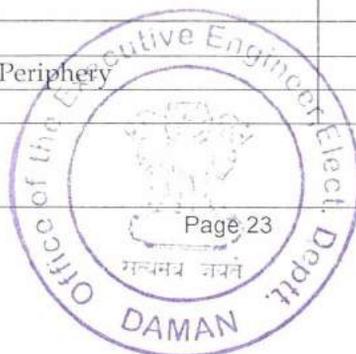
"14.1 Approved aggregate gain to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be shared equally between Licensee and Consumers:

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 4.44/kWh, which is the Average Power Purchase cost (APPC) of the Petitioner. The APPC has been derived at State/UT Periphery based on the Power Purchase cost approved in the true-up and the Energy at the State/UT Periphery has been computed after grossing up the retail energy sales (2495.67MU) with the actual Intra-State T&D Loss (4.07%).

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

Particulars	Approved	Actual
Retail Sales	2495.67	2495.67
T%D Loss (%)	6.70%	4.07%
Power Purchase at State Periphery	2720.55	2601.49
Gain/Loss (MU)		119.06



*[Handwritten signature]*

Particulars	Approved	Actual
Average Power Purchase Cost		4.44
Gain/Loss (MU)		52.83
Sharing of 50% of gain with Petitioner (Rs. Crore)		26.42

### 2.15 Aggregate Revenue Requirement for FY 19-20

Based on above expenses, table below summarizes actual Aggregate Revenue Requirement for FY 19-20 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 19-20

Particulars	(Rs. Crore.)		
	FY 19-20 Approved (20th May, 2019)	FY 19-20 Approved (18th May, 2020)	FY 19-20 Actual
Power Purchase Cost	1,138.20	1,202.62	1,154.43
O&M Expense	44.36	44.79	40.82
Depreciation	20.66	21.13	31.54
Interest Cost on Long-term Capital Loans	12.60	13.04	13.70
Interest on Working Capital Loans	14.32	13.81	10.76
Return on Equity	12.97	13.32	13.10
Provision for Bad Debt	0.00	0.00	0.00
Interest on security deposit	4.24	4.24	4.68
Incentive/Disincentive on achievement of norms	0.00	0.00	26.42
Less:			
Non-Tariff Income	19.76	10.45	4.04
Revenue from Surplus Power Sale	0.00	0.00	2.21
Annual Revenue Requirement	1,227.59	1,302.50	1,289.19

The EDDD, requests the Hon'ble Commission to approve the ARR computed for FY 19-20.

### 2.16 Revenue for FY 19-20

During the FY 19-20, EDDD's actual revenue amounted to Rs. 1112.80 Crore (Including Rs. 110.33 Crore of FPPCA) as against Rs. 1040.66 Crore and Rs. 1165.98 Crore as approved vide its Tariff Order dated 20<sup>th</sup> May, 2019 and 18<sup>th</sup> May, 2020 respectively by the Hon'ble Commission.



Table 15: Revenue for FY 19-20

Particulars	(Rs. Crore.)		
	FY 19-20 Approved (20th May, 2019)	FY 19-20 Approved (18th May, 2020)	FY 19-20 Actual
Revenue from sale of power	1,040.66	1,165.98	1,112.80
Total revenue	1040.66	1165.98	1112.80

## 2.17 Revenue (Gap) / Surplus for FY 19-20

The Hon'ble Commission in Order dated 20<sup>th</sup> May, 2019 has approved a total Aggregate Revenue Requirement (ARR) of Rs. 1227.59 Crore for FY 19-20. Further, the Commission has computed the revised ARR for FY 19-20 in the Order dated and 18<sup>th</sup> May, 2020 of Rs. 1165.98 Crore. Based on the annual accounts for FY 19-20 and the actual expenses incurred by the EDDD, the revised ARR for FY 2019-20 has been arrived at Rs. 1278.07 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 2019-20 was Rs. 1112.80 Crore. Accordingly, total revenue gap of EDDD for FY 19-20 is computed at Rs. 176.39 Crore as depicted in the Table below:

Table 16: Revenue (Gap)/surplus for FY 19-20

Particulars	(Rs. Crore.)	
	FY 19-20 Approved (18th May, 2020)	FY 19-20 Actual
Annual Revenue Requirement (a)	1302.50	1289.19
Revenue from sale of power (b)	1165.98	1112.80
Revenue from open access (c)	0.00	0.00
Revenue (Gap)/Surplus (d=b+c-a)	(136.52)	(176.39)
Previous Years' (Gap)/Surplus Carried Over (e)	144.07	144.07
Carrying Cost (f)	7.24	5.34
Net Revenue (Gap)/surplus (g=d+e+f)	14.79	(26.99)

EDDD requests the Hon'ble Commission to approve afore-mentioned revenue surplus for FY 19-20.



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### Chapter 3: Review for the FY 2020-21

The review of aggregate revenue requirement for FY 20-21 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 20-21. 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 20-21 as shown in the Table below:



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**Table 17: Category wise sales for FY 20-21 (Revised Estimate)**

(MU)

Particulars	FY 20-21 Approved (20th May, 2019)	FY 20-21 Approved (18th May, 2020)	FY 20-21 RE
Domestic	143.31	165.80	152.91
LIG/ Kutir Jyoti	0.10	0.00	0.00
Commercial	70.36	59.19	42.07
Agriculture	5.70	5.12	3.27
LT Industry	233.44	205.19	181.58
HT/EHT Industry	2281.90	2239.12	1,714.33
Public Lighting	11.83	6.66	5.52
Public Water Works	5.19	3.03	2.46
Temp. Supply	6.40	0.00	0.00
<b>Total Sales</b>	<b>2,758.23</b>	<b>2,684.11</b>	<b>2,102.14</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 2020-21 is 2102.14 MUs as against 2684.11 MUs approved by the Hon'ble Commission in the Tariff Order dated 18<sup>th</sup> May, 2020. There is a significant reduction in the sales during the FY 2020-21 and the same is attributable to the lockdown imposed by the Government of India during March 2020.

### 3.2 Distribution loss for FY 20-21

EDDD has considered the distribution losses of 4.05% for FY 20-21. The Hon'ble Commission had approved a distribution loss of 6.60% for the EDDD vide its Tariff Order dated 18<sup>th</sup> May, 2020. However, as the actual distribution loss for the FY 2019-20 stood at 4.07%, the EDDD has proposed the distribution loss of 4.05% for the FY 2020-21.

**Table 18: Distribution losses for FY 20-21**

(%)

Particulars	FY 20-21 Approved (20th May, 2019)	FY 20-21 Approved (18th May, 2020)	FY 20-21 RE
Distribution Loss	6.60%	6.60%	4.05%

### 3.3 Energy Requirement of the System

The following Table depicts the energy requirement of the EDDD for FY 20-21.



Table 19: Energy Requirement of the System

(MU)

Particulars	FY 20-21	FY 20-21
	Approved (18th May, 2020)	RE
Retail Sales (a)	2,684.11	2,102.14
Open Access Sales (b)	0.00	0.00
Less: Energy Savings (c)	0.00	0.00
Total Sales (d=a+b-c)	2,684.11	2,102.14
Distribution Loss (MU) (e=g-d)	189.67	88.73
Distribution Loss (%) (f=e/g)	6.60%	4.05%
Energy Required at Periphery (g)	2,873.78	2190.87
Sale to common pool consumer/UI Sale(h)	0.75	0.93
Own generation (i)	63.02	58.04
Total energy requirement at state periphery(j=g+h-i)	2,811.51	2,133.76
Less: Energy Purchased through UI at Periphery (k)	0.00	37.06
Less: Open Access Purchase at Periphery (l)	0.00	0.00
Less: Energy Purchased through Renewable Sources (m)	352.95	0.00
Less: Energy Purchased through IEX (n)	0.00	102.76
Energy requirement at state periphery from tied up sources (o=j-k-l-m-n)	2,458.57	1,993.94
Inter state loss (MU) (p=q-o)	93.40	87.18
Inter state loss (%)	3.66%	3.66%
Energy requirement at state periphery from generator end (q)	2,551.97	2381.93
Total Energy requirement from tied up sources, UI and renewable sources at generator end (r=i+k+m+n)	2,967.94	2794.93
Total Energy requirement in ut including Open Access (r=q+l)	2967.94	2794.93

### 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 20-21 has considered the following sources of power:

→ NTPC Western Region Generating Stations

→ NTPC Eastern Region Generating Stations



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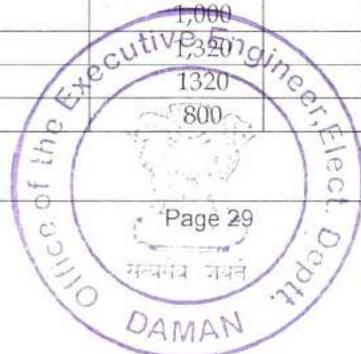
- NSPCL (NTPC-SAIL Power Company Ltd)
- Nuclear Power Corporation of India Limited
- Ratnagiri Gas Power Plant (RGPPL)
- Renewable energy sources – Solar and Non-Solar
- Other market sources

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 20-21, six months actual power purchase has been considered. For projection of remaining six months of power purchase for FY 20-21, firm and infirm allocation from various generating stations has been considered as per the allocation specified in the notification no's. WRPC/Comml-I/6/Alloc/2020 dated 15/10/2020 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	48	2.30%
KSTPP-III	500	6	1.16%
VSIPP-I	1,260	13	1.02%
VSIPP-II	1,000	9	0.90%
VSIPP- III	1,000	11	1.10%
VSIPP- IV	1,000	12	1.23%
VSIPS-V	500	8	1.61%
KAWAS	656	31	4.73%
JGPP	657	31	4.77%
Bhilai Unit-I &II(NTPC )	500	70	14.00%
Sipat-I	1,980	25	1.24%
Sipat-II	1,000	10	0.97%
MSTPS-I	1,000	12	1.23%
MOUDA-II	1,320	17	1.26%
SOLAPUR	1320	26	1.94%
LARA	800	10	1.29%



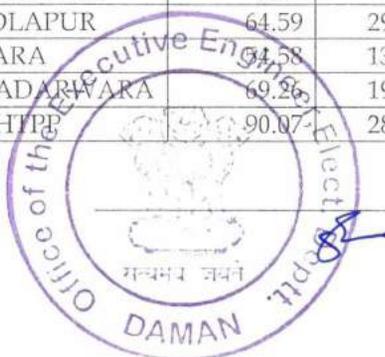
Particulars	Plant Capacity	EDDD Allocation	Avg. EDDD Allocation
	MW	MW	(%)
GADARWARA	800	14	1.78%
KHTPP	1320	23	1.76%
<b>Subtotal</b>	<b>18,714</b>	<b>376</b>	
<b>Eastern Region</b>			
KHSTPP-II	1000	1.30	0.13%
<b>Subtotal</b>	<b>1000</b>	<b>1.3</b>	
<b>NPCIL</b>			
KAPPS	440	8	1.86%
TAPP 3&4	1080	12	1.15%
<b>Subtotal</b>	<b>1520.00</b>	<b>21</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>436</b>	

Based on the actual power purchase cost of the first six months of FY 20-21 and the remaining six months projection, the revised estimated power purchase cost for FY 20-21 is presented in the following Table:

Table 21: Revised estimated Power Purchase cost for FY 20-21

(Rs. Crore)

Source	Units Purchased	Fixed Charges	Variable Charges	Other Charges	Rebate	Credit for URS	All Charges Total	Per Unit Cost
<b>NTPC Stations</b>								
KSTPP	356.47	22.34	54.31	-0.77			75.88	2.13
KSTPP-III	43.36	5.37	6.54	-0.08			11.84	2.73
VSTPP-I	80.04	6.35	14.08	-0.28			20.15	2.52
VSTPP-II	58.24	3.74	9.98	-0.12			13.60	2.34
VSTPP- III	73.38	7.12	12.59	-0.30			19.41	2.65
VSTPP- IV	81.03	12.67	13.49	-0.07			26.09	3.22
VSTPS-V	52.90	8.65	9.21	-0.08			17.78	3.36
KAWAS	68.58	18.54	13.72	1.12			33.38	4.87
JGPP	77.93	23.81	15.85	1.49			41.15	5.28
Sipat-I	175.16	20.96	27.96	-0.09			48.84	2.79
Sipat-II	69.76	7.74	11.54	-0.27			19.01	2.73
MSTPS-I	25.54	15.43	7.43	0.27			23.13	9.06
MOUDA-II	29.81	16.59	8.76	0.36			25.71	8.63
KHSTPP-II	7.27	1.18	1.87	0.03			3.08	4.24
SOLAPUR	64.59	29.92	18.63	0.18			48.72	7.54
LARA	64.58	13.38	11.43	-0.03			24.78	4.54
GADARWARA	69.26	19.20	17.54	0.06			36.80	5.31
KHTPP	90.07	28.27	38.90	0.10			67.27	7.47



Source	Units Purchased	Fixed Charges	Variable Charges	Other Charges	Rebate	Credit for URS	All Charges Total	Per Unit Cost
Subtotal	1477.95	261.25	293.85	1.52	14.98	(0.01)	541.64	3.66
NTPC Bhilai								
Bhilai Unit-I &II(NTPC )	368.40	80.77	95.57	-2.34			173.99	4.72
Subtotal	368.40	80.77	95.57	(2.34)			173.99	4.72
NPCIL								
KAPPS	53.42	0.00	12.40	-5.56			6.84	1.28
TAPP 3&4	85.21	0.00	28.89	12.96			41.86	4.91
Subtotal	138.64	0.00	41.29	7.41			48.70	3.51
Others								
Ratnagiri	84.70	15.09	27.64	0.17			42.90	5.07
Subtotal	84.70	15.09	27.64	0.17			42.90	5.07
<u>Power purchase from Other Sources</u>								
Power purchase from Indian E. Exchange	102.76	0.00	30.99	0.00			30.99	3.02
UI	37.06	0.00	10.54	0.00			10.54	2.84
Solar	58.04	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	7.02	0.00			7.02	0.00
Non Solar REC	0.00	0.00	16.82	0.00			16.82	0.00
Solar (SECI, NTPC)	0.00	0.00	0.00	0.00			0.00	0.00
Subtotal	197.86	0.00	65.37	0.00			65.37	3.30
Misc. Arrears								
NTPC Rebate								
Gross Power Purchase	2267.55	357.11	523.72	6.75	14.98	(0.01)	872.59	3.85
External Losses								
<b>Total Power Purchase</b>	<b>2267.55</b>	<b>357.11</b>	<b>523.72</b>	<b>6.75</b>	<b>14.98</b>	<b>(0.01)</b>	<b>872.59</b>	<b>3.85</b>
PGCIL CHARGES							76.82	
WRLDC							0.21	
MSTCL							3.50	
<b>Grand Total of Charges - Net</b>	<b>2267.55</b>						<b>953.12</b>	<b>4.20</b>

Per unit variable cost, fixed cost and other charges have been considered at the same level as actual from April to September 2020.



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 20-21, till September, 2020 the EDDD has procured 11.77 MU of solar energy from its ground mounted and rooftop solar plants. For the remaining six months the EDDD will further procure 46.27 MU of solar power from its own generation and will purchase a further 70.19 MUs as solar certificates to meet its solar obligation till FY 2020-21.

To meet its non-solar obligation for the FY 2020-21, the EDDD has planned to purchase 168.17 MUs through non-solar certificates during the remaining six months of FY 2020-21.

### 3.5 Operation & Maintenance Costs

The approved and revised estimated O&M cost for FY 20-21 is shown in the following Table:

Table 22: O&M Expense for FY 20-21

(Rs. Crore)

Particulars	FY 20-21 Approved (20th May, 2019)	FY 20-21 Approved (18th May, 2020)	FY 20-21 RE
Employee Cost	18.43	17.98	16.93
R&M	19.93	19.67	17.04
A&G	7.44	8.59	10.97
O&M Expenses	45.80	46.24	44.93

The revision on the O&M cost for FY 20-21 is mainly on escalation in A&G expenses.

### 3.6 Capital Expenditure Plan

A summary of the capital expenditure and capitalization for FY 20-21 vis-à-vis approved by the Commission is summarized in Table below:



Table 23: Capital Expenditure &amp; Capitalization for FY 20-21

(Rs. Crore)

Particulars	FY 20-21	FY 20-21	FY 20-21
	Approved (20th May, 2019)	Approved (18th May, 2020)	RE
Capital Expenditure	53.10	95.00	95.00
Capitalisation	64.10	38.00	38.00

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 20-21 at Rs. 616.88 Crore, Rs. 38.00 Crore and Rs. 654.88 Crore respectively.

EDDD had Opening Gross Fixed Assets (GFA) of Rs. 607.45 Crore in FY 19-20. EDDD has further added assets worth Rs. 20.24 Crore during FY 19-20. The closing GFA by the end of FY 19-20 stands at Rs. 627.69 Crore.

Based on the capital expenditure and capitalization estimated above, assets amounting to Rs. 38.00 Crore have been estimated to be capitalized during FY 20-21.

A summary of the Opening and Closing GFA and capitalization for FY 20-21 vis-à-vis approved by the Commission has been summarized in Table below:

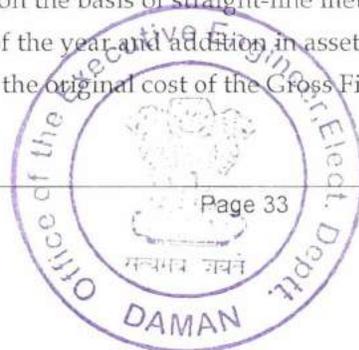
Table 24: Opening and Closing GFA for FY 20-21

(Rs. Crore)

Particulars	Opening GFA	Additions during the Year	Closing GFA
FY 2019-20(Approved)	616.88	38.00	654.88
FY 2019-20(RE)	627.69	38.00	665.69

### 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 20-21 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 20-21. The Table below summarizes the asset-wise depreciation vis-à-vis approved by the Commission and computed by EDDD:

**Table 26: Depreciation for FY 20-21**

(Rs. Crore)

Particulars	FY 20-21	FY 20-21	FY 20-21
	Approved (20th May, 2019)	Approved (18th May, 2020)	RE
Opening GFA	609.68	616.88	627.69
Addition during the year	64.10	38.00	38.00
Closing GFA	673.78	654.88	665.69
Average GFA	641.73	635.88	646.69
Depreciation during the year	21.92	21.96	22.47

### 3.9 Interest & Financial Costs

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

Assets capitalized during the FY 2020-21 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 8.75% 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 18<sup>th</sup> May, 2020 as against the revised estimates is shown in the Table below:

Table 27: Interest on Long-term/Capital Loans for FY 20-21

(Rs. Crore)

Particulars	FY 20-21	FY 20-21	FY 20-21
	Approved (20th May, 2019)	Approved (18th May, 2020)	RE
Opening Loan	124.99	129.45	134.77
Loan for additional Capex (70:30 debt-equity)	44.87	26.60	26.60
Loan Repayment	21.92	21.96	22.47
Closing Loan	147.94	134.09	138.90
Interest Cost on Avg. Loans	13.03	11.66	11.97

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

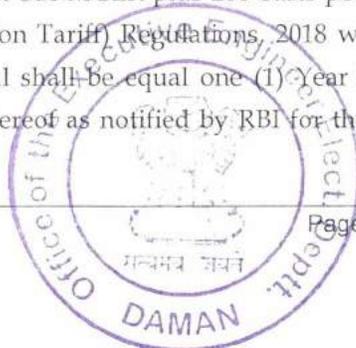
### 3.9.2 Interest on Working Capital Borrowings

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 2020-21 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 9.75% 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 20-21 considering the above methodology is summarized in the Table below:

**Table 28: Interest on Working Capital for FY 20-21**

(Rs. Crore)

Particulars	FY 20-21	FY 20-21	FY 20-21
	Approved (20th May, 2019)	Approved (18th May, 2020)	RE
O&M expense for one month	3.82	3.85	3.74
Maintenance spares at 40% of R&M for one month	0.66	0.66	0.57
Receivables for 2 months	222.04	219.36	175.98
Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt	67.82	67.82	87.32
<b>Total Working Capital requirement</b>	<b>158.70</b>	<b>156.05</b>	<b>92.98</b>
<b>Interest on Working Capital</b>	<b>16.11</b>	<b>16.46</b>	<b>9.07</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 2020-21.

**Table 29: Return on Equity for FY 20-21**

(Rs. Crore)

Particulars	FY 20-21 Approved (20th May, 2019)	FY 20-21 Approved (18th May, 2020)	FY 20-21 RE
Opening Equity	84.84	87.18	87.27
Addition in equity on account of new capitalization	19.23	11.4	11.40
Closing Equity	104.07	98.58	98.67
Average Equity	94.46	92.88	84.24
Average Equity (Wires Business)	85.01	83.59	83.67
Average Equity (Retail Supply Business)	9.45	9.29	9.30
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%
Return on Equity for Wires Business	13.18	12.96	12.97
Return on Equity for Retail Supply Business	1.51	1.49	1.49
<b>Return on Equity</b>	<b>14.69</b>	<b>14.44</b>	<b>14.46</b>

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

### 3.11 Interest on consumer security deposits

The Hon'ble Commission in its last Tariff Order has approved Rs. 4.24 Crore as interest payable on consumer security deposits. EDDD has made a provision to pay Rs. 4.68 Crore as interest on consumer security deposits in FY 20-21. 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 20-21**

(Rs. Crore)

Particulars	FY 20-21 Approved (20th May, 2019)	FY 20-21 Approved (18th May, 2020)	FY 20-21 RE



*[Handwritten signature]*

Particulars	FY 20-21 Approved (20th May, 2019)	FY 20-21 Approved (18th May, 2020)	FY 20-21 RE
Interest on Security Deposit	4.24	4.24	4.68

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

### 3.12 Non-Tariff & Other Income

For estimating the non-tariff income for FY 20-21, an increase of 5% p.a. has been considered over the actual non-tariff income of FY 19-20. Details of the non-tariff income is provided in table below:

Table 31: Non-tariff Income for FY 20-21

(Rs. Crore)

Particulars	FY 20-21 Approved (20th May, 2019)	FY 20-21 Approved (18th May, 2020)	FY 20-21 RE
Non tariff Income	20.76	10.91	4.24

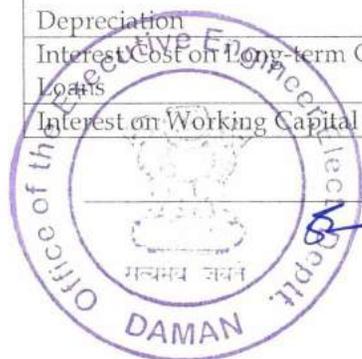
### 3.13 Aggregate Revenue Requirement

The following Table summarizes EDDD's Aggregate Revenue Requirement for FY 20-21 against approved by the Hon'ble Commission in the Tariff Order dated 18<sup>th</sup> May, 2020.

Table 32: Aggregate Revenue Requirement for FY 20-21

(Rs. Crore)

Particulars	FY 20-21 Approved (20th May, 2019)	FY 20-21 Approved (18th May, 2020)	FY 20-21 RE
Power Purchase Cost	1,237.19	1,243.59	953.12
O&M Expense	45.80	46.24	44.93
Depreciation	21.92	21.96	22.47
Interest Cost on Long-term Capital Loans	13.03	11.66	11.97
Interest on Working Capital Loans	16.11	16.46	9.07



Particulars	FY 20-21 Approved (20th May, 2019)	FY 20-21 Approved (18th May, 2020)	FY 20-21 RE
Return on Equity	14.69	14.44	14.46
Provision for Bad Debt	0.00	0.00	0.00
Interest on security deposit	4.24	4.24	4.68
Total	1,352.98	1,358.59	1,060.70
Less:			
Non-Tariff Income	20.76	10.91	4.24
Revenue from Surplus Power Sale	0.00	0.00	0.00
<b>Annual Revenue Requirement</b>	<b>1,332.22</b>	<b>1,347.68</b>	<b>1,056.46</b>

### 3.14 Revenue from Existing Tariff

Revenue from sale of power for FY 20-21 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. 1055.91 Crore in FY 20-21, as shown in the following Table. The estimated revenue for FY 20-21 is based on the six month actual revenue at the exiting tariff. The revenue for remaining six months of FY 20-21 has been computed based on the retail tariff notified by the Commission in the Tariff Order for the FY 2020-21 dated 18<sup>th</sup> May, 2020. As directed by the Hon'ble Commission in its Tariff Order dated 18<sup>th</sup> May, 2020, 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 2020-21.

The Table below summarizes the revenue from sale of power at existing tariff for FY 20-21:

**Table 33: Revenue from Sale of Power at Existing Tariff for FY 20-21**

(Rs. Crore)

Particulars	FY 20-21 Approved (18th May, 2020)	FY 20-21 RE
Revenue from sale of power	1,108.54	1,016.92
Revenue from FPPCA	0.00	38.99
<b>Total Revenue</b>	<b>1108.54</b>	<b>1055.91</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. 29.92 Crore for FY 20-21.

Table 34: Revenue Gap/Surplus for FY 20-21

(Rs. Crore)

Particulars	FY 20-21 Approved (18th May, 2020)	FY 20-21 RE
Annual Revenue Requirement (a)	1,347.68	1,056.46
Revenue from sale of power (b)	1,108.54	1,016.92
Revenue from FPPCA ( c)	0.00	38.99
Revenue (Gap)/surplus (d=b+c-a)	(239.14)	(0.55)
Previous Years' (Gap)/Surplus Carried Over ( e )	14.79	(26.99)
Carrying Cost (f)	(9.27)	(2.39)
Net Revenue (Gap)/surplus (j=f+g-h+i)	(233.62)	(29.92)

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



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## Chapter 4: ARR for the FY 2021-22

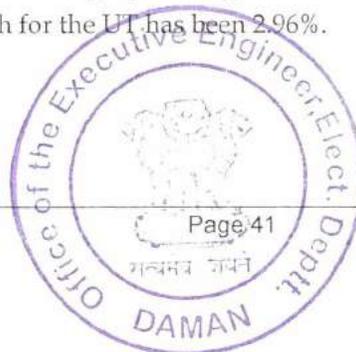
EDDD is submitting its ARR for the FY 2021-22 broadly on the basis of the principles outlined in MYT Tariff Regulations notified by JERC. EDDD has considered the past trends and taken cognizance of other internal and external developments to estimate the likely performance for the FY 2021-22.

The following sections explain in detail the basis and forecasts of the following elements for the FY 2021-22.

- 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 FY 2021-22.

### 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 1.61% over this period. Overall growth for the UT has been 2.96%.



*[Handwritten signature]*

Table 35: Past Year's Load Growth

(kVA)

Consumer Category	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
kVA	Actual	Actual	Actual	Actual	Actual	Actual
Domestic	117161	119557	121827	131652	123187	104658
Commercial	19322	19761	20781	23722	22187	25034
Agriculture	3617	3672	3812	4003	3824	3743
LT Industry	100284	107471	104148	108683	112502	117295
HT/EHT Industry	486708	505321	536544	551163	543648	537595
Public Lighting	1657	1690	880	1405	1447	1488
Public Water Works	795	795	795	794	748	733
Temp. Supply		28	673	1986	1650	1495
<b>Total</b>	<b>7,29,544</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>

2. The projected load for the FY2020-21 and FY 2021-22 for all the categories has been given in the table below:

Table 36: Projected load growth during FY 2020-21 and FY 2021-22

(kVA)

Consumer Category	FY 20-21	FY 21-22
kVA	RE	Projected
Domestic	165844	179111.09
Commercial	27832	29353.99
Agriculture	4430	4582.89
LT Industry	116492	119218.39
HT/EHT Industry	596500	612426.96
Public Lighting	1491	1520.82
Public Water Works	892	927.44
Temp. Supply	1986	1986
<b>Total</b>	<b>9,15,468</b>	<b>9,49,128</b>

3. The Hon'ble Commission is requested to approve the sanctioned load for the FY 2020-21 and the FY 2021-22 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.



*[Handwritten signature]*

Table 37: Past Year's Consumer Growth

Consumer Category	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Actual	Actual	Actual	Actual	Actual	Actual
Domestic	45,298	46,420	47,403	48,287	48,455	49,924
Commercial	8,037	8,209	7,875	7,815	7,373	7,413
Agriculture	1,195	1,243	1,283	1,344	1,299	1,257
LT Industry	1,755	1,817	1,755	1,706	1,705	1,783
HT/EHT Industry	786	784	800	807	789	763
Public Lighting	524	529	571	633	635	637
Public Water Works	109	125	127	125	110	104
Temp. Supply		11	366	414	510	629
<b>Total</b>	<b>57,704</b>	<b>59,138</b>	<b>60,180</b>	<b>61,131</b>	<b>60,876</b>	<b>62,510</b>

2. The projected consumer growth for the FY 2020-21 and the FY 2021-22 has been given in the table below:

Table 38: Projected consumer growth during the FY 2020-21 and FY 2021-22

Consumer Category	FY 20-21	FY 21-22
	RE	Projected
Domestic	52122	53467
Commercial	8009	8075
Agriculture	1458	1498
LT Industry	1757	1775
HT/EHT Industry	810	811
Public Lighting	765	815
Public Water Works	143	150
Temp. Supply	414	414
<b>Total</b>	<b>65,478</b>	<b>67,005</b>

3. The Hon'ble Commission is requested to approve the no. of consumers for the FY 2020-21 and the FY 2021-22 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 period from FY 2013-14 to FY 2019-20 has been considered to arrive at the Compound Annual Growth Rate (CAGR) for each of the customer categories. As the data available for FY 2020-21 pertains only to the first 6 months of the year, the figures for FY 2020-21 were not considered for arriving at the growth rates. However, the figures available for 6 months of FY 2020-21 have

been annualized, in line with the past trends to arrive at sales estimates for FY 2020-21. The figures for FY 2020-21 have been further used as the base for forecasting the values for the FY 2021-22.

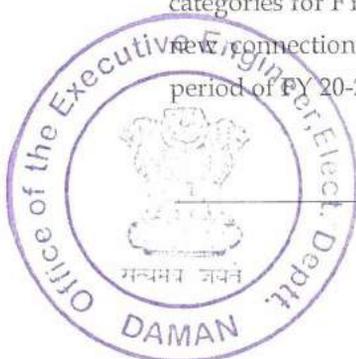
2. Table 39 below presents the category-wise energy sales for the past 7 years.

Table 39: Past Years' Energy Sales Growth

(MU)

Consumer Category	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20
	Actual						
Domestic	84.16	83.06	88.20	97.89	121.32	134.47	147.83
LIG/ Kutir Jyoti	0.08	0.08	0.09	0.10	0.10	0.00	0.00
Commercial	46.75	41.57	49.93	55.37	57.74	53.27	51.35
Agriculture	3.05	2.30	2.46	2.81	4.83	4.95	4.35
LT Industry	169.59	153.70	160.54	179.85	195.61	197.86	204.68
HT/EHT Industry	1,441.53	1,327.84	1,379.41	1407.81	1,708.63	2031.44	2078.33
Public Lighting	7.06	8.80	7.43	7.89	9.48	8.26	6.32
Public Water Works	1.20	3.28	2.68	3.22	3.49	3.68	2.81
Temp. Supply	0.67	1.09	1.23	2.17			0.00
<b>Total Sales</b>	<b>1,754.08</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>

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 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 2020-21 has been projected by considering the actual sales for the first six months of FY 2020-21 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 20-21, 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 20-21.



*[Handwritten signature]*

5. The table given below summarizes the projections of category wise increase in energy sales during the FY 2020-21 and the FY 2021-22. As can be observed, the overall energy sales in UT of 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

Consumer Category	(MU)	
	FY 20-21 RE	FY 21-22 Projected
Domestic	152.91	163.72
LIG/ Kutir Jyoti*	0.00	0.00
Commercial	42.07	46.13
Agriculture	3.27	3.37
LT Industry	181.58	221.36
HT/EHT Industry	1714.33	2,155.94
Public Lighting	5.52	5.64
Public Water Works	2.46	2.46
Temp. Supply	0.00	0.00
<b>Total Sales</b>	<b>2,102.14</b>	<b>2,598.61</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 4.07% for the FY 2019-20. 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 18<sup>th</sup> May, 2020. The EDDD proposes to reduce the Distribution losses to 4.00% for FY 21-22. The approved and the projected Distribution Loss for the FY 2021-22 is as given in the table below:



Table 41: Proposed Distribution Loss for FY 2021-22

Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Projected
Distribution Loss	6.50%	4.00%

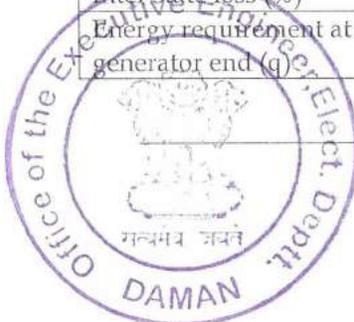
3. The EDDD submits to the Commission to approve the Distribution losses submitted herein.

#### 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

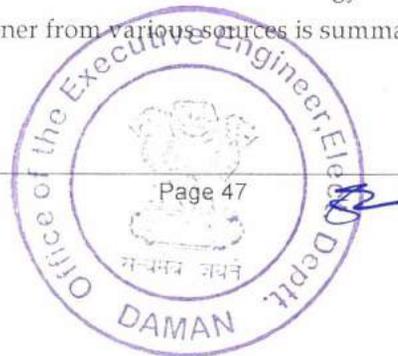
Particulars	(MU)	
	FY 21-22 Approved (20th May, 2019)	FY 21-22 Projected
Retail Sales (a)	2,895.94	2,598.61
Open Access Sales (b)	0.00	0.00
Less: Energy Savings (c)	0.00	0.00
Total Sales (d=a+b-c)	2,895.94	2,598.61
Distribution Loss (MU) (e=g-d)	201.32	108.28
Distribution Loss (%) (f=e/g)	6.50%	4.00%
Energy Required at Periphery (g)	3,097.26	2,706.89
Sale to common pool consumer/UI Sale(h)	0.00	0.87
Own generation (i)	17.78	60.00
Total energy requirement at state periphery(j=g+h-i)	3,079.48	2,647.75
Less: Energy Purchased through UI at Periphery (k)	0.00	0.00
Less: Open Access Purchase at Periphery (l)	0.00	0.00
Less: Energy Purchased through Renewable Sources (m)	352.95	0.00
Less: Energy Purchased through IEX (n)	0.00	353.00
Energy requirement at state periphery from tied up sources (o=j-k-l-m-n)	2726.53	2294.75
Inter state loss (MU) (p=q-o)	103.59	87.18
Inter state loss (%)	3.66%	3.66%
Energy requirement at state periphery from generator end (q)	2830.12	2381.93



Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Projected
Total Energy requirement from tied up sources, UI and renewable sources at generator end (r=i+k+m+n)	3200.85	2794.93
Total Energy requirement in ut including Open Access (r=q+l)	3200.85	2794.93

#### 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, Vindychal, 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 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 20-21, actual power purchase for the first six months of FY 20-21 has been considered. For projection of energy availability for the FY 2021-22, 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 20-21 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 2020 to March 2021 has been estimated based on the revised allocation specified in the notification No. WRPC/Comml-I/6/Alloc/2020 dated 15/10/2020 of Western Regional Power Committee. The energy allocation from various generating stations is summarized in table below:

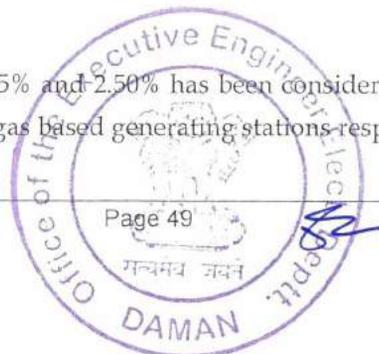
Table 43: Energy Allocation from Central Generating Stations

Particulars	Plant Capacity MW	EDDD Allocation MW	Avg. EDDD Allocation (%)
<b>NTPC Stations</b>			
KSIPP	2,100	48	2.30%
KSIPP-III	500	6	1.16%
VSIPP-I	1,260	13	1.02%
VSIPP-II	1,000	9	0.90%
VSIPP- III	1,000	11	1.10%
VSIPP- IV	1,000	12	1.23%
VSTPS-V	500	8	1.61%
KAWAS	656	31	4.73%
JGPP	657	31	4.77%
Bhilai Unit-I &II(NTPC )	500	70	14.00%
Sipat-I	1,980	25	1.24%
Sipat-II	1,000	10	0.97%
MSTPS-I	1,000	12	1.23%
MOUDA-II	1,320	17	1.26%
SOLAPUR	1320	26	1.94%
LARA	800	10	1.29%
GADARWARA	800	14	1.78%
KHIPP	1320	23	1.76%
Subtotal	18,714	376	
<b>Eastern Region</b>			
KHSIPP-II	1000	1.30	0.13%
Subtotal	1000	1.3	
<b>NPCIL</b>			
KAPPS	440	8	1.86%



Particulars	Plant Capacity	EDDD Allocation	Avg. EDDD Allocation
	MW	MW	(%)
TAPP 3&4	1080	12	1.15%
Subtotal	1520.00	21	
Others			
Ratnagiri	582	38	6.53%
Subtotal	582	38	
Grand Total	21,815.59	436	

3. Actual power purchase in first six months of FY 20-21 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 20-21.
4. The EDDD received 20.13 MUs of power from Ratnagiri Gas Power Plant during the first six months of FY 20-21. However, it is expected that EDDD will be getting more power from Ratnagiri for the rest of the FY 2020-21 and therefore 84.70 MUs have been considered from the plant for the FY 2020-21.
5. For projecting the power availability for FY 2021-22, 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.
6. Additionally, EDDD has 70 MW allocations from NSPCL Bhilai power stations. Energy availability from NSPCL Bhilai power stations for FY 2020-21 has been considered by taking 70 MW allocation from the plant.
7. Power purchase quantum from the NTPC stations of the current year and FY 2021-22 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.
8. 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. It is expected that an additional 27 MW of rooftop solar plant will be added to the existing capacity during the 2020-21. Hence, EDDD will procure 37 MUs from solar plants during the FY 2020-21 and 60 MUs during the FY 2021-22. The remaining solar RPO obligation will be fulfilled by procuring renewable energy certificates. For meeting the non-solar RPOs the EDDD will procure renewable energy certificates during the FY 2020-21 and FY 2021-22. A summary of the Renewable Purchase Obligation (RPO) to be met by the EDDD during the FY 2020-21 and FY 2021-22 is given in the table below:

Table 44: Summary of renewable Purchase Obligation for the FY 2020-21 and FY 2021-22

Description	(MU)	
	FY 2020-21	FY 2021-22
Sales within State (MU)	2,102.14	2,598.61
RPO obligation (%)	14.10%	17.00%
Solar	6.10%	8.00%
Non-Solar	8.00%	9.00%
RPO obligation for the year (MU)	296.40	441.76
Solar	128.23	207.89
Non-Solar	168.17	233.87
RPO Compliance (Procurement and own generation)	58.04	60.00
Solar	58.04	60.00
Non-Solar	0.00	0.00
RPO Compliance (REC certificate purchase)	238.36	233.87
Solar	70.19	0.00
Non-Solar	168.17	233.87

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 2020-21 and FY 2021-22.
13. Table 45 below depicts the station wise power purchase for FY 2020-21 and FY

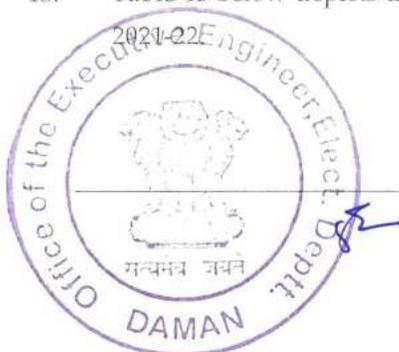
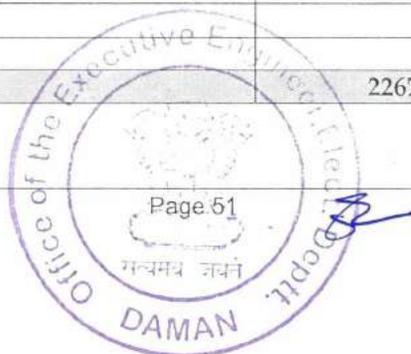


Table 45: Power Purchase Quantum

Source	(MU)	
	FY 2020-21	FY 2021-22
<b>NTPC Stations</b>		
KSTPP	356.47	346.87
KSTPP-III	43.36	41.59
VSTPP-I	80.04	86.48
VSTPP-II	58.24	60.05
VSTPP- III	73.38	73.47
VSIPP- IV	81.03	82.22
VSTPS-V	52.90	54.02
KAWAS	68.58	82.19
JGPP	77.93	96.46
Sipat-I	175.16	174.76
Sipat-II	69.76	68.62
MSTPS-I	25.54	41.61
MOUDA-II	29.81	56.51
KHSTPP-II	7.27	8.09
SOLAPUR	64.59	126.10
LARA	54.58	69.81
GADARWARA	69.26	96.33
KHTPP	90.07	157.13
<b>Subtotal</b>	<b>1477.95</b>	<b>1722.32</b>
<b>NTPC Bhilai</b>		
Bhilai Unit-I &II(NTPC )	368.40	469.51
<b>Subtotal</b>	<b>368.40</b>	<b>469.51</b>
<b>NPCIL</b>		
KAPPS	53.42	46.55
TAPP 3&4	85.21	78.56
<b>Subtotal</b>	<b>138.64</b>	<b>125.10</b>
<b>Others</b>		
Ratnagiri	84.70	65.00
<b>Subtotal</b>	<b>84.70</b>	<b>65.00</b>
<b>Power purchase from Other Sources</b>		
Power purchase from Indian E. Exchange	102.76	353.00
UI	37.06	0.00
Solar	58.04	60.00
Non Solar (Hydro)	0.00	0.00
Solar REC	0.00	0.00
Non Solar REC	0.00	0.00
Solar (SECI, NTPC)	0.00	0.00
<b>Subtotal</b>	<b>197.86</b>	<b>413.00</b>
Misc. Arrears		
NTPC Rebate		
Gross Power Purchase	2267.55	2794.93
External Losses		
<b>Total Power Purchase</b>	<b>2267.55</b>	<b>2794.93</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.

Table 46: Energy Balance

Particulars	(MU)	
	FY 21-22 Approved (20th May, 2019)	FY 21-22 Projected
Retail Sales (a)	2,895.94	2,598.61
Open Access Sales (b)	0.00	0.00
Less: Energy Savings (c)	0.00	0.00
Total Sales (d=a+b-c)	2,895.94	2,598.61
Distribution Loss (MU) (e=g-d)	201.32	108.28
Distribution Loss (%) (f=e/g)	6.50%	4.00%
Energy Required at Periphery (g)	3,097.26	2,706.89
Sale to common pool consumer/UI Sale(h)	0.00	0.87
Own generation (i)	17.78	60.00
Total energy requirement at state periphery(j=g+h-i)	3,079.48	2,647.75
Less: Energy Purchased through UI at Periphery (k)	0.00	0.00
Less: Open Access Purchase at Periphery (l)	0.00	0.00
Less: Energy Purchased through Renewable Sources (m)	352.95	0.00
Less: Energy Purchased through IEX (n)	0.00	353.00
Energy requirement at state periphery from tied up sources (o=j-k-l-m-n)	2726.53	2294.75
Inter state loss (MU) (p=q-o)	103.59	87.18
Inter state loss (%)	3.66%	3.66%
Energy requirement at state periphery from generator end (q)	2830.12	2381.93
Total Energy requirement from tied up sources, UI and renewable sources at generator end (r=i+k+m+n)	3200.85	2794.93
Total Energy requirement in ut including Open Access (r=q+l)	3200.85	2794.93



*[Handwritten signature]*

#### 4.6.3 Power Purchase Cost

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

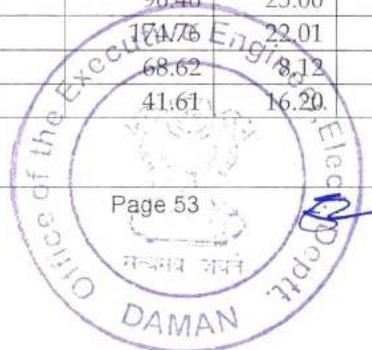
- Fixed cost for NTPC for the FY 2021-22 has been estimated by giving an escalation of 5% at the fixed cost estimated for the FY 2020-21.
- Variable cost for each NTPC generating stations for the FY 2021-22 has been projected at the same rate as received during the first six months of FY 2020-21.
- For 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 2020-21 for projecting the power purchase cost for the FY 2021-22.
- For power purchase from renewable energy sources, the EDDD has considered the purchase of solar renewable energy certificates at Rs. 1.00 per unit. Further, the EDDD has considered the purchase of non-solar renewable energy certificates at Rs. 1.00 per unit.
- 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 is summarized in the Table below:

Table 47: Power Purchase Cost

(Rs. Crore.)

Source	Units Purchased	Fixed Charges	Variable Charges	All Charges Total	Per Unit Cost
<b>NTPC Stations</b>					
KSTPP	346.87	23.46	52.85	76.31	2.20
KSTPP-III	41.59	5.64	6.28	11.92	2.87
VSTPP-I	86.48	6.67	15.21	21.89	2.53
VSTPP-II	60.05	3.93	10.29	14.22	2.37
VSTPP- III	73.47	7.48	12.61	20.08	2.73
VSTPP- IV	82.22	13.30	13.69	26.99	3.28
VSTPS-V	54.02	9.08	9.41	18.49	3.42
KAWAS	82.19	19.46	16.45	35.91	4.37
JGPP	96.46	25.00	19.62	44.62	4.63
Sipat-I	174.75	22.01	27.90	49.91	2.86
Sipat-II	68.62	8.12	11.36	19.48	2.84
MSTPS-I	41.61	16.20	12.10	28.30	6.80



Source	Units Purchased	Fixed Charges	Variable Charges	All Charges Total	Per Unit Cost
MOUDA-II	56.51	17.42	16.61	34.03	6.02
KHSTPP-II	8.09	1.24	2.08	3.32	4.11
SOLAPUR	126.10	31.41	36.36	67.77	5.37
LARA	69.81	14.04	14.62	28.67	4.11
GADARWARA	96.33	20.16	24.40	44.56	4.63
KHIPP	157.13	29.68	67.85	97.54	6.21
<b>Subtotal</b>	<b>1722.32</b>	<b>274.32</b>	<b>369.69</b>	<b>644.01</b>	<b>3.74</b>
<b>NTPC Bhilai</b>					
Bhilai Unit-I &II(NTPC )	469.51	84.80	121.80	206.60	4.40
<b>Subtotal</b>	<b>469.51</b>	<b>84.80</b>	<b>121.80</b>	<b>206.60</b>	<b>4.40</b>
<b>NPCIL</b>					
KAPPS	46.55	0.00	10.80	10.80	2.32
TAPP 3&4	78.56	0.00	26.64	26.64	3.39
<b>Subtotal</b>	<b>125.10</b>	<b>0.00</b>	<b>37.44</b>	<b>37.44</b>	<b>2.99</b>
<b>Others</b>					
Ratnagiri	65.00	15.85	21.21	37.06	5.70
<b>Subtotal</b>	<b>65.00</b>	<b>15.85</b>	<b>21.21</b>	<b>37.06</b>	<b>5.70</b>
<b>Power purchase from Other Sources</b>					
Power purchase from Indian E. Exchange	353.00	0.00	88.25	88.25	2.50
UI	0.00	0.00	0.00	0.00	0.00
Solar	60.00	0.00	0.00	0.00	0.00
Non Solar (Hydro)	0.00	0.00	0.00	0.00	0.00
Solar REC	0.00	0.00	14.79	14.79	0.00
Non Solar REC	0.00	0.00	23.39	23.39	0.00
Solar (SECI, NTPC)	0.00	0.00	0.00	0.00	0.00
<b>Subtotal</b>	<b>413.00</b>	<b>0.00</b>	<b>126.43</b>	<b>126.43</b>	<b>3.06</b>
Misc. Arrears					
NTPC Rebate					
<b>Gross Power Purchase</b>	<b>2794.93</b>	<b>374.96</b>	<b>676.57</b>	<b>1051.53</b>	<b>3.76</b>
External Losses					
<b>Total Power Purchase</b>	<b>2794.93</b>	<b>374.96</b>	<b>676.57</b>	<b>1051.53</b>	<b>3.76</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 20-21 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 2020-21. 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 FY 2021-22, the transmission charges estimated FY 20-21 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

Source	Units Purchased	Fixed Charges	Variable Charges	(Rs. Crore.)	
				All Charges Total	Per Unit Cost
Total Power Purchase	2794.93	374.96	676.57	1051.53	3.76
PGCIL CHARGES				76.82	
WRLDC				0.21	
MSTCL				3.50	
Grand Total of Charges - Net	2794.93			1132.06	4.05

#### 4.7 Operation & Maintenance Costs

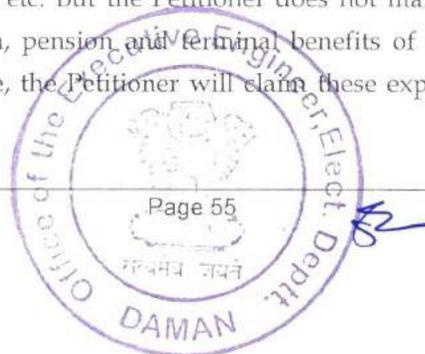
1. Operation and Maintenance expenses comprise of the following heads:

- **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.

2. The methodology adopted by EDDD for projecting the values of each component of the O&M expense for the FY 2021-22 has been explained in the following section.

##### 4.7.1 Employee Expense

1. 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 20-21 EDDD has estimated the total employee cost for full year of FY 20-21 as Rs. 16.93 Crore. Salary expenses for the FY 2021-22 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 5.35%.
3. As per the MYT Regulations, 2018, 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<sub>n</sub> - Employee expenses of the Distribution Licensee for the nth Year;

G<sub>n</sub> is a growth factor for the nth Year. Value of G<sub>n</sub> 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 5.35%. Total employee cost of EDDD for the FY 2021-22 is as given in the table below:

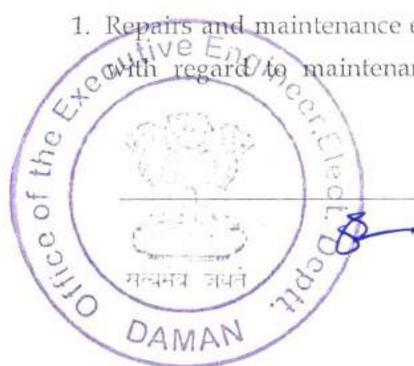
Table 49: Employee Expenses

Particulars	(Rs. Crore)	
	FY 21-22 Approved (20th May, 2019)	FY 21-22 Projected
Employee Cost	19.36	17.83

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 2019-20 is Rs. 14.34 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 FY 2021-22, the EDDD has considered the WPI inflation as 2.96%. Total repair & maintenance cost of EDDD for the FY 2021-22 is summarized in the table below:

Table 50: Repairs & Maintenance Expense

Particulars	(Rs. Crore)	
	FY 21-22 Approved (20th May, 2019)	FY 21-22 Projected
R&M	22.03	18.07

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 considered 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 19-20 is Rs. 10.41 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 FY 2021-22 have been given in the table below:

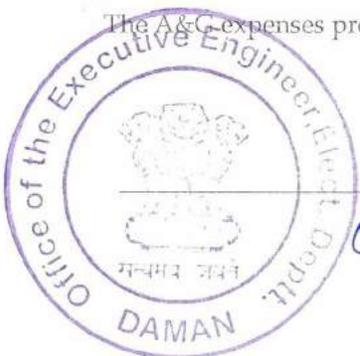


Table 51: A&amp;G Expense

Particulars	(Rs. Crore)	
	FY 21-22 Approved (20th May, 2019)	FY 21-22 Projected
A&G	7.76	11.56

4. The Regulatory & Consultancy expenses for the FY 2021-22 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&amp;M Expense

Particulars	(Rs. Crore.)	
	FY 21-22 Approved (20th May, 2019)	FY 21-22 Projected
Employee Cost	19.36	17.83
R&M	22.03	18.07
A&G	7.76	11.56
O&M Expenses	49.15	47.46

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 FY 2020-21 and FY 2021-22 is given in the table below:

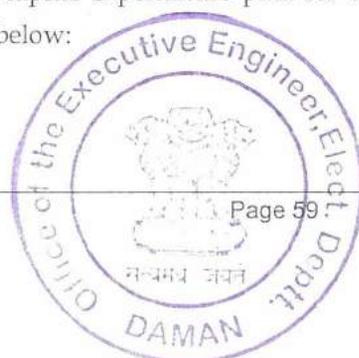


Table 53: Capital Expenditure for the FY 2020-21 and FY 2021-22

(Rs. Crore.)

Sr.No.	Name of Scheme	2020-21	2021-22
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	20.00	19.60
2	Scheme for establishment of 66/11 KV, 2x20 MVA GIS Sub-station alongwith associated line at Dabhel, Daman	16.52	0.00
3	Scheme for establishment of 66/11 KV GIS Sub-station at Bhimpore, Daman	16.58	0.00
	<b>Total</b>	<b>53.10</b>	<b>19.60</b>

- The EDDD requests the Hon'ble Commission to approve the capital expenditure against the scheme as submitted herewith.
- A summary of the capital expenditure and capitalization for the FY 2021-2 is summarized in Table below:

Table 54: Capital Expenditure &amp; Capitalization for the FY 2021-22

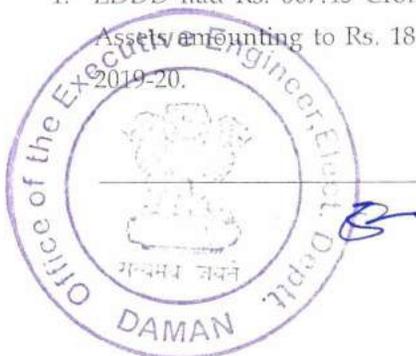
(Rs. Crore)

Particulars	FY 21-22	FY 21-22
	Approved (20th May, 2019)	Projected
Capital Expenditure	19.60	19.60
Capitalisation	49.60	49.00

- 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. 607.45 Crore of Opening Gross Fixed Assets (GFA) in FY 19-20. Assets amounting to Rs. 18.31 Crore have been added to the GFA during the FY 2019-20.



2. Assets amounting to Rs.38.00 Crore have been estimated to be added in the GFA during FY 20-21.
3. Similarly, based on the capital expenditure plan as detailed above, Rs. 49.60 Crore, is proposed to be capitalized during the FY 2021-22.
4. 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

(Rs. Crore)

Particulars	Opening GFA	Additions during the Year	Closing GFA
FY 2020-21 (Approved)	673.21	49.60	722.81
FY 2020-21 (Projected)	665.69	49.60	715.29

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, 2018.
3. Depreciation for the FY 2021-22 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 FY 2021-22. 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 2019-20 as given in the fixed asset register and the estimated capitalization for FY 20-21 and FY 21-22.
4. Therefore, the EDDD requests the Hon'ble Commission to approve the depreciation as given in the table below:



*[Handwritten signature]*

Table 56: Depreciation

(Rs. Crore)

Particulars	FY 21-22 Approved (20th May, 2019)	FY 21-22 Projected
Opening GFA	673.21	665.69
Addition during the year	49.60	49.60
Closing GFA	722.81	715.29
Average GFA	698.01	690.49
Depreciation during the year	23.86	24.04

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 FY 2021-22 have been considered based on normative debt-equity ratio of 70:30 as per the MYT Regulations, 2018.
4. Interest rate of 8.75% 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 FY 2021-22 is summarized in Table below:



Table 57: Total Interest on Long-term Loans

Particulars	(Rs. Crore)	
	FY 21-22 Approved (20th May, 2019)	FY 21-22 Projected
Opening Loan	147.94	138.90
Loan for additional Capex (70:30 debt-equity)	34.72	34.72
Loan Repayment	23.86	24.04
Closing Loan	158.80	149.57
Interest Cost on Avg. Loans	14.65	12.62

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

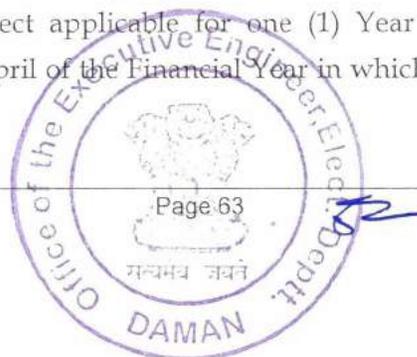
#### 4.11.2 Interest on Working Capital Borrowings

- 1 EDDD has computed the Interest on Working Capital for the FY 2021-22 based on normative basis as per the MYT Regulations, 2018.

- 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. 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 9.75% 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 FY 2021-22 considering the above methodology is summarized in the Table below:

Table 58: Interest on Working Capital for the FY 2021-22

Particulars	(Rs. Crore)	
	FY 21-22 Approved (20th May, 2019)	FY 21-22 Projected
O&M expense for one month	4.10	3.95
Maintenance spares at 40% of R&M for one month	0.73	0.60
Receivables for 2 months	243.09	212.24
Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt	67.82	87.32
<b>Total Working Capital requirement</b>	<b>180.10</b>	<b>129.48</b>
<b>Interest on Working Capital</b>	<b>18.28</b>	<b>12.62</b>

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

#### 4.12 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 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, 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.

4. The equity component has been determined in accordance with Regulation 26 of the MYT Regulations. The following table provides the ROE for the FY 2021-22:

**Table 59: Proposed Return on Equity**

(Rs. Crore)

Particulars	FY 21-22	FY 21-22
	Approved (20th May, 2019)	Projected
Opening Equity	104.07	98.67
Addition in equity on account of new capitalization	14.88	14.88
Closing Equity	118.95	113.55
Average Equity	111.51	106.11
Average Equity (Wires Business)	100.36	95.50
Average Equity (Retail Supply Business) Business	11.15	10.61
Return on Equity for Wires Business (%)	15.50%	15.50%
Return on Equity for Retail Supply Business (%)	16.00%	16.00%
Return on Equity for Wires Business	15.56	14.80
Return on Equity for Retail Supply Business	1.78	1.70
<b>Return on Equity</b>	<b>17.34</b>	<b>16.50</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. 4.24 Crore as interest payable on consumer security deposits. EDDD has made a provision to pay Rs. 4.68 Crore as interest on consumer security deposits during the FY 2021-22. The details of interest on consumer security deposits for the FY 2021-22 have been given in the table below:



Table 60: Interest on Consumer Security Deposit

(Rs. Crore)

Particulars	FY 21-22	FY 21-22
	Approved (20th May, 2019)	Projected
Interest on Security Deposit	4.24	4.68

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 FY 2021-22, an increase of 5% p.a. has been considered over the estimated non-tariff income for FY 20-21. Details of the non-tariff income for the FY 2021-22 is provided in table below:

Table 61: Non-tariff Income

(Rs. Crore)

Particulars	FY 21-22	FY 21-22
	Approved (20th May, 2019)	Projected
Non tariff Income	21.79	4.46

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

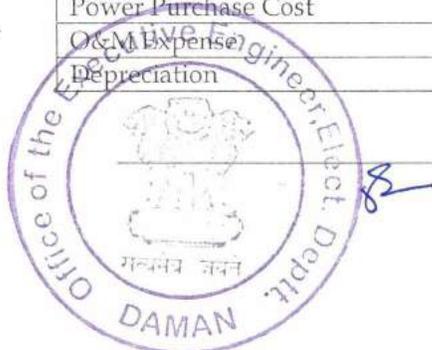
#### 4.15 Aggregate Revenue Requirement

1. Table 62 summarizes EDDD's Aggregate Revenue Requirement for FY 2021-22.

Table 62: Aggregate Revenue Requirement

(Rs. Crore)

Particulars	FY 21-22	FY 21-22
	Approved (20th May, 2019)	Projected
Power Purchase Cost	1,352.79	1,132.06
O&M Expense	49.15	47.46
Depreciation	23.86	24.04



Particulars	FY 21-22	FY 21-22
	Approved (20th May, 2019)	Projected
Interest Cost on Long-term Capital Loans	14.65	12.62
Interest on Working Capital Loans	18.28	12.62
Return on Equity	17.34	16.50
Provision for Bad Debt	0.00	0.00
Interest on security deposit	4.24	4.68
Total	1,480.31	1,249.99
Less:		
Non-Tariff Income	21.79	4.46
Revenue from Surplus Power Sale	0.00	0.00
Annual Revenue Requirement	1,458.52	1,245.53

#### 4.16 Revenue at Existing Tariff

1. Revenue from sale of power for the FY 2021-22 is determined based on the energy sales estimated in Table 40 and category wise tariff prevalent in the UT of Daman & Diu.
2. EDDD has computed the revenue for the FY 2021-22 based on the tariff notified by the Hon'ble Commission in the Tariff Order for the FY 2020-21 dated 18<sup>th</sup> May, 2020.
3. The table below summarizes the revenue from sale of power at existing tariff for FY 2021-22:

Table 63: Revenue from Sale of Power at Existing Tariff

(Rs. Crore.)

Revenue @ Existing Tariff (Rs Crore)	FY 21-22 Projected
Domestic	29.73
LIG	0.00
Commercial	15.47
Agriculture	0.20
LT Industry	91.31
HT/EHT Industry	1133.18
Public Lighting	2.54
Public Water Works	1.01
Temp. Supply	0.00
Total	1273.44
Revenue from Open access	0.00
Total Revenue	1273.44



## 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 2019-20, FY 2020-21 and FY 2021-22 along with the revenue and the resulting revenue (gap)/surplus. The cumulative revenue gap for the three years is Rs. 3.42 Crores as given in the table below.

Table 64: Revenue Gap for FY 2021-22

(Rs. Crore.)

Sr. No.	Particulars	FY19-20	FY20-21	FY21-22
		Actual	Revised Estimates	Projected
1	Total ARR	1,289.19	1,056.46	1,245.53
2	Revenue @ Existing Tariff (including open access)	1,112.80	1,055.91	1,273.44
3	Total Revenue	1,112.80	1,055.91	1,273.44
4	Revenue (Gap)/Surplus (3-1)	(176.39)	(0.55)	27.90
	Covered By			
5	Previous Years' (Gap)/Surplus Carried Over	144.07	(26.99)	(29.92)
6	Revenue (Gap)/Surplus (4+5)	(32.32)	(27.53)	(2.02)
7	Carrying Cost	5.34	(2.39)	(1.40)
8	Total (Gap)/Surplus for three years (6+7)	(26.99)	(29.92)	(3.42)

3. It is evident from Table 64 that there is a cumulative revenue gap of Rs. 3.42 Crore at the end of FY 2021-22. Further, there is a standalone revenue surplus of Rs. 27.90 Crores during the FY 2021-22.
4. The EDDD therefore does not propose any tariff hike for the FY 2021-22. 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 2021-22 may kindly be approved.



## 4.18 Average Cost of Supply

- 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 &amp; Revenue Realization

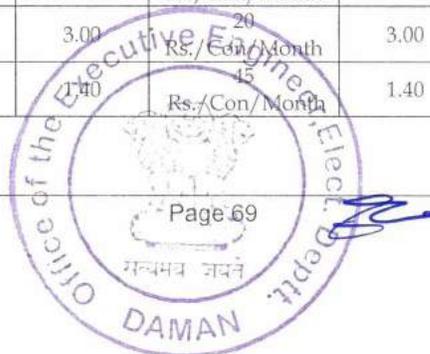
Average Realization & Cost of Supply	FY19-20	FY20-21	FY21-22
(Rs/Unit)	Actual	Revised Estimate	Projected
Average Cost of Supply of EDDD	5.12	5.02	4.79
Average Realization	4.42	5.02	4.90
Revenue Gap at Existing Tariff	(0.70)	(0.00)	0.11
Net Revenue (Gap)/Surplus (Includes gap of previous year)	(0.13)	(0.13)	(0.01)
Additional revenue through proposed tariff	0.00	0.00	0.00
Net Revenue (Gap)/Surplus	(0.11)	(0.14)	(0.01)

## 4.19 Tariff Proposal for FY 21-22

- As discussed above the EDDD does not propose any tariff hike for the FY 2021-22. The table below summarizes the existing and proposed tariff structure for various consumer categories for FY 2021-22.

Table 66: Proposed Tariff Structure for FY 21-22

Tariff Structure	Phase	Existing (FY 2020-21)		Proposed (FY 2021-22)	
		Energy Charges (Rs/Kwh)	Fixed Charges	Energy Charges (Rs/Kwh)	Fixed Charges
LT-D/Domestic					
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



Tariff Structure	Phase	Existing (FY 2020-21)		Proposed (FY 2021-22)	
		Energy Charges (Rs/Kwh)	Fixed Charges	Energy Charges (Rs/Kwh)	Fixed Charges
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
Low Income Group			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	
<b>LT-Public Water Works</b>					
For the category		4.10	Rs. 25/HP/month	4.10	Rs. 25/HP/month
<b>HT</b>					
<b>HTC General Industrial / Motive Power 11KV or 66KV having CMD above 100KVA</b>					
For all units		4.20/kVAh	Rs. 315/kVA/month	4.20/kVAh	Rs. 315/kVA/month
<b>HT Industrial ((Ferro Metallurgical/ Steel Melting/ Steel Rerolling Power Intensive)</b>					
For all units		4.15/kVAh	Rs. 505/kVA/month	4.15kVAh	Rs. 505/kVA/month
<b>Hoardings/Sign Boards</b>					
For all units			Rs.	6.70	Rs. 100/kVA/month



Tariff Structure	Existing (FY 2020-21)			Proposed (FY 2021-22)	
	Phase	Energy Charges (Rs/Kwh)	Fixed Charges	Energy Charges (Rs/Kwh)	Fixed Charges
			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 21-22 as well, which can take care of any variation in the ARR over and above the approved level by the Commission for FY 21-22.

#### 4.20 Initiatives

Energy Conservation Building code (ECBC) was launched by central Government in 2017 and ECBC rules were notified in February 2018. The BEE has established ECBC Cell at Daman to get ECBC notified in the UT. The functions of the ECBC cell is to assist the UT Government with various issues related to ECBC notification.

As per the direction of BEE, the SDA has to formulate Guidelines for financial incentives for the upcoming ECBC compliant Buildings.

##### Intent:

The intent for providing the financial incentives is to encourage the building owners to apply for ECBC Plus or super ECBC compliance.

##### Benefits:

1. Higher level of ECBC Compliance will mean higher energy conservation.
2. The life cycle cost of the building will also reduce as higher energy efficiency measures will be applied.
3. Due to the financial incentives, more people will be willing to apply for higher level of compliance rather the mandatory basic compliance.

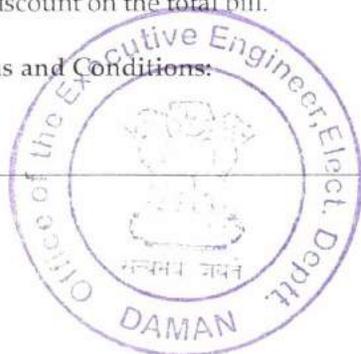
##### Scope:

1. The scope of financial incentives will be limited to ECBC Plus and Super ECBC Compliant Buildings.

##### Guidelines:

1. All ECBC plus or Super ECBC compliant Buildings will be given a 0.25% discount on the total bill.

##### Terms and Conditions:



2. The Building Owner will have to submit the ECBC Plus / Super ECBC Compliance Certificate given by BEE Certified Energy Auditor- Building to the SDA.
3. All the incentives will be provided only after verifying the energy consumption of the building for 1 year after the date of receiving completion certificate after the NOC provided by the SDA and Energy Auditor (Building).



## Chapter 5: Determination of Open access charges

### 4.1 Allocation Matrix

The allocation between wheeling and retail supply business for FY 2021-22 as per the ARR proposed for FY 2021-22 is provided in the table below:

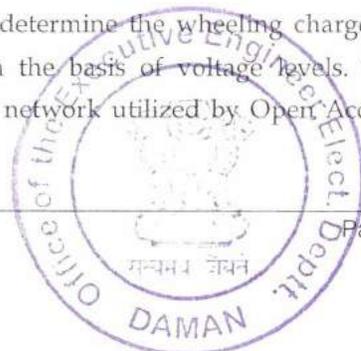
Table 67: Allocation of ARR between Wheeling and Retail Supply

Annual Revenue Requirement Rs. Crs	Allocation (%)		Allocation FY 2021-22	
	Wheeling	Supply	Wheeling	Supply
Fuel Cost	0%	100%	0.00	0.00
Power Purchase Cost	0%	100%	0.00	1,132.06
Employee	40%	60%	7.13	10.70
R&M	90%	10%	16.26	1.81
A&G	50%	50%	5.78	5.78
Depreciation	90%	10%	21.64	2.40
Interest Cost on Long-term Capital Loans	90%	10%	11.36	1.26
Interest on Working Capital Loans	10%	90%	1.26	11.36
Interest on Security Deposit	10%	90%	0.47	4.21
Return on Equity	90%	10%	14.85	1.65
Provision for Bad Debt	0%	100%	-	-
<b>Annual Revenue Requirement</b>			<b>78.75</b>	<b>1171.24</b>
Less: Non-Tariff Income	10%	90%	0.45	4.01
Income from other business	50%	50%	0.00	0.00
<b>Net Revenue Requirement</b>			<b>78.31</b>	<b>1167.23</b>

### 4.2 Voltage wise Wheeling Charges

The EDDD has considered the voltage wise losses for FY 2021-22 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	442.67	12.83%	507.84	66194	30%
HT & EHT	2,155.94	1.96%	2199.04	811	70%
Total	2598.61	4.00%	2706.89	67005	100%

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 2021-22

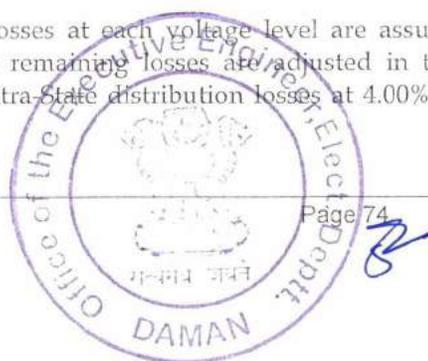
Category	O&M	Others	Total	Wheeling Charges (Rs./kWh)
LT	28.82	14.74	43.56	0.86
HT & EHT	0.35	34.39	34.75	0.16
Total	29.17	49.13	78.31	0.29

#### 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 2020-21. 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 4.00%, as proposed in the ARR for FY



2021-22. 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	442.67	12.83%	507.84
HT & EHT	2,155.94	1.96%	2199.04
<b>Total</b>	<b>2599</b>	<b>4.00%</b>	<b>2706.89</b>

Now the overall ARR proposed for FY 2021-22 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	507.84	30.00%	66194
HT & EHT	2,199.04	70.00%	811
<b>Total</b>	<b>2706.89</b>	<b>100.00%</b>	<b>67005</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	170.69	202.97	373.66	442.67	8.44
HT & EHT	398.28	473.60	871.87	2,155.94	4.04

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 2021-22

Category	VCoS (Rs./kWH)	ABR (Rs./kWH)	Cross Subsidy
LT	8.44	3.17	(5.27)
HT & EHT	4.04	5.26	1.21

#### 4.4 Additional Surcharge

The Additional Surcharge has been determined as considered by the Hon'ble Commission in its Tariff Order for the FY 2020-21.

Table 74: Additional Surcharge for the FY 2021-22

Particulars	FY 2021-22
Total Power Purchase cost (Rs. Cr)	1,132.06
Fixed Cost component in Power Purchase Cost (Rs. Cr)	451.79
Energy Sales (MU)	2,598.61
Additional Surcharge (Rs/kWh)	1.74

#### 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

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The Hon'ble Commission vide Tariff Order dated 18<sup>th</sup> May, 2020 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

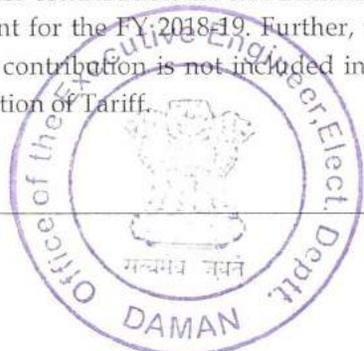
The EDDD would like to submit that the details of assets created from consumer contribution shall be submitted to the Hon'ble Commission shortly.

#### 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.

## 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 loos 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.

**B. New Directives****1. Directive 1: Timely submission of Reports and Compliance of directives**

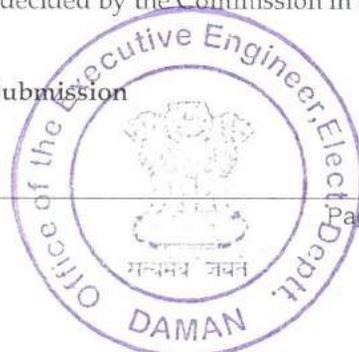
The Commission has noted that the Petitioner does not submit the quarterly reports and the reports related to compliance of directives in a regular and timely manner. The Commission directs the petitioner to submit the aforementioned report regularly.

**Petitioner's Submission**

The EDDD would like to submit that the Department has been regularly submitting all the reports to the Hon'ble Commission. As directed by the Hon'ble Commission the EDDD submitted the first quarterly report on 08.07.2020 which was again submitted on 27.08.2020 as per the revised format. Further, the second quarterly report was submitted on 12.20.2020.

**2. Directive 2: Renewable Purchase Obligation**

The Commission directs the petitioner to submit the quarterly RPO report including all the data related to the actual electricity generation/purchase from Solar & Non-Solar and data related to purchase of Solar & Non-Solar energy certificates within timeframe as decided by the Commission in earlier order and regulations.

**Petitioner's Submission**

The EDDD would like to submit that the Department has submitted all the quarterly RPO report to the Hon'ble Commission. The first quarterly report was submitted on 17.07.2020 and was again submitted on 27.08.2020 as per the revised format. The second quarterly report was submitted on 12.10.2020.

### 3. Directive 3: Status of Metering

The Commission directs the petitioner to submit the metering status including status of defective meters for each category of consumers separately within three months from the issuance of this Tariff Order. Further, the petitioner is also directed to submit the status of the consumers for which billing is being done on actual reading basis or on assessment basis within three months from the issuance of this Tariff Order.

#### Petitioner's Submission

The EDDD would like to submit that metering status report has already been submitted to the Hon'ble Commission as per the format provided to the Department.

### 4. Directive 4: Open Access Consumers

The Commission directs the petitioner to submit quarterly details of power stranded on account of consumers opting for open access along with the Additional Surcharge recovered from these consumers.

#### Petitioner's Submission

The EDDD would like to submit to the Hon'ble Commission that as pf now there is no open access consumer and therefore no power has been stranded.



## Tariff Schedule

### General Terms and Conditions:

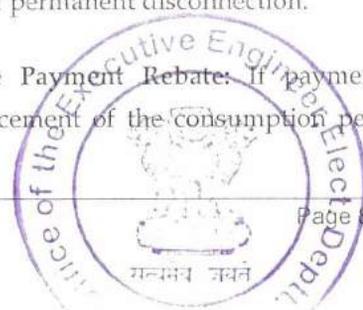
1. The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.
2. Unless otherwise agreed to, these tariffs for power supply are 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 Supply Code Regulations 2018 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 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 9 of this Order. Such charges shall be recovered/refunded in accordance with the terms and conditions specified in the FPPCA formula.

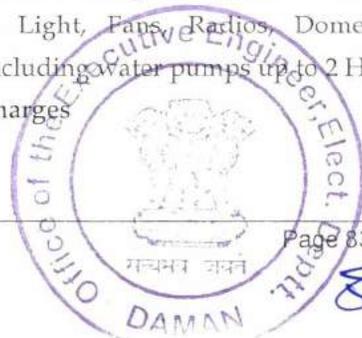
16. The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order.

#### 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 2 HP.

##### 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

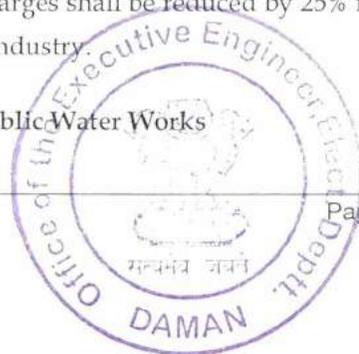
Usage(Units/month)	Energy Charge (Ps./kVAh)
For all units	360

#### 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 Rerolling/Power Intensive)

## 1. Fixed Charges(Demand Charges)

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

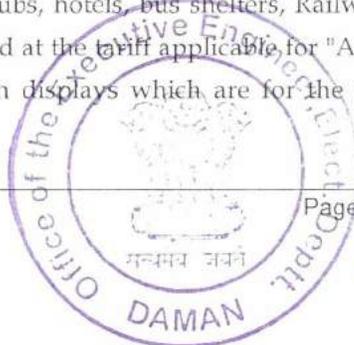
## VII. Public Lighting

### 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.

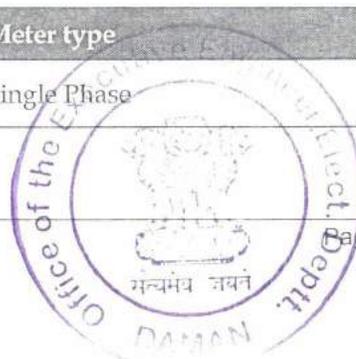
For multi activity pursuit, applicable Tariff for temporary connection shall be with reference to that of non-domestic category for permanent supply.

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.

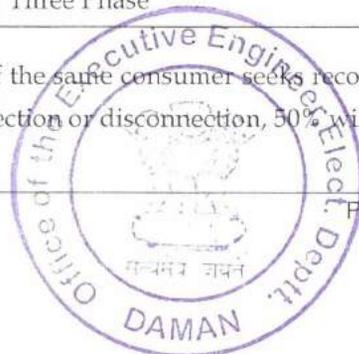
c. **Service Connection Charges**(as per provisions of Regulation 3.3 (3) of JERC (Electricity Supply Code) Regulations 2010

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



## e. Cost of HT connection

Entire Cost of setting up HT connection would be borne by the consumer and the agreement period would be two years for the category. 15% supervision charges shall be recovered by the EDDD.

## f. Testing Fee for various Metering Equipment

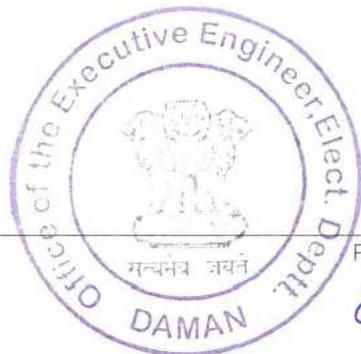
S.No.	Types of Metering Equipment	Fee per unit (in Rs.)
1	Single Phase	200
2	Three Phase	500
3	Three Phase Tri-vector Meter (0.5 Class) Industrial LT Consumer	1000
4	Three Phase Tri-vector Meter (0.5 Class) 11 KV HT Consumer	1000
5	Three Phase Tri-vector Meter (0.2 Class) 66KV EHT Consumers	1500
6	ABT 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
7	HT Industries upto 500 KVA	2000
8	HT Industries upto 2500 KVA	8000



S.No.	Types of Connection	Fee per test report (in Rs.)
9	HT Industries above 2500 KVA	15000



**Prayer**

1. EDDD requests the Hon'ble Commission to:
  - Admit the Aggregate Revenue Requirement for the FY 2021-22 as submitted herewith as well as the revised estimates for FY 2020-21.
  - Admit and approve the Trued up ARR for FY 2019-20.
  - 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:



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
ENERGY DEMAND  
FY 2019-20

Sr.No.	Category of Consumer	No. of Consumers at the end of FY 19-20 (Nos.)	Connected Load	Energy Sale/Demand (MUs)
1	2	3	5	6
1	Domestic	49,924	1,04,658.00	147.83
2	LIG/ Kutir Jyoti			0.00
3	Commercial	7,413	25,034.00	51.35
4	Agriculture	1,257	3,743.00	4.35
5	LT Industry	1,783	1,17,295.00	204.68
6	HT/EHT Industry	763	5,37,595.00	2,078.33
7	Public Lighting	637	1,488.00	6.32
8	Public Water Works	104	733.00	2.81
9	Temp. Supply	629	1,495.00	0.00
10	<b>Total</b>	<b>62,510</b>	<b>7,92,041.00</b>	<b>2,495.67</b>



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
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	52,122	1,65,843.60	152.91
2	LIG/ Kutir Jyoti			0.00
3	Commercial	8,009	27,831.60	42.07
4	Agriculture	1,458	4,430.48	3.27
5	LT Industry	1,757	1,16,492.47	181.58
6	HT/EHT Industry	810	5,96,500.40	1,714.33
7	Public Lighting	765	1,491.00	5.52
8	Public Water Works	143	892.11	2.46
9	Temp. Supply	414	1,986.00	0.00
10	Total	65,478	9,15,467.66	2,102.14



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
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	53,467	1,79,111.09	163.72
2	LIG/ Kutir Jyoti			0.00
3	Commercial	8,075	29,353.99	46.13
4	Agriculture	1,498	4,582.89	3.37
5	LT Industry	1,775	1,19,218.39	221.36
6	HT/EHT Industry	811	6,12,426.96	2,155.94
7	Public Lighting	815	1,520.82	5.64
8	Public Water Works	150	927.44	2.46
9	Temp. Supply	414	1,986.00	0.00
10	Total	67,005	9,49,127.58	2,598.61



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Information regarding AT&C Loss Of Licensee

S. No.	Particulars	Calculation	Unit	Previous Year FY 2019-20 (Actual)	Current Year FY 2020-21 (RE)	Ensuing Year FY 2021-22 (Projections)
1	Generation (own as well as any other connected generation net after deducting auxiliary consumption) within area of supply of DISCOM.	A	MU	21.69	58.04	60.00
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	2601	2134	2648
4	Total energy available for sale within the licensed area to the consumers of the DISCOM	D=A+BC	MU	2601	2191	2707
5	Energy billed to metered consumers within the licensed area of the DISCOM	E	MU	2496	2102	2599
6	Energy billed to unmetered consumers within the licensed area of the DISCOM	F	MU			
7	Total energy billed	G=E+F	MU	2496	2102	2599
8	Amount billed to consumer within the licensed area of DISCOM.	H	Rs.	1002.47	1016.92	1273.44
9	Amount realized by the DISCOM out of the amount Billed at H#	I	Rs.	952.34	1016.92	1273.44
10	Collection efficiency (%) (= Revenue realized/ Amount billed)	J=(I/H)x100	%	95.00%	100.00%	100.00%
11	Energy realized by the DISCOM	K=JxG	MU	2371	2102	2599
12	Distribution loss (%)	L=((DG)/D)x10	%	4.07%	4.05%	4.00%
13	AT&C Loss (%)*	M=((DK)/D)x1	%	8.86%	4.05%	4.00%



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
ENERGY BALANCE

(all figures in Mus)

Sr.No.	Category of Consumer	Previous Year FY 2019-20 (Actual)	Current Year FY 2020-21 (RE)	Ensuing Year FY 2021-22 (Projections)
1	2	3	4	5
<b>A)</b>	<b>ENERGY REQUIREMENT</b>			
1	Energy sales to metered category within the State/UT	2,495.67	2,102.14	2,598.61
2	Energy sales to Agriculture consumers			
3	Open Access Sales	0.00	0.00	0.00
4	Total sales within the State/UT	2,495.67	2,102.14	2,598.61
5	Sales to common pool consumers/ UI	20.78	0.93	0.87
6	Sales outside state/UT	20.78	0.93	0.87
7	Sales to electricity traders & through PX			
	Sales to other distribution licensees			
8	a) Bilateral Trade b) Banking Arrangement			
9	Total sales	2,537.22	2,103.99	2,600.35
10	T&D losses			
(i)	%	4.07%	4.05%	4.00%
(ii)	MU	105.82	88.73	108.28
<b>11</b>	<b>Total energy requirement</b>	<b>2,643.04</b>	<b>2,192.72</b>	<b>2,708.62</b>
<b>B)</b>	<b>ENERGY AVAILABILITY</b>			
1	Net own generation	21.69	58.04	60.00
2	Net Purchase	2,625.41	2,209.51	2,734.93
3	Injection through Open access	0.00	0.00	0.00
4	Net power purchase (1 +2 +3)	2,647.10	2,267.55	2,794.93
<b>12</b>	<b>Total energy availability</b>	<b>2,647.10</b>	<b>2,267.55</b>	<b>2,794.93</b>



Electricity Department of Damam & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
POWER PURCHASE COST  
FY 20-21 (RE)

(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)	Rebate	Credit for URS	Total (Rs. Cr)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
I	<b>NTPC Stations</b>													
1	KSTPP	2,100	48.23	16,372	89%	2.30%	356	152	22.34	54.31	-0.77			75.88
2	KSTPP-III	500	5.78	3,898	89%	1.16%	43	151	5.37	6.54	-0.08			11.84
3	VSTPP-I	1,260	12.89	9,161	83%	1.02%	80	176	6.35	14.08	-0.28			20.15
4	VSTPP-II	1,000	8.95	7,271	83%	0.90%	58	171	3.74	9.98	-0.12			13.60
5	VSTPP- III	1,000	10.95	7,271	83%	1.10%	73	172	7.12	12.59	-0.30			19.41
6	VSTPP- IV	1,000	12.26	7,271	83%	1.23%	81	167	12.67	13.49	-0.07			26.09
7	VSTPS-V	500	8.05	3,635	83%	1.61%	53	174	8.65	9.21	-0.06			17.78
8	KAWAS	856	31.04	1,762	31%	4.73%	69	200	18.54	13.72	1.12			33.38
9	JGPP	857	31.37	2,073	36%	4.77%	78	203	23.81	15.85	1.49			41.15
10	Sipat-I	1,980	24.58	15,263	88%	1.24%	175	160	20.96	27.96	-0.09			48.84
11	Sipat-II	1,000	9.65	7,709	88%	0.97%	70	165	7.74	11.54	-0.27			19.01
12	MSTPS-I	1,000	12.26	3,679	42%	1.23%	26	291	15.43	7.43	0.27			23.13
13	MOUDA-II	1,320	16.65	4,857	42%	1.26%	30	294	16.59	8.76	0.36			25.71
14	KHSTPP-II	1,000	1.30	6,745	77%	0.13%	7	267	1.18	1.87	0.03			3.08
15	KHSI/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	25.58	7,054	81%	1.94%	65	288	26.02	16.83	0.18			48.72
18	LARA	800	10.30	5,967	85%	1.29%	55	0	13.38	11.43	-0.03			24.78
19	GADARWARA	800	14.22	5,957	85%	1.78%	69	0	19.20	17.54	0.06			36.80
20	KHTPP	1,320	23.19	9,829	85%	1.76%	90	432	28.27	38.90	0.10			67.27
21	<b>Subtotal</b>	<b>19,214</b>	<b>307</b>	<b>1,25,764</b>	<b>13</b>	<b>0</b>	<b>1,478</b>	<b>199</b>	<b>261</b>	<b>294</b>	<b>2</b>	<b>14.98</b>	<b>0</b>	<b>541.64</b>
II	<b>NTPC Bhilai</b>													
1	Bhilai Unit-I & II(NTPC)	500	70.00	3,635	83%	14.00%	368	259	80.77	95.57	-2.34			173.99
2	<b>Subtotal</b>	<b>500</b>	<b>70.00</b>	<b>3,635</b>			<b>368</b>	<b>259</b>	<b>80.77</b>	<b>95.57</b>	<b>-2.34</b>			<b>173.99</b>
III	<b>NPCCIL</b>													
1	KAPPS	440	8.20	2,775	72%	1.86%	53	232	0.00	12.40	-5.98			6.84
2	TAPP 3&4	1,080	12.46	7,569	80%	1.15%	85	339	0.00	28.89	12.96			41.86
3	KAPPS (III & IV)	100	0.00	745	85%	0.00%	0	0	0.00	0.00	0.00			0.00
4	<b>Subtotal</b>	<b>1,620</b>	<b>21</b>	<b>11,088</b>			<b>139</b>	<b>298</b>	<b>0.00</b>	<b>41.29</b>	<b>7.41</b>			<b>48.70</b>
IV	<b>Others</b>													
1	Ratnagiri	582	38.00	4,334	85%	6.53%	85	0	15.09	27.64	0.17			42.90
2	<b>Subtotal</b>	<b>582</b>	<b>38</b>	<b>4,334</b>			<b>85</b>	<b>0</b>	<b>15</b>	<b>28</b>	<b>0.17</b>			<b>42.90</b>
V	<b>Power purchase from Other Sources</b>													
1	Power purchase from Indian E. Exchange	0	0.00	0			103	302	0.00	30.99	0.00			30.99
2	LI	0	0.00	0			37	284	0.00	10.54	0.00			10.54
3	Solar	0	0.00	0			58	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	7.02	0.00			7.02
6	Non Solar REC	0	0.00	0			0	0	0.00	16.82	0.00			16.82
7	Solar (SECI, NTPC)	170	0.00	283			0	0	0.00	0.00	0.00			0.00
8	<b>Subtotal</b>	<b>170</b>	<b>0</b>	<b>283</b>			<b>198</b>	<b>330</b>	<b>0</b>	<b>65</b>	<b>0</b>			<b>65</b>
VI	<b>Misc. Arrears</b>													<b>0.00</b>
VII	<b>NTPC Rebate</b>													<b>0.00</b>
	<b>Gross Power Purchase Cost</b>	<b>22,086</b>	<b>436</b>	<b>1,45,124</b>			<b>2,267.55</b>		<b>357.11</b>	<b>523.72</b>	<b>6.75</b>			<b>872.59</b>
	External Losses						0							
VIII	<b>Total Power Purchase</b>						<b>2,267.55</b>		<b>357.11</b>	<b>523.72</b>	<b>6.75</b>			<b>872.59</b>
1	PGCIL CHARGES													76.82
2	WRLDC													0.21
3	MSTCL													3.50
4	REC													0.00
5	GETCO													0.00
6	PGVCL													0.00
7	POSCO													0.00
8	<b>Grand Total of Charges</b>						<b>2,267.55</b>							<b>953.12</b>



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Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
POWER PURCHASE COST  
FY 21-22 (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	48.23	16,372	89%	2.30%	347	152	23.46	52.85	0.00	76.31
2	KSTPP-III	500	5.78	3,898	89%	1.16%	42	151	5.64	6.28	0.00	11.92
3	VSTPP-I	1,260	12.89	9,161	83%	1.02%	66	176	6.67	15.21	0.00	21.89
4	VSTPP-II	1,000	8.95	7,271	83%	0.90%	60	171	3.93	10.29	0.00	14.22
5	VSTPP- III	1,000	10.95	7,271	83%	1.10%	73	172	7.48	12.51	0.00	20.08
6	VSTPP- IV	1,000	12.26	7,271	83%	1.23%	82	167	13.30	13.69	0.00	26.99
7	VSTPS-V	500	8.05	3,635	83%	1.61%	54	174	9.08	9.41	0.00	18.49
8	KAWAS	656	31.04	1,782	31%	4.73%	82	200	19.46	16.45	0.00	35.91
9	JGPP	657	31.37	2,073	36%	4.77%	96	203	25.00	19.62	0.00	44.62
10	Sipat-I	1,980	24.58	15,263	88%	1.24%	175	160	22.01	27.90	0.00	49.91
11	Sipat-II	1,000	9.65	7,709	86%	0.97%	69	165	8.12	11.36	0.00	19.48
12	MSTPS-I	1,000	12.26	3,679	42%	1.23%	42	291	16.20	12.10	0.00	28.30
13	MOUDA-II	1,320	16.65	4,857	42%	1.26%	57	294	17.42	16.61	0.00	34.03
14	KHSTPP-II	1,000	1.30	6,745	77%	0.13%	8	257	1.24	2.08	0.00	3.32
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	25.58	7,054	61%	1.94%	126	288	31.41	36.36	0.00	67.77
18	LARA	800	10.30	5,957	85%	1.29%	70	0	14.04	14.62	0.00	28.67
19	GADARWARA	800	14.22	5,957	85%	1.78%	96	0	20.16	24.40	0.00	44.56
20	KHTPP	1,320	23.19	9,829	85%	1.76%	157	0	29.68	67.85	0.00	97.54
21	Subtotal	19,214	307	1,25,784			1,722	215	274	370	0	644
II	NTPC Bhitai											
1	Bhitai Unit-I & II(NTPC )	500	70.00	3,635	83%	14.00%	470	259	84.80	121.80	0.00	206.60
2	Subtotal	500	70.00	3,635			470	259	84.80	121.80	0.00	206.60
III	NPCIL											
1	KAPPS	440	8.20	2,775	72%	1.86%	47	232	0.00	10.80	0.00	10.80
2	TAPP 384	1,080	12.46	7,569	80%	1.15%	79	339	0.00	26.84	0.00	26.84
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	21	11,088			125	299	0.00	37.44	0.00	37.44
IV	Others											
1	Ratnagiri	582	38.00	4,334	85%	6.53%	65	0	15.85	21.21	0.00	37.06
2	Subtotal	582	38	4,334			65	0	16	21	0.00	37.06
V	Power purchase from Other Sources											
1	Power purchase from Indian E. Exchange	0	0.00	0			353	250	0.00	88.25	0.00	88.25
2	UI	0	0.00	0			0	#DIV/0!	0.00	0.00	0.00	0.00
3	Solar	0	0.00	0			60	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	0.05	14.79	0.00	14.79
6	Non Solar REC	0	0.00	0			0	0	0.00	23.39	0.00	23.39
7	Solar (SECI, NTPC)	170	0.00	283			0	0	0.00	0.00	0.00	0.00
8	Subtotal	170	0	283			413	306	0	126	0	126
VI	Misc. Arrears											0.00
VII	NTPC Rebate											0.00
	Gross Power Purchase Cost	22,086	436	1,45,124			2,794.93		374.96	676.57	0.00	1,051.53
	External Losses						0					
VIII	Total Power Purchase						2,794.93		374.96	676.57	0.00	1,051.53
1	PGCIL CHARGES											76.62
2	WRLDG											0.21
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						2,794.93					1,132.06



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Investment Plan (year-wise)

Project Details						capital expenditu re approved by JERC (Rs. Cr.)	SOURCE OF FINANCING FOR SCHEME				
Name of sche me	Year of Start	Project (Select appropriate code from below)	Approved by the Commissi on* (YES/NO)	Start Date (DD- MM- YY)	Project Completi on date (DD- MMYY)		Equity component		Subsidi es / grants compon ent	r Contribut i on compon e	Actual Expen diture
							Internal Accrual (from free reserves and surplus)	Equity infused**			
1	2	3	4	5	6	7	8	9	10	11	12
			NA								

## 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



*[Handwritten signature]*

Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Capital Base and Return

(all figures in Crs)

Sr.No.	Category of Consumer	Previous Year FY 2019-20 (Actual)	Current Year FY 2020-21 (RE)	Ensuing Year FY 2021-22 (Projections)
1	2	4	5	6
1	Gross block at beginning of the year	607.45	627.69	665.69
2	Less accumulated depreciation	270.25	292.72	316.76
3	Net block at beginning of the year	337.20	334.97	348.92
4	Less accumulated consumer contribution	0.00	0.00	0.00
5	Net fixed assets at beginning of the year	337.20	334.97	348.92
6	Reasonable return @3% of NFA	10.12	10.05	10.47



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Original Cost of Fixed Assets

(Rs. Crores)

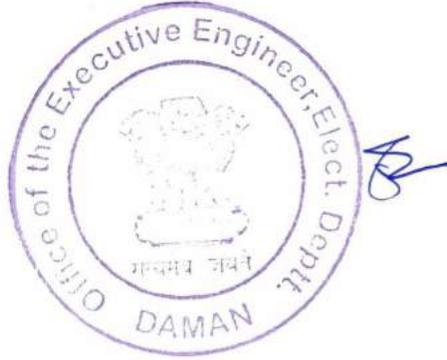
Sr.No.	Particulars Name of the Assets	Value of assets at the beginning of the year	Addition during the FY2019-20	Closing balance at the end of FY2019-20	Addition during FY2020-21	Closing balance at the end of FY2020-21	Addition during FY2021-22	Closing balance at the end of FY2021-22
1	2	3	4	5	6	7	8	9
1	Plant & Machinery	542.80	18.31	561.11	38.00	599.11	49.60	648.71
2	Buildings	23.70	0.00	23.70	0.00	23.70	0.00	23.70
3	Vehicles	0.67	0.00	0.67	0.00	0.67	0.00	0.67
4	Furniture & Fixtures	2.82	0.05	2.87	0.00	2.87	0.00	2.87
5	Computers & Others	12.67	1.88	14.56	0.00	14.56	0.00	14.56
6	Land	24.79	0.00	24.79	0.00	24.79	0.00	24.79
7	Total	607.45	20.24	627.69	38.00	665.69	49.60	715.29



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Interest Capitalized

(Rs. in crores)

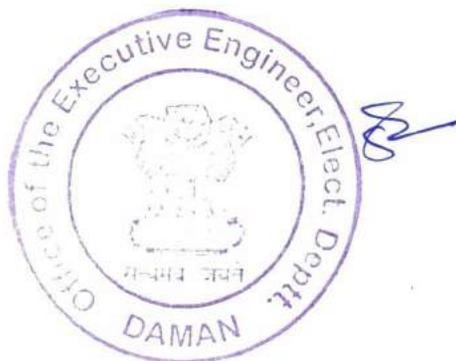
Sr.No.	Particulars	Previous Year FY 2019-20 (Actual)	Current Year FY 2020-21 (RE)	Ensuing Year FY 2021-22 (Projections)
1	2	3	4	5
1	WIP*			
2	GFA* at the end of the year			
3	WIP+GFA at the end of the year		NA	
4	Interest(excluding interest on WCL*)			
5	Interest Capitalized			



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
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			
	Add Govt. loan							
	-State Govt.							
	-Central Govt.							
14	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							



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
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							



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Value of Assets and Depreciation Charges

(Rs. Crores)

Sr.No.	Particulars Name of the Assets	Rate of depreciation*	Previous Year		Current Year		Ensuing Year	
			Assets value at the beginning of FY 2019-20	Depreciation charges	Assets value at the beginning of FY 2020-21	Depreciation charges	Assets value at the beginning of FY 2021-22	Depreciation charges
1	Plant & Machinery	3.60%	542.80	28.66	561.11	20.88	599.11	22.46
2	Buildings	1.80%	23.70	0.79	23.70	0.43	23.70	0.43
3	Vehicles	9.50%	0.67	0.01	0.67	0.06	0.67	0.06
4	Furniture & Fixtures	6.00%	2.82	0.18	2.87	0.17	2.87	0.17
5	Computers & Others	6.33%	12.67	1.90	14.56	0.92	14.56	0.92
6	Land	0.00%	24.79	0.00	24.79	0.00	24.79	0.00
7	<b>Total</b>		<b>607.45</b>	<b>31.54</b>	<b>627.69</b>	<b>22.47</b>	<b>665.69</b>	<b>24.04</b>



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Repair and Maintenance Expenses

(Rs. in crores)

Sr.No:	Particulars	Previous Year FY 2019-20 (Actual)	Current Year FY 2020-21 (RE)	Ensuing Year FY 2021-22 (Projections)
1	2	4	5	6
1	Plant & machinery			
	-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			
	Add/Deduct share of others (To be specified)			
10	Total expenses			
11	Less capitalized			
12	Net expenses			
13	Add prior period *			
14	Total expenses charged to revenue as R&M expenses			
15		14.34	17.04	18.07

Breakup not available



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Total Number of Employees

Sr.No.	Particulars	Previous Year FY 2019-20 (Actual)	Current Year FY 2020-21 (RE)	Ensuing Year FY 2021-22 (Projections)
1	2	3	4	5
1	Number of employees as on 1st April	267	269	270
2	Employees on deputation/ foreign service as on 1st April	0	0	0
3	Total number of employees (1+2)	267	269	270
4	Number of employees retired/retiring during the year	2	1	1
5	Number of employees added	4	2	3
6	Number of employees at the end of the year (4-5)	269	270	272



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Employee Cost

(Rs. in crores)

Sr.No.	Particulars	Previous Year FY 2019-20 (Actual)	Current Year FY 2020-21 (RE)	Ensuing Year FY 2021-22 (Projections)
1	2	3	4	5
	<b>Salaries &amp; Allowances</b>			
1	Basic Pay	7.88	8.30	8.75
2	Dearness Pay	2.02	2.13	2.24
3	Dearness Allowance	4.11	4.33	4.56
4	House Rent Allowance	0.86	0.90	0.95
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	0.86	0.90	0.95
c.	L.T.C.	0.00	0.00	0.00
d.	Children Education All.	0.14	0.14	0.15
e.	Family Planning Allow.	0.03	0.04	0.04
9	Generation incentive	0.00	0.00	0.00
10	Bonus	0.17	0.18	0.19
11	<b>Total</b>	<b>16.07</b>	<b>16.93</b>	<b>17.83</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>16.07</b>	<b>16.93</b>	<b>17.83</b>
24	Amount capitalized	-	-	-
25	Net amount	-	-	-
26	Add prior period expenses	-	-	-
27	<b>Grand total</b>	<b>16.07</b>	<b>16.93</b>	<b>17.83</b>



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Administration and General Expenses

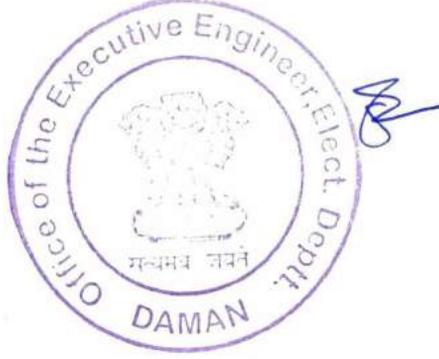
(Rs. in crores)

Sr.No.	Particulars	Previous Year FY 2019-20 (Actual)	Current Year FY 2020-21 (RE)	Ensuing Year FY 2021-22 (Projections)
1	2	3	4	5
1	Advertisement expenses	0.06	0.06	0.07
2	Amc expense	2.02	2.13	2.24
3	Building Maintanance	0.10	0.11	0.12
4	Celebration expenses	1.68	1.77	1.86
5	Data download charges & Internet Expenses	0.57	0.60	0.63
6	Diesel expenses	0.11	0.11	0.12
7	Digital document & data entry charge	0.27	0.28	0.30
8	Electric Expense/Repair	0.00	0.00	0.00
9	Electricity expenses	0.16	0.17	0.18
10	E-tendring expenses	0.02	0.03	0.03
11	Garden expense	0.80	0.84	0.89
12	Gift/Welfare of Students	0.00	0.00	0.00
13	JERC fees	1.66	1.75	1.85
14	Meter reading expense	0.68	0.72	0.75
15	News paper & magazine expense	0.01	0.01	0.01
16	Office cleaning expense	0.34	0.36	0.38
17	Office expense daman & diu	0.46	0.48	0.51
18	Postage stamp	0.00	0.00	0.00
19	Printing & stationery expenses	0.25	0.27	0.28
20	Professional charges	0.60	0.63	0.67
21	Security service charges	0.51	0.53	0.56
22	Telephone expenses	0.07	0.07	0.07
23	Vehicles maintenance & repairs	0.02	0.02	0.03
24	Water charge expenses	0.02	0.02	0.02
25	<b>Total</b>	<b>10.41</b>	<b>10.97</b>	<b>11.56</b>
26	Add/Deduct share of others (to be specified)			
27	<b>Total expenses</b>	<b>10.41</b>	<b>10.97</b>	<b>11.56</b>
28	Less capitalized	0.00	0.00	0.00
29	<b>Net expenses</b>	<b>10.41</b>	<b>10.97</b>	<b>11.56</b>
30	Add prior period	0.00	0.00	0.00
31	<b>Total expenses charges to revenue</b>	<b>10.41</b>	<b>10.97</b>	<b>11.56</b>



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Information regarding Bad and Doubtful Debts

Sr.No.	Particulars	Previous Year FY 2019-20 (Actual)	Current Year FY 2020-21 (RE)	Ensuing Year FY 2021-22 (Projections)
1	2	4	5	6
1	Amount of receivable	1,002.47	1,016.92	1,273.44
1	Provision made for debts in ARR	0.00	0.00	0.00



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Information regarding Working Capital for the current and ensuing year

Sr.No.	Particulars	Amount (in Crores Rs.)		
		Previous Year FY 2019-20 (Actual)	Current Year FY 2020-21 (RE)	Ensuing Year FY 2021-22 (Projections)
1	2	3	4	5
1	O&M expense for one month	3.40	3.74	3.95
2	Maintenance spares at 40% of R&M for one month	0.48	0.57	0.60
3	Receivables for 2 months	185.47	175.98	212.24
4	Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt	87.32	87.32	87.32
5	<b>Total Working Capital requirement</b>	<b>102.03</b>	<b>92.98</b>	<b>129.48</b>



Electricity Department of Daman & Diu  
**ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22**  
 Information regarding Foreign Exchange Rate Variation (FERV)

(Rs. in crores)

Sr.No.	Particulars	Previous Year FY 2019-20 (Actual)	Current Year FY 2020-21 (RE)	Ensuing Year FY 2021-22 (Projections)
1	2	3	4	5
1	Amount of liability provided			
2	Amount recovered		NA	
3	Amount adjusted			



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Format -20

Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Non Tariff Income

(Rs. in crores)

Sr.No.	Particulars	Previous Year FY 2019-20 (Actual)	Current Year FY 2020-21 (RE)	Ensuing Year FY 2021-22 (Projections)
1	2	3	4	5
1	Meter/service rent	1.33	1.40	1.47
2	Late payment surcharge	0.00	0.00	0.00
3	Theft/pilferage of energy	0.00	0.00	0.00
4	Wheeling charges under	0.00	0.00	0.00
5	open access	0.00	0.00	0.00
6	Interest on staff loans &	0.00	0.00	0.00
7	advance	0.00	0.00	0.00
8	Income from trading	0.00	0.00	0.00
9	Income staff welfare activities	0.00	0.00	0.00
10	Investment & bank	0.00	0.00	0.00
11	balances	0.00	0.00	0.00
12	Misc. Receipts/income	2.71	2.85	2.99
13	<b>Total income</b>	<b>4.04</b>	<b>4.24</b>	<b>4.46</b>
14	Add prior period income*	0.00	0.00	0.00
15	<b>Total non tariff income</b>	<b>4.04</b>	<b>4.24</b>	<b>4.46</b>



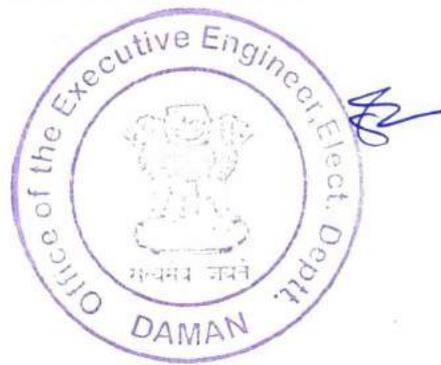
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Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Information regarding Revenue from Other Business

(Rs. in crores)

Sr.No.	Particulars	Previous Year FY 2019-20 (Actual)	Current Year FY 2020-21 (RE)	Ensuing Year FY 2021-22 (Projections)
1	2	3	4	5
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 FY 2021-22  
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						



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Electricity Department of Daman & Diu  
**ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22**  
 Information regarding Wholesale Price Index (All Commodities)

Sr.No.	Period	WPI/CPI	Increase over previous year
1	2	3	4
1	FY 2017-18	114.88	2.92%
2	FY 2018-19	119.76	4.25%
3	FY 2019-20	121.80	1.70%
4	FY 2020-21	120.81	2.97%



**Electricity Department of Daman & Diu**  
**ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22**  
**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	NA	NA
2	As on March 31 of Current Year			
3	As on March 31 of Ensuing Year			



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Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22

Format 25

(Rs. in crores)

Sr.No.	Particular	FY 2019-20 Approved by the Commission (Tariff Order dated 18th May, 2020)	FY 2019-20 Actuals
1	Cost of power purchase	1,202.62	1,154.43
2	Employee costs	17.19	16.07
3	R&M expenses	19.36	14.34
4	Administration and General expenses	8.24	10.41
5	Depreciation	21.13	31.54
6	Interest charges (including interest on working capital)	26.85	24.46
7	Return on NFA / Equity	13.32	13.10
8	Provision for Bad Debt	0.00	0.00
9	Interest on security deposit	4.24	4.68
10	Incentive/Disincentive on achievement of norms	0.00	26.42
11	<b>Total revenue requirement</b>	<b>1,312.95</b>	<b>1,295.45</b>
12	Less: non tariff income	10.45	4.04
13	<b>Net revenue requirement (10-11)</b>	<b>1,302.50</b>	<b>1,291.41</b>
14	Revenue from tariff	1,165.98	1,112.80
15	Revenue from UI	0.00	2.21
16	<b>(Gap)/surplus (12-13)</b>	<b>-136.52</b>	<b>-176.39</b>
17	(Gap)/surplus for previous year	144.07	144.07
18	Carrying cost	7.24	5.34
19	<b>Total (gap)/surplus (14+15)</b>	<b>14.79</b>	<b>-26.99</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)	2,538.27	2,495.67



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22

Format 25

(Rs. in crores)

Sr.No.	Particular	FY 2020-21 Approved by the Commission (Tariff Order dated 18th May, 2020)	FY 2020-21 RE
1	Cost of power purchase	1,237.19	953.12
2	Employee costs	18.43	16.93
3	R&M expenses	19.93	17.04
4	Administration and General expenses	7.44	10.97
5	Depreciation	21.92	22.47
6	Interest charges (including interest on working capital	29.14	21.04
7	Return on NFA / Equity	14.69	14.46
8	Provision for Bad Debt	0.00	0.00
9	Interest on security deposit	4.24	4.68
10	RPO provisioning to cover backlog of the previous years upto current year	0.00	0.00
11	<b>Total revenue requirement</b>	<b>1,352.98</b>	<b>1,060.70</b>
12	Less: non tariff income	20.76	4.24
13	<b>Net revenue requirement (10-11)</b>	<b>1,332.22</b>	<b>1,056.46</b>
14	Revenue from tariff	1,108.54	1,055.91
15	Revenue from UI	0.00	0.00
16	<b>(Gap)/surplus (12-13)</b>	<b>-223.68</b>	<b>-0.55</b>
17	Gap for previous year	14.79	-26.99
18	Carrying cost	-9.27	-2.39
19	<b>Total gap (14+15)</b>	<b>-218.16</b>	<b>-29.92</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)	2,758.23	2,102.14



**Electricity Department of Daman & Diu**  
**ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22**

(Rs. in crores)

Sr.No.	Particular	FY 2020-21 Approved by the Commission (Tariff Order dated 20th May, 2019)	FY 2020-21 Projected
1	Cost of power purchase	1,352.79	1,132.06
2	Employee costs	19.36	17.83
3	R&M expenses	22.03	18.07
4	Administration and General expenses	7.76	11.56
5	Depreciation	23.86	24.04
6	Interest charges (including interest on working capital)	32.93	25.24
7	Return on NFA / Equity	17.34	16.50
8	Provision for Bad Debt	0.00	0.00
9	Interest on security deposit	4.24	4.68
10	RPO provisioning to cover backlog of the previous years upto current year	0.00	0
<b>11</b>	<b>Total revenue requirement</b>	<b>1,480.31</b>	<b>1,249.99</b>
12	Less: non tariff income	21.79	4.46
<b>13</b>	<b>Net revenue requirement (10-11)</b>	<b>1,458.52</b>	<b>1,245.53</b>
14	Revenue from tariff	0.00	1,273.44
15	Revenue from UI	0.00	0.00
<b>16</b>	<b>(Gap)/surplus (12-13)</b>	<b>0.00</b>	<b>27.90</b>
17	(Gap)/surplus for previous year	0.00	-29.92
18	Carrying cost	0.00	-1.40
<b>19</b>	<b>Total gap (14+15)</b>	<b>0.00</b>	<b>-3.42</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)	2,895.94	2,598.61



Electricity Department of Daman & Diu  
ANNUAL REVENUE REQUIREMENT FOR THE FY 2021-22  
Revenue from Existing Tariff (April to May 2020)

FY 2020-21

S.No.	Category of Consumers	No. of Consumers	Energy Sales (MU) (April to May, 2020)	Tariff Rates (P/unit) (April to May, 2020)	Energy Charges (Rs. in Crore) (April to May, 2020)	Contracted Max Demand KVA	Demand Charges (Rs/KVA)	Demand Charges (Rs. in Crore)	Total Revenue (Rs. in Crore)
1	Domestic								
	Up to 100 units		11.39	1.20	1.37		20		
	101-200 units		7.60	1.70	1.29		20		
	201-400 units		4.07	2.10	0.85		20		
	401 units and above		4.07	2.45	1.00		20		
	<b>Total Domestic</b>	<b>52,122</b>	<b>27.13</b>		<b>4.51</b>	<b>165844</b>	<b>20</b>	<b>0.21</b>	<b>4.72</b>
2	LIGHT								
	All units						10	0.00	0.00
2	NRS/Commercial								
	0-100 units		0.61	2.5	0.15		25		
	above 100 units		5.51	3.4	1.87		50		
	<b>Total Commercial</b>	<b>8,009</b>	<b>6.12</b>		<b>2.03</b>	<b>27832</b>	<b>50</b>	<b>0.08</b>	<b>2.11</b>
3	Public Lighting	765	0.98	4.00	0.39	1491	0	0.00	0.39
4	Public Water Work	143	0.39			892	25	0.00	0.00
	Above 20 HP Connected Load		0.39	3.60	0.14	892	25	0.00	
5	Industrial								
	a) HT								
	i) HT (A) General	782	131.90		47.48	584690	240	23.86	71.34
	For all units		131.90	3.60	47.48		240		
	ii) HT (B) Furnace	28	5.23		1.86	11810	425	0.85	2.71
	For all units		5.23	3.55	1.86		425		
	<b>Total HT Industrial</b>	<b>810</b>	<b>137.12</b>		<b>49.34</b>	<b>596500</b>		<b>24.71</b>	<b>74.05</b>
	b) LT	1,757	15.97		4.95	116492		0.50	5.45
	For all units		15.97	3.10	4.95	116492	25	0.50	
	<b>Total HT+LT Industrial</b>	<b>2567</b>	<b>153.10</b>		<b>54</b>	<b>712993</b>		<b>25.20</b>	<b>79.49</b>
6	Agriculture Consumption	1,458	0.63		0.05	4430	0		0.05
	Upto 10 HP		0.43	0.65	0.03				
	Beyond 10 HP		0.19	0.90	0.02				
7	Temporary	414.00				1986			
	All units					1986			0.00
7	<b>Total Revenue Billed</b>	<b>65478</b>	<b>188</b>		<b>61.27</b>	<b>915467.66</b>		<b>25.50</b>	<b>86.76</b>
8	FPPCA								
9	OA Charges								
10	Other Charges								
11	REC charges								
12	UJ								
13	<b>Grand Total</b>	<b>65478</b>			<b>61.27</b>	<b>913481.66</b>		<b>25.50</b>	<b>86.76</b>

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



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