True up for FY 2016-17,

Review of FY 2017-18,

AND

ARR and Tariff Revision Proposal for FY 2018-19

Main Text & Formats (Volume I)

Submitted to

Joint Electricity Regulatory Commission Gurgaon

By:

Electricity Department of Daman & Diu (Daman)

December 2017



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

Filing No.	٠				٠	
Casa No						

IN THE MATTER OF:

Filing of Aggregate Revenue Requirement (ARR) for the

FY 2018-19 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 16-17, Review for the FY 2017-18 and the Aggregate Revenue Requirement (ARR) for and Tariff Revision Proposal of EDDD for the FY 18-19 (Financial Year 2018-19).



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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. The EDDD mainly relies 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 present transmission and distribution system of EDDD consists of 26 circuit kms of 220 kV Double Circuit (D/C) lines, 85.30 kms of 66kV lines, 420 circuit kms of 11kV O/H as well as U/G lines, 773.71 circuit kms of LT OH & U/G lines along with 875 transformers. Presently, there are 107 no. 11 kV feeders and 5 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.

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- 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 378 MW 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 from two sources. First source is 220 KV (D/C) Ambethi-Magarwada line and second source is from 220 KV (D/C) Magarwada (PGCIL) Magarawada, Daman and 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. 90% of the total sales in FY 16-17. The demand from the industrial consumers is primarily due to tax holiday benefit extended by the Govt of India in UT of Daman & Diu which has attracted a large number of industries to set up base in this area.

Considering the increase in demand from the large industries, the demand is likely to reach to 330-340 MW by FY 2018-19. In view of the huge 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, 2014

EDDD's tariff determination is now governed by "The Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Multi Year Distribution Tariff) Regulations, 2014" (referred to as "MYT Regulations, 2014"). The MYT Regulations, 2014 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, 2014 segregate the items impacting tariffs into controllable and uncontrollable factors. Items that are uncontrollable are passed through to the consumers. Further, the MYT Regulations, 2014 identifies the uncontrollable and controllable parameters as follows:

1.2.1 Uncontrollable Parameters include

- 1 Force Majeure events, such as acts of war, fire, natural calamities, etc.
- 2 Change in law;
- 3 Taxes and Duties;
- 4 Variation in sales; and
- 5 Variation in the cost of power generation and/or power purchase due to the circumstances, as specified in the MYT Regulations, 2014

1.2.2 Controllable Parameters include

- 1 Variations in CAPEX due to time and/or cost overruns/efficiencies;
- 2 Variations in transmission and distribution losses;
- 3 Variations in depreciation and working capital requirements;
- 4 Failure to meet the standards specified in the Joint Electricity Regulatory Commission (Standards of Performance) Regulations, 2009 except where exempted;
- 5 Variation in operation & maintenance expenses, except those attributable to directions of the Commission;
- 6 Variation in Wires Availability and Supply Availability; and
- 7 Variation on account of inflation.

1.3 Contents of this Petition

This Petition covers the truing up for FY 16-17, revised estimates for FY 17-18 and the basis, assumptions and projections of individual elements constituting the determination of ARR for the FY 18-19. 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 1st November 2010 and subsequently the second, third, fourth, fifth, sixth, seventh and eighth 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 and FY 2017-18 for EDDD were issued on

3rd October, 2011, 25th August, 2012, 22nd March, 2013, 1st May, 201, 31st March, 2015, 6th April, 2016 and 29th May, 2017 respectively. The Commission in its Tariff Order for the FY 2017-18 has approved the ARR for the FY 2017-18 based on the actual cost for FY 15-16 and estimated expenses for FY 16-17.



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Chapter 2: True Up for FY 2016-17

2.1 Principles for True Up for FY 2016-17

As per JERC MYT Regulations, 2014, the Hon'ble Commission shall undertake the True Up of licensee for FY 2016-17 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 2016-17. Information provided in the True Up for FY 2016-17 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 6th April, 2016 and 29th May, 2017 for the FY 16-17.

Accordingly, revised Aggregate Revenue Requirement, revenue and gap for FY 16-17 are given in the following paragraphs of this chapter.

2.2 Energy Sales for FY 2016-17

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The actual energy sale for FY 2016-17 has been shown below along with approved sales by Hon'ble Commission vide Tariff Order dated 6th April, 2016 and 29th May, 2017. The actual energy sales for FY 2016-17 are as under:

Table 1: Consumer category wise energy sales for FY 2016-17

(MU) FY 16-17 FY 16-17 FY 16-17 **Particulars** Approved Approved (29th May, (6th April, Actual 2017) 2016) 91.99 97.89 99.49 Domestic 0.10 0.10 0.10 LIG/ Kutir Jyoti 55.37 47.69 54.34 Commercial 2.81 2.53 2.63 Agriculture 166.19 167.69 179.85 LT Industry 1,407.81 1469.52 1438.40 HT/EHT Industry Public Lightingtive Engine 7.89 11.11 7.62 Public Water Works 3.83 2.81 3.22 2.17 0.00 0.00 Temp. Supply 1,800.46 1,765.58 1,757.11 Total Sales



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 29th May, 2017. The reasons attributable for the same are:

- The actual sales of the HT category for the FY 2016-17 was 1407.81 MUs as compared to 1438.40 MUs approved by the Hon'ble Commission in its Tariff Order dated 29th May, 2017.
- The actual sold to the Commercial category was 55.37 MUs as compared to 54.34 MUs approved by the Hon'ble Commission in its Tariff Order dated 29th May, 2017.
- The actual sold to the Domestic category was 97.89 MUs as compared to 91.99 MUs approved by the Hon'ble Commission in its Tariff Order dated 29th May, 2017.
- The actual sold to the Public Lighting category was 7.89 MUs as compared to 7.62 MUs approved by the Hon'ble Commission in its Tariff Order dated 29th May, 2017.
- Overall the actual sales has decreased by around 8.00 MUs in comparison to the sales approved by the Hon'ble Commission vide its Tariff Order dated 29th May, 2017.

The EDDD requests the Hon'ble Commission to approve the actual sales for FY 16-17.

2.3 Distribution Loss for FY 2016-17

EDDD is making all efforts to reduce the distribution losses in the UT of Daman & Diu. In FY 2016-17, the actual distribution losses were 8.48% as against the approved level of 8.50%.

In the Tariff Order dated 6th April, 2016 and 29th May, 2017 the Hon'ble Commission had approved the distribution losses at 8.50% for the FY 2016-17. However, now EDDD has computed the distribution loss based on the actual sales data for FY 16-17. Based on that the distribution loss for FY 16-17 has been worked out at 8.48%. The table below highlights the comparison of actual distribution losses of the EDDD against that approved by the Hon'ble Commission vide its Tariff Order dated 6th April, 2016 and 29th May, 2017.



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Table 2: Distribution Loss

			(%)
Particulars	FY 16-17	FY 16-17	FY 16-17
	Approved (6th April, 2016)	Approved (29th May, 2017)	Actual
Distribution Loss	8.50%	8.50%	8.48%

The EDDD requests the Hon'ble Commission to approve the actual T&D losses for FY 16-17.

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 16-17 has been furnished below. The energy requirement had been met through various sources as described in the subsequent sections.

Table 3: Energy Balance for FY 2016-17

FY 16-17 FY 16-17 FY 16-17 **Particulars** Approved Approved (6th April, (29th May, Actual 2017) 2016) 1,765.59 1,757.11 1,800.46 Retail Sales (a) 411.09 459.77 456.63 Open Access Sales (b) 0.00 0.35 0.35 Less: Energy Savings (c) 2,225.01 2,213.74 2,211.20 Total Sales (d=a+b-c) 206.69 205.22 205.42 Distribution Loss (MU) (e=g-d) 8.48% 8.50% 8.50% Distribution Loss (%) (f=e/g) 2,418.96 2,431.70 2416.62 Energy Required at Periphery (g) 1.05 26.61 Sale to common pool consumer/UI Sale(h) 103.24 0.00 0.00 14.48 Own generation (i) Total energy requirement at state 2519.86 2432.75 2431.09 periphery(j=g+h-i) Less: Energy Purchased through UI at 100.14 49.78 0.00 Periphery (k) 467.43 464.20 Less: Open Access Purchase at Periphery (l) 431.37 Energy requirement at state periphery from 2,088.49 1,915.54 1866.75 tied up sources (m=j-k-l) 67.87 79.34 73.38 Inter state loss (MU) (n=o-m) 3.69% 3.51% 3.66% Inter state loss (%) Engi Energy requirement at state periphery from 1,934.62 2,167.83 1988.92 generator end (o) Total Energy requirement from tied up 2,038.70 2,034.76 2,167.83 sources & UI at generator end (p=o+k)

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Particulars	FY 16-17	FY 16-17	FY 16-17
	Approved (6th April, 2016)	Approved (29th May, 2017)	Actual
Total Energy requirement in ut including Open Access (q=p+l)	2,599.20	2,506.13	2,498.96

The net energy requirement for sale during FY 2016-17 was 2498.96 MUs.

2.5 Power Purchase Cost

EDDD sources power from Central Generating Stations like Korba, Vindyachal, 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 16-17 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 2016-17

Particulars	MUs	S	Cos (Rs. Cı	
Tardeurars	FY 16-17	FY 16-17	FY 16-17	FY 16-17
	Approved	Actual	Approved	Actual
Power Purchase	2,038.70	2,034.76	726.49	715.30

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. 726.49 Crore in the Tariff Order dated 29th May, 2017. Now, the EDDD has claimed a power purchase cost of Rs. 715.30 Crore based on the Annual accounts for FY 16-17 and there is a decrease in the power purchase cost as compared to the power purchase cost approved by the Hon'ble Commission.

The EDDD also requests the JERC to allow the UI purchase during FY 16-17 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 16-17.



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The EDDD purchased 100.14 MU during FY16-17 through UI at the cost of Rs. 17.61 Crore to meet the energy shortfall during the year. Further, the EDDD procured 14.48 MUs of solar energy from its rooftop and ground mounted solar plants during the FY 2016-17 to meet its solar obligation. As there were no solar certificates available in the energy exchange therefore solar certificates could not be purchased to fulfill the target of solar energy.

The EDDD procured 24.81 MUS of non-solar energy from the Arunachal Pradesh Power Corporation Pvt. Ltd. and Himachal Pradesh State Electricity Board Ltd. to meet the non-solar obligation. The EDDD also procured 13334 non-solar certificates to meet the non-solar obligation.

The EDDD, therefore, requests the Hon'ble Commission to approve the actual power purchase cost for FY 16-17 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.

ecutive Engin The Hon ble Commission had approved the O&M cost at Rs. 28.16 Crore and Rs. 29.63 Crore vide Tariff Orders dated 6th April, 2016 and 29th May, 2017 respectively. During FY 16-17, EDDD incurred actual O&M expense of Rs. 40.16 Crore which was inclusive of employee cost of Rs. 15.19 Crore, Repair & Maintenance Charges of Rs. 17.50 Crore and Administration & General Expenses of Rs. 6.75 Crore as shown in the table below:

Table 5: Operation & Maintenance Expenses for FY 2016-17

(Rs. Crore.)

Particulars	FY 16-17	FY 16-17	FY 16-17
	Approved (6th April, 2016)	Approved (29th May, 2017)	Actual
Employee Cost	11.19	11.10	15.91
R&M	11.98	13.57	17.50
A&G	4.99	4.96	6.75
O&M Expenses	28.16	29.63	40.16

The O&M cost has increased due to the increase in the actual cost incurred by the EDDD during the FY 2016-17 as against the O&M cost approved by the Hon'ble Commission. The employee cost incurred by the EDDD during the FY 2016-17 was Rs. 15.91 Crore which is Rs. 4.81 Crores higher than the employee cost approved by the Hon'ble Commission. The employee cost increased due to the implementation of the 7th Pay Commission.

Further, the R&M cost has also increased by Rs. 3.93 Crores due to the cost incurred by the EDDD against installation of new energy meters throughout the territory of the UT of Daman and Diu. These energy meters have not been added to the Gross Fixed Assets of the EDDD and therefore the cost incurred against installation of the meters has been considered in the R&M expenses. The revised estimates submitted by the EDDD for FY 2016-17 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 2016-17. The EDDD, therefore, requests the Hon'ble Commission to approve the O&M expenses for FY 16-17 as submitted in herewith.

2.7 Capital Expenditure & Capitalization

The actual capital expenditure incurred by EDDD during the FY 16-17 was Rs. 48.62 Crore, which is lower than that of approved by the Hon'ble Commission in its Tariff Orders dated 6th April, 2016 and 29th May, 2017 respectively. The capital expenditure incurred and actual capitalization made by the department for FY 16-17 against that approved by the Hon'ble Commission is as shown below:

Table 6: Capital expenditure and capitalization for FY 16-17

(Rs. Crore.)

Particulars	FY 16-17	FY 16-17	FY 16-17
	Approved (6th April, 2016)	Approved (29th May, 2017)	Actual
Capital Expenditure	71.98	71.98	48.62
Capitalisation	54.70	54.70	65.52

The EDDD, therefore, requests the Hon'ble Commission to approve the capital expenditure and capitalization for FY 16-17.

2.8 Depreciation

The depreciation has been worked out after applying the Depreciation rates as per the JERC MYT Regulations, 2014. Accordingly, the depreciation so arrived and approved depreciation for FY 2016-17 is shown in the table below:

Table 7: Depreciation for FY 2016-17

(Rs. Crore.)

Particulars	FY 16-17	FY 16-17	FY 16-17
	Approved (6th April, 2016)	Approved (29th May, 2017)	Actual
Opening GFA	404.41	468.12	468.63
Addition during the year	54.70	54.70	65.52
Closing GFA	459.11	522.82	534.15
Average GFA	431.76	495.47	501.39
Depreciation during the year	21.69	25.10	23.55

The EDDD, requests the Hon'ble Commission to approve the actual depreciation for FY 16-17 without any deduction.

2.9 Interest and Finance Charges

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For assessing interest on Loans in FY 16-17, EDDD has considered the opening balance of loans for FY 16-17 as approved by the Hon'ble Commission vide its Tariff Order dated 29th May, 2017 for the Review of the ARR for FY 16-17. The normative loan addition in FY 16-17 has been computed as 70% of the capitalization for FY 2016-17 which works out to Rs. 45.87 Crore. The capitalization for FY 16-17 was Rs. 65.52 Crore as per the audited annual accounts for FY 16-17.

As per the JERC (Multi Year Distribution Tariff) Regulations, 2014, the repayment of loan during the year has been considered equal to the depreciation for the FY 2016-17. Further the rate of interest has been considered as equal to the SBI PLR of 14.05%.



The following table depicts the total Interest & Financial charges for FY 16-17 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 16-17

(Rs. Crore.)

Particulars	FY 16-17 Approved (6th April, 2016)	FY 16-17 Approved (29th May, 2017)	FY 16-17 Actual
Opening Loan	87.07	131.66	131.66
Loan for additional Capex (70:30 debt- equity)	38.29	38.29	45.87
Loan Repayment	21.69	25.10	23.55
Closing Loan	116.64	144.85	153.98
Interest Cost on Avg. Loans	13.40	19.42	20.07

The EDDD, requests the Hon'ble Commission to approve the interest on loan computed for FY 16-17.

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, 2014.

EDDD has computed interest on working capital at 9.30% as equal to the SBI PLR rate. The following table shows the interest on working capital for FY 2016-17 incurred by EDDD against the approved amount for the consideration of the Hon'ble Commission:

Table 9: Interest on Working Capital for FY 2016-17

(Rs. Crore.)

Particulars	FY 16-17	FY 16-17	FY 16-17
	Approved (6th April, 2016)	Approved (29th May, 2017)	Actual
Receivables of two months of billing	150.07	141.79	130.12
Less power purchase cost of one month	80.35	60.54	59.61
Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt	39.34	45.22	52.68
Inventory for two months based on annual requirement for previous year	0.69	0.96	1.36
Total Working Capital requirement	31.07	36.99	19.19





Particulars	FY 16-17	FY 16-17	FY 16-17
	Approved (6th April, 2016)	Approved (29th May, 2017)	Actual
Interest on Working Capital	2.89	3.44	1.78

The EDDD, requests the Hon'ble Commission to approve the interested on working capital computed for FY 16-17.

2.11 Return on Equity

As per the JERC (Multi Year Distribution Tariff) Regulations, 2014, 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 2016-17 is given in the Table below:

Table 10: Return on Equity for FY 16-17

| Particulars | FY 16-17 | FY 16-17 | FY 16-17 |
| Approved (6th April, 2016) | Approved (29th May, 2017) |
| Return on Equity | 8.00 | 8.03 | 8.29

The EDDD, requests the Hon'ble Commission to approve the return on equity computed for FY 16-17.

2.12 Interest on consumer security deposits

The Hon'ble Commission in its last Tariff Order has approved Rs. 3.50 Crore as interest payable on consumer security deposits. The actual interest on consumer security deposit paid by the EDDD was Rs. 3.69 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 16-17

(100 no		10 - W 100 - 1 - 100 - 1	(Rs. Crore.)
Particulars	FY 16-17	FY 16-17	FY 16-17
	Approved (6th April, 2016)	Approved (29th May, 2017)	Actual
Interest on Security Deposit	3.05	3.50	3.69

The EDDD, requests the Hon'ble Commission to approve the interest on consumer security deposit submitted for FY 16-17.

2.13 Non - Tariff Income

The actual Non-Tariff Income of EDDD for FY 16-17 was Rs. 20.08 Crore as against Rs. 19.20 Crore approved by the Hon'ble Commission. The non-tariff income includes meter rent of Rs. 1.14 Crores, Delayed Payment Charges of Rs. 12.76 Crores and Miscellaneous Income of Rs. 6.18 Crores (including interest income of Rs. 4.05 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 16-17

| Particulars | FY 16-17 | FY 16-17 | FY 16-17 |
| Approved (6th April, 2016) | Approved (29th May, 2017) |
| Non-tariff Income | 19.97 | 19.20 | 20.08

The EDDD, requests the Hon'ble Commission to approve the actual Non-Tariff Income for FY 16-17.

2.14 Aggregate Revenue Requirement for FY 16-17

Based on above expenses, table below summarizes actual Aggregate Revenue Requirement for FY 16-17 for EDDD vis-à-vis the ARR approved by the Hon'ble Commission in the previous two Tariff Orders.

Table 13: Aggregate Revenue Requirement for FY 16-17

(Rs. Crore.)

Particulars	FY 16-17	FY 16-17	FY 16-17
	Approved (6th April, 2016)	Approved (29th May, 2017)	Actual
Power Purchase Cost	964.22	726.49	715.30
O&M Expense	28.16	29.63	40.16
Depreciation	21.69	25.10	23.55
Interest Cost on Long-term Capital Loans	13.40	19.42	20.07
Interest on Working Capital Loans	2.89	3.44	1.78
Return on Equity	8.00	8.03	8.29
Provision for Bad Debt	0.00	0.00	-0.00
Interest on security deposit	3.05	3.50	3.69
Less;			



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Particulars	FY 16-17	FY 16-17	FY 16-17
	Approved (6th April, 2016)	Approved (29th May, 2017)	Actual
Non-Tariff Income	19.97	19.20	20.08
Revenue from Surplus Power Sale	30.97	0.13	1.14
Annual Revenue Requirement	990.47	796.28	791.61

The EDDD, requests the Hon'ble Commission to approve the ARR computed for FY 16-17.

2.15 Revenue for FY 16-17

During the FY 16-17, EDDD's actual revenue amounted to Rs. 818.98 Crore (including, FPPCA of Rs. -19.35 Crore, Open Access charges of Rs. 38.28 Crore) as against Rs. 913.56 Crore and Rs. 873.34 Crore as approved vide its Tariff Order dated 6th April, 2016 and 29th May, 2017 respectively by the Hon'ble Commission.

Table 14: Revenue for FY 16-17

Particulars		(Rs. Crore.)		
	FY 16-17	FY 16-17	FY 16-17	
	Approved (6th April, 2016)	Approved (29th May, 2017)	Actual	
Revenue from sale of power	913.56	882.91	818.98	
Recovery on Account of PPC variations/(Refund of excess)	0.00	(9.57)	0.00	
Total revenue	913.56	873.34	818.98	

2.16 Revenue (Gap) / Surplus for FY 16-17

The Hon'ble Commission in Order dated 6th April, 2016 has approved a total Aggregate Revenue Requirement (ARR) of Rs. 990.47 Crore for FY 16-17. Further, the Commission has computed the revised ARR for FY 16-17 in the Order dated and 29th May, 2017 of Rs. 796.28 Crore. Based on the annual accounts for FY 16-17 and the actual expenses incurred by the EDDD, the revised ARR for FY 2016-17 has been arrived at Rs. 791.61 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 2016-17 was Rs. 818.98 Crore. Accordingly, total revenue surplus of EDDD for FY 16-17 is computed at Rs. 27.36 Crore as depicted in the Table below:



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Table 15: Revenue (Gap)/surplus for FY 16-17

		(Rs. Crore.)	
Particulars	FY 16-17	FY 16-17	
	Approved (29th May, 2017)	Actual	
Annual Revenue Requirement (a)	796.28	791.61	
Revenue from sale of power (b)	882.91	818.98	
Recovery on Account of PPC variations/(Refund of excess) (c)	-9.57	0.00	
Revenue (Gap)/Surplus (d=b+c-a)	77.06	27.36	
Previous Years' (Gap)/Surplus Carried Over (e)	134.92	184.19	
Carrying Cost (f)	19.90	0.00	
Net Revenue (Gap)/surplus (g=d+e+f)	231.88	211.55	

EDDD requests the Hon'ble Commission to approve afore-mentioned revenue surplus for FY 16-17.



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Chapter 3: Review for the FY 2017-18

The review of aggregate revenue requirement for FY 17-18 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 17-18. EDDD analysis in respect of items given below is discussed in the following paras:

- a. Category wise Energy Sales & Revenues at existing tariffs;
- T&D Losses;
- 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
- 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 17-18 as shown in the Table below:

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Table 16: Category wise sales for FY 17-18 (Revised Estimate)

(MU)

Particulars	FY 17-18	FY 17-18	FY 17-18
	Approved (6th April, 2016)	Approved (29th May, 2017)	RE
Domestic	108.89	95.96	111.95
LIG/ Kutir Jyoti	0.10	0.1	0.15
Commercial	51.08	59.13	71.54
Agriculture	2.56	2.81	5.39
LT Industry	172.82	175.16	187.79
HT/EHT Industry	1572.39	1499.91	1,646.52
Public Lighting	12.49	7.82	9.31
Public Water Works	4.14	2.95	3.40
Temp. Supply	0.00	0	3.22
Total Sales	1,924.47	1,843.84	2,039.27

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 2017-18 is 2039.27 MUs as against 1843.84 MUs approved by the Hon'ble Commission in the Tariff Order dated 29th May, 2017. EDDD has shown an increase in sales for the FY 2017-18 as against the sales approved by the Hon'ble Commission due to the fact that in the month of November 2017, consumers availing open access have reduced the quantum of open access by 31.50 MW out of the 48.50 MW being availed by them till November, 2017. Therefore, proportionate sales against 31.50 MW have been added to the total sales for the period December, 2017 to March, 2018.

3.2 Distribution loss for FY 17-18

EDDD has considered the distribution losses of 8.40% for FY 17-18, the same as approved by the Hon'ble Commission in its last Tariff Order.

Table 17: Distribution losses for FY 17-18

(%)

Particulars	FY 17-18	FY 17-18	FY 17-18
	Approved (6th April, 2016)	Approved (29th May, 2017)	RE
Distribution Loss	8.40%	8.40%	8.40%

3.3 Energy Requirement of the System

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The following Table depicts the energy requirement of the EDDD for FY 17-18.





Table 18: Energy Requirement of the System

(MU)

Particulars	FY 17-18 Approved (6th April, 2016)	FY 17-18 Approved (29th May, 2017)	FY 17-18 RE
Retail Sales (a)	1,924.47	1843.86	2,039.27
Open Access Sales (b)	431.64	482.75	321.09
Less: Energy Savings (c)	(0.35)	(0.35)	(0.35)
Total Sales (d=a+b-c)	2,355.76	2,326.26	2,360.01
Distribution Loss (MU) (e=g-d)	216.13	213.33	216.42
Distribution Loss (%) (f=e/g)	8.40%	8.40%	8.40%
Energy Required at Periphery (g)	2,571.89	2539.59	2,576.43
Sale to common pool consumer/UI Sale(h)	142.18	0	5.08
Own generation (i)	0.00	0	18.04
Total energy requirement at state periphery(j=g+h-i)	2,714.07	2,539.59	2,563.47
Less: Energy Purchased through UI at Periphery (k)	0.00	0.00	186.77
Less: Open Access Purchase at Periphery (l)	452.94	490.8	326.41
Energy requirement at state periphery from tied up sources (m=j-k-l)	2,261.13	2,048.79	2,050.28
Inter state loss (MU) (n=o-m)	85.90	78.48	77.89
Inter state loss (%)	3.66%	3.66%	3.66%
Energy requirement at state periphery from generator end (o)	2,347.03	2,127.27	2,128.17
Total Energy requirement from tied up sources & UI at generator end (p=o+k)	2,347.03	2,127.27	2,314.94
Total Energy requirement in ut including Open Access (q=p+l)	2,799.97	2,618.07	2,641.36

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 17-18 has considered the following sources of power:

NTPC Western Region Generating Stations

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

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

For projecting of the energy availability for FY 17-18, six months actual power purchase has been considered. For projection of remaining six months of power purchase for FY 17-18, 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/2017/15183 dated 17.10.2017 of Western Regional Power Committee. Detailed methodology for projecting the power availability to the Petitioner from various sources is summarized below.

Table 19: Energy Allocation from Central Generating Stations

Particulars	Plant Capacity	EDDD Allocation	Avg. EDDD Allocation
	MW	MW	(%)
NTPC Stations			
KSTPP	2,100	49	2.32%
KSTPP-III	500	6	1.18%
VSTPP-I	1,260	13	1.03%
VSTPP-II	1,000	9	0.90%
VSTPP- III	1,000	11	1.10%.
VSTPP- IV	500	12	2.49%
VSTPS-V	500	8	1.63%
KAWAS	656	31	4.73%
JGPP	657	31	4.77%
Bhilai Unit-I &II(NTPC)	500	70	14.00%
Sipat-I	1,980	25	1.26%
Sipat-II	1,000	10	0.97%
Sipat-II MSTPS-I	500	12	2.49%
MOUDA-II	1,000	17	1.69%

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Particulars	Plant Capacity	EDDD Allocation	Avg. EDDD Allocation
· · · · · · · · · · · · · · · · · · ·	MW	MW	(%)
SOLAPUR	660	13	1.96%
Subtotal	13,814	318	
10			
Eastern Region			
KHSTPP-II	1000	1.3	0.13%
Subtotal	1000	1.3	
NPCIL			
KAPPS	440	9.17	2.08%
TAPP 3&4	1080	12.77	1.18%
Subtotal	1520.00	21.94	
Others			
Ratnagiri	1967	38	1.93%
Subtotal	1967	38	
Grand Total	18,300.59	378.93	

Based on the actual power purchase cost of the first six months of FY 17-18 and the remaining six months projection, the revised estimated power purchase cost for FY 17-18 is presented in the following Table:

Table 20: Revised estimated Power Purchase cost for FY 17-18

(Rs. Crore)

Source	Units Purchased	Fixed Charges	Variable Charges	Other Charges	Rebate	Credit for URS	All Charges Total	Per Unit Cost
NTPC Stations							2273. 00.92	
KSTPP	358.65	22.66	50.08	1.70			74.43	2.08
KSTPP-III	41.60	6.01	5.56	0.17			11.74	2.82
VSTPP-I	93.63	7.50	14.79	0.30			22.58	2.41
VSTPP-II	64.78	4.46	9.59	0.20			14.25	2.20
VSTPP- III	81.66	8.40	12.42	0.25			21.07	2.58
VSTPP- IV	87.19	13.94	12.96	0.60			27.49	3.15
VSTPS-V	60.75	9.46	9.40	0.17			19.04	3.13
KAWAS	125.61	19.03	26.77	0.91			46.70	3.72
JGPP	157.70	23.93	30.93	4.66			59.53	3.77
Sipat-I	169.35	23.73	22.87	0.44			47.04	2.78
Sipat-II	68.25	8.81	9.70	0.03			18.55	2.72
MSTPS-I	49.54	17.11	13.86	0.45			31.42	6.34
MOUDA-II	64.75	4.80	2.07	-0.03			6.84	1.06
KHSTPP-II	11.04	1.51	2.67	-0.01			4.17	3.78
SOLAPUR	43.65	CU19.47	Eng/1.1.41	0.00			20.82	4.77
Subtotal	1478,14		235.08	9.83	49.37	(0.47)	375.83	2.54
NTPC Bhilai	10	1 550	100 /3					
Bhilai Unit-I &II(NTPC)	506.62	82.16	106.57	-0.42			188.30	3.72
Subtotal	506.62	82.16	106.57	(0.42)			188.30	3.72

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Source	Units	Fixed	Variable	Other		Credit	All	Per
	Purchased	Charges	Charges	Charges	Rebate	for URS	Charges Total	Unit Cost
NPCIL	a patrick things have				3 4 1 4 1			
KAPPS	0.00	0.00	0.00	0.00			0.00	0.00
TAPP 3&4	55.37	0.00	17.22	0.00			17.22	3.11
KAPPS (III &								
IV)	0.00	0.00	0.00	0.00			0.00	0.00
Subtotal	55.37	0.00	17.22	0.00			17.22	3.11
Others								
Ratnagiri	0.00	1.30	0.86	0.57			2.73	0.00
Subtotal	0.00	1.30	0.86	0.57			2.73	0.00
Power								
purchase								
from Other								
Sources								
Power								
purchase								
from Indian	200000000000000000000000000000000000000							
E. Exchange	70.00	0.00	24.50	0.00			24.50	3.50
UI	186.77	0.00	41.06	0.00			41.06	2.20
Solar	18.04	0.00	0.00	0.00			0.00	0.00
Non Solar								
(Exchange)	0.00	0.00	0.00	0.00			0.00	0.00
Solar REC	0.00	0.00	3.29	0.00			3.29	
Non Solar								
REC	0.00	0.00	12.85	0.00			12.85	
Subtotal	274.81	0.00	81.71	0.00			81.71	2.97
Misc. Arrears								
NTPC								
Rebate								
Gross Power	2400 A R A CAPTO TO THE PER	200-00000000000000000000000000000000000	0.0000000000000000000000000000000000000			7974 290 86		
Purchase	2314.94	264.22	441.43	9.98	49.37	(0.47)	665.79	2.88
External								
Losses								
Total Power	Legisland State	nilla and a lab		With To Look				
Purchase	2314.94	264.22	441.43	9.98	49.37	(0.47)	665.79	2.88
PGCIL			111110	3.30	15107	(0.17)	000.75	2.00
CHARGES							77.29	
WRLDC							0.46	
MSTCL							3.85	
REC							3.41	
GETCO							3.52	
PGVCL							0.07	
POSCO							1.93	
Grand Total	STARTON SET	Tar State and				MARKET AND A	1.75	
of Charges -						III CATIND		V.
Net	2314.94						756.31	3.27

Per unit variable cost, fixed cost and other charges have been considered at the same level as actual from April to September 2017.



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.

The EDDD has received income tax refund to the tune of Rs. 47.85 Crores from the NTPC in the month of June, 2017. The same has been deducted from the ARR.

For FY 17-18, till September, 2017 the EDDD has procured 9.02 MU of solar energy from its ground mounted and rooftop solar plants. For the remaining six months the EDDD will further procure 9.02 MU of solar power from its own generation and will purchase a further 32.94 MUs as solar certificates to meet its solar obligation till FY 2017-18.

During the first six months of FY 2017-18, the EDDD purchased 26.67 MUs through non-solar certificates. To meet its non-solar obligation for the FY 2017-18, the EDDD has planned to purchase 58.98 MUs through non-solar certificates during the remaining six months of FY 2017-18.

3.5 Operation & Maintenance Costs

The approved and revised estimated O&M cost for FY 17-18 is shown in the following Table:

Table 21: O&M Expense for FY 17-18

(Rs. Crore)

Particulars	FY 17-18 Approved (6th April, 2016)	FY 17-18 Approved (29th May, 2017)	FY 17-18 RE
Employee Cost	12.05	11.62	16.06
R&M	13.60	15.16	19.10
A&G	5.38	5.19	6.81
O&M Expenses	31.03	31.97	41.97

The revision on the O&M cost for FY 17-18 is mainly on escalation in Employee Cost and R&M expenses.

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3.6 Capital Expenditure Plan

The estimated capital expenditure to be incurred by EDDD during the FY 2017-18 is given in the table below:

Table 22: Capital Expenditure Plan for FY 2017-18

(Rs. Crore)

		Capital I	Expenditure
Sr. No.	Name of Project/Work	Estimated Cost	Revised Estimates (FY 2017-18)
1	Scheme for establishment of 1x160 MVA + 2x50 MVA, 220/66/11 KV S/S at Ringanwada, Daman alongwith associated 220 KV D/C line from 400 KV new PGCIL S/S to Ringanwada, Daman.	40.45	14.89
2	Scheme for establishment of 66/11 KV, 2x20 MVA GIS Sub-station alongwith associated line at Dabhel, Daman	31.52	8.00
3	Scheme for establishment of 66/11 KV GIS Substation at Panchal Industrial Estate, Bhimpore, Daman	33.22	2.00
4	Providing Underground power Distribution system in Daman & Diu and Normal Development works & release of service connection	32.00	21.51
5	Total	137.19	46.40

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 FY 17-18 vis-à-vis approved by the Commission is summarized in Table below:

Table 23: Capital Expenditure & Capitalization for FY 17-18

(Rs. Crore)

Particulars	FY 17-18	FY 17-18	FY 17-18
	Approved (6th April, 2016)	Approved (29th May, 2017)	RE
Capital Expenditure	121.82	121.82	46.40
Capitalisation	101.88	101.88	47.73



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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 17-18 at Rs. 522.82 Crore, Rs. 101.88 Crore and Rs. 624.70 Crore respectively.

EDDD had Opening Gross Fixed Assets (GFA) of Rs. 468.63 Crore in FY 16-17. EDDD has further added assets worth Rs. 65.52 Crore during FY 16-17. The closing GFA by the end of FY 16-17 stands at Rs.534.15 Crore.

Based on the capital expenditure and capitalization estimated above, assets amounting to Rs. 47.73 Crore have been estimated to be capitalized during FY 17-18.

A summary of the Opening and Closing GFA and capitalization for FY 17-18 vis-à-vis approved by the Commission has been summarized in Table below:

Table 24: Opening and Closing GFA for FY 17-18

(Rs. Crore)

Particulars	Opening GFA	Additions during the Year	Closing GFA
FY 2017-18(Approved)	522.82	101.88	624.70
FY 2017-18(RE)	534.15	47.73	581.89

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.

Based on the CERC norms, EDDD has applied the following depreciation rates as specified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014.

Table 25: Depreciation rate specified by CERC

Depreciation Rate %
5.28%
3.34%
9.50%

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Asset Category	Depreciation Rate %
Furniture & Fixtures	6.33%
Computers & Others	6.33%
Land	0.00%

Depreciation for the FY 17-18 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 17-18. The Table below summarizes the asset-wise depreciation vis-à-vis approved by the Commission and computed by EDDD:

Table 26: Depreciation for FY 17-18

(Rs. Crore)

Particulars	FY 17-18	FY 17-18	FY 17-18
	Approved (6th April, 2016)	Approved (29th May, 2017)	RE
Opening GFA	459.11	522.82	534.15
Addition during the year	101.88	101.88	47.73
Closing GFA	560.99	624.70	581.89
Average GFA	510.05	573.76	558.02
Depreciation during the year	25.82	29.27	27.83

3.9 Interest & Financial Costs

3.9.1 Interest on Long-term / Capital Loans

Assets capitalized during the FY 2017-18 have been considered based on normative debt-equity ratio of 70:30 as per the as per the JERC (Multi Year Distribution Tariff) Regulations, 2014.

Interest rate of 14.05% has been considered for computation of interest cost for long-term loans which is similar to the prevailing SBI Prime Lending Rate. The normative interest on long-term/capital loans against approved by the Commission in the Tariff Order dated 6th April, 2016 and 29th May, 2017 as against the revised estimates is shown in the Table below:



Table 27: Interest on Long-term/Capital Loans for FY 17-18

(Rs. Crore)

Particulars	FY 17-18 Approved (6th April, 2016)	FY 17-18 Approved (29th May, 2017)	FY 17-18
Opening Loan	103.67	144.85	153.98
Loan for additional Capex (70:30 debt-	71.32	71.32	33.41
equity)	25.82	29.27	27.83
Loan Repayment	149.17	186.90	159.56
Closing Loan Interest Cost on Avg. Loans	17.76	22.97	22.03

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, 2014.

The working capital requirement for the Control Period has been computed considering the following parameters:

- a. Receivables of two months of billing
- b. Less power purchase cost of one month
- c. Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit
- d. Inventory for two months based on annual requirement for previous year

A rate of interest of 9.30% has been considered on the working capital requirement, being the SBI Prime Lending Rate as on 1st April of the year. This is in line with the JERC (Multi Year Distribution Tariff) Regulations, 2014 which states that "The rate of interest on working capital shall be equal to the base rate for the State Bank of India on the 1st April of the relevant financial year."

The rate of interest of 9.30% has been considered for FY 17-18 on the working capital requirement as approved by the Hon'ble Commission in its last Tariff Order.

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The normative interest on working capital for FY 17-18 considering the above methodology is summarized in the Table below:

Table 28: Interest on Working Capital for FY 17-18

(Rs. Crore)

Particulars Particulars	FY 17-18	FY 17-18	FY 17-18
	Approved (6th April, 2016)	Approved (29th May, 2017)	RE
Receivables of two months of billing	161.80	149	141.38
Less power purchase cost of one month	87.25	63.09	63.03
Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt	39.34	45.97	52.68
Inventory for two months based on annual requirement for previous year	0.69	0.96	1.43
Total Working Capital requirement	35.90	40.90	27.10
Interest on Working Capital	3.34	3.72	2.52

3.10 Return on Equity

As per the JERC (Multi Year Distribution Tariff) Regulations, 2014, 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 2017-18 is given in the Table below:

Table 29: Return on Equity for FY 17-18

(Rs. Crore)

Particulars	FY 17-18	FY 17-18	FY 17-18	
	Approved (6th April, 2016)	Approved (29th May, 2017)	RE	
Opening Equity	50.01	58.39	61.64	
Addition in equity on account of new capitaization	30.56	30.56	14.32	
Closing Equity	80.57	88.96	75.96	
Average Equity	-	73.68	68.80	
Return on Equity	12.89	11.79	11.01	

The EDDD, requests the Hon'ble Commission to approve the return on capital base computed for FY 17-18.



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3.11 Interest on consumer security deposits

The Hon'ble Commission in its last Tariff Order has approved Rs. 2.99 Crore as interest payable on consumer security deposits. EDDD has made a provision to pay Rs. 3.69 Crore as interest on consumer security deposits in FY 17-18. 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 17-18

(Rs. Crore)

Particulars	FY 17-18	FY 17-18	FY 17-18
	Approved (6th April, 2016)	Approved (29th May, 2017)	RE
Interest on Security Deposit	3.05	2.99	3.69

The EDDD, requests the Hon'ble Commission to approve the interest on consumer security deposits computed for FY 17-18.

3.12 Non-Tariff & Other Income

For estimating the non-tariff income for FY 17-18, an increase of 5% p.a. has been considered over the actual non-tariff income of FY 16-17. Details of the non-tariff income is provided in table below:

Table 31: Non-tariff Income for FY 17-18

(Rs. Crore)

Particulars	FY 17-18	FY 17-18	FY 17-18
	Approved (6th April, 2016)	Approved (29th May, 2017)	RE
Non-tariff Income	20.97	20.16	21.03

3.13 Aggregate Revenue Requirement

The following Table summarizes EDDD's Aggregate Revenue Requirement for FY 17-18 against approved by the Hon'ble Commission in the Tariff Order dated 6th April, 2016 and 29th May, 2017.



Table 32: Aggregate Revenue Requirement for FY 17-18

(Rs. Crore)

Particulars	FY 17-18	FY 17-18	FY 17-18
	Approved (6th April, 2016)	Approved (29th May, 2017)	RE
Power Purchase Cost	1,046.99	757.02	756.31
O&M Expense	31.03	31.97	41.97
Depreciation	25.82	29.27	27.83
Interest Cost on Long-term Capital Loans	17.76	22.97	22.03
Interest on Working Capital Loans	3.34	3.72	2.52
Return on Equity	12.89	11.79	11.01
Provision for Bad Debt	0.00	0.00	0.00
Interest on security deposit	3.05	2.99	3.69
Total	1,140.88	859.73	865.36
Less:			
Non-Tariff Income	20.97	20.16	21.03
Revenue from Surplus Power Sale	42.65	0.00	0.76
Annual Revenue Requirement	1,077.26	839.57	843.57

3.14 Revenue from Existing Tariff

Revenue from sale of power for FY 17-18 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. 848.27 Crore in FY 17-18, as shown in the following Table. The estimated revenue for FY 17-18 is based on the six month actual revenue at the exiting tariff. The revenue for remaining six months of FY 17-18 has been computed based on the retail tariff notified by the Commission in the Tariff Order for FY 17-18 dated 29th May, 2017. As directed by the Hon'ble Commission in its Tariff Order dated 29th May, 2017, the fuel purchase adjustment surcharge approved by the Hon'ble Commission is not being levied to the consumers of the EDDD. The FPPCA is being adjusted against the surplus approved by the Hon'ble Commission at the end of FY 2017-18. Accordingly, FPPCA to the tune of Rs. 28.87 Crores for the 1st quarter of FY 2017-18 has not been levied to the consumers and is being adjusted against the approved surplus. The FPPCA computed for the remaining three quarters of the FY 2017-18 shall be submitted to the Hon'ble Commission.

The Table below summarizes the revenue from sale of power at existing tariff for FY

17-18:





Table 33: Revenue from Sale of Power at Existing Tariff for FY 17-18

(Rs. Crore)

Particulars	FY 17-18	FY 17-18	FY 17-18	
	Approved (6th April, 2016)	Approved (29th May, 2017)	RE	
Revenue from sale of power	970.80	893.99	848.27	
Revenue from Open Access	13.81	33.79	32.37	
Total revenue	984.61	927.78	880.64	

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 surplus at existing tariff at Rs. 30.57 Crore for FY 17-18.

Table 34: Revenue Gap/Surplus for FY 17-18

(Rs. Crore)

Particulars	FY 17-18	FY 17-18	FY 17-18
	Approved (6th April, 2016)	Approved (29th May, 2017)	RE
Annual Revenue Requirement (a)	1077.26	839.57	843.57
Revenue from sale of power (b)	970.80	893.99	848.27
Revenue from Open Access (c)	13.81	33.79	32.37
Revenue (Gap)/surplus (d=b+c-a)	(92.65)	88.21	37.06
Refund of Cross subsidy surcharge (e)	0.00	0.00	6.49
Revenue (Gap)/surplus (f=d-e)	(92.65)	88.21	30.57
Previous Years' (Gap)/Surplus Carried Over (g)	41.94	281.94	211.55
Less: FPPCA not billed to consumers (h)	0.00	0.00	28.87
Carrying Cost (i)	0.00	29.67	0.00
Net Revenue (Gap)/surplus (j=f+g-h+i)	(50.71)	399.82	213.26

As directed by the Hon'ble Commission in its Tariff Order for FY 17-18 dated 29th May, 2017, the EDDD has refunded the excess cross subsidy surcharge billed during the FY 2016-17 to the consumers during the first six months of the FY 2017-18 amounting to Rs. 6.49 Crores tive Engineer

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Chapter 4: ARR for the FY 2018-19

EDDD is submitting its ARR for the FY 2018-19 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 2018-19.

The following sections explain in detail the basis and forecasts of the following elements for the FY 2018-19.

- 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 2018-19.

4.1 Load Growth

The Table given below summarizes the growth in sanctioned load over the past 5 years. The HT Industrial category has registered a load growth of 2.66% over this period. Overall growth for the UT has been 4.66%.



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Table 35: Past Year's Load Growth

(kVA)

Consumer Category	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17
	Actual	Actual	Actual	Actual	Actual
Domestic	55,080	55,991	117161	119557	121827
Commercial	18,180	17,654	19322	19761	20781
	2,252	2,512	3617	3672	3812
Agriculture LT Industry	96,818	97,780	100284	107471	104148
HT/EHT Industry	483,024	488,495	486708	505321	536544
Public Lighting	1,919	1,649	1657	1690	880
Public Water Works	654	664	795	795	795
	001			28	673
Temp. Supply Total	657,927	664,745	729,544	758,295	789,460

- 2. As can be seen in the table given above the public lighting is showing a drastic reduction in the load during the FY 2016-17. The same is due to the fact that the EDDD has converted the existing street light of sodium vapor lamps on all major district roads of Daman and Diu to LED street lights. Further, the existing street light of florescent tube light of municipality area of UT of Daman and Diu has also been converted to LED street lights.
- 3. The projected load for the FY 2017-18 and FY 2018-19 for all the categories has been given in the table below:

Table 36: Projected load growth during FY 2017-18 and FY 2018-19

(kVA)

Consumer Category	FY 17-18	FY 18-19	
	RE	Projected	
Domestic	132124	132780	
Commercial	21984	22158	
Agriculture	5391	5954	
LT Industry	116537	118291	
HT/EHT Industry	563344	591483	
	924	970	
Public Lighting	905	913	
Public Water Works		-	
Temp. Supply Total	841,209	872,549	

4. The Hon'ble Commission is requested to approve the sanctioned load for the FY 2017-18 and FY 2018-19 for the various consumer categories as submitted herewith. wtec

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4.2 Consumer Growth

1. The Table 35 below summarizes the category wise growth in consumers over the past 4 years.

FY 15-16 FY 16-17 FY 13-14 FY 14-15 FY 12-13 **Consumer Category** Actual Actual Actual Actual Actual 47403 42,507 43,962 45,298 46,420 Domestic 7875 8,209 Commercial 7,972 8,037 8,158 1,243 1283 Agriculture 1,173 1,191 1,195 1755 1,817 LT Industry 1,926 1,799 1,755 784 800 HT/EHT Industry 798 786 801 339 524 529 571 369 Public Lighting 125 127 Public Water Works 77 71 109 11 366 Temp. Supply 60,180 56,132 57,704 59,138 Total 55,011.0

Table 37: Past Year's Consumer Growth

2. The projected consumer growth for the FY 2017-18 and FY 2018-19 has been given in the table below:

Table 38: Projected consumer growth during the FY 2017-18 and FY 2018-19

Consumer Category	FY 17-18 RE	FY 18-19 Projected
Domestic	48,937	50215
Commercial	8,668	8889
Agriculture	1,312	1,342
LT Industry	1,806	1823
HT/EHT Industry	804	810
Public Lighting	596	622
Public Water Works	137	148
Temp. Supply	0	0
Total	62,260	63,849

3. The Hon'ble Commission is requested to approve the no. of consumers for the FY 2017-18 and FY 2018-19 for the various consumer categories as submitted herewith.

4.3 Energy Sales Growth

 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 2011-12 to FY 2016-17 has been considered to arrive at the Compound Annual Growth Rate (CAGR) for each of the



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customer categories. As the data available for FY 2017-18 pertains only to the first 6 months of the year, the figures for FY 2017-18 were not considered for arriving at the growth rates. However, the figures available for 6 months of FY 2017-18 have been annualized, in line with the past trends to arrive at sales estimates for FY 2017-18. The figures for FY 2017-18 have been further used as the base for forecasting the values for the FY 2018-19.

2. Table 37 below presents the category-wise energy sales for the past 6 years.

Table 39: Past Years' Energy Sales Growth

(MU) FY 16-17 FY 14-15 FY 15-16 FY 13-14 FY 12-13 **Consumer Category** FY 11-12 Actual Actual Actual Actual Actual Actual 88.20 97.89 83.06 77.79 84.16 73.85 Domestic 0.09 0.10 0.08 0.08 0.04 LIG/ Kutir Jyoti 0.10 55.37 49.93 38.74 46.75 41.57 33.83 Commercial 2.81 2.30 2.46 4.22 3.05 2.70 Agriculture 179.85 169.59 153.70 160.54 161.21 156.84 LT Industry 1407.81 1,379.41 1,441.53 1,327.84 1,572.81 1,496.83 HT/EHT Industry 7.89 7.43 8.80 5.59 6.51 7.06 Public Lighting 3.28 2.68 3.22 1.20 Public Water Works 1.12 0.92 1.23 2.17 1.09 0.67 0.51 0.51 Temp. Supply 1,862.95 1,754.08 1,621.72 1,691.98 1,757.11 1,771.17 **Total Sales**

- 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 2018-19 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 2017-18 has been projected by considering the actual sales for the first six months of FY 2017-18 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 17-18, 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 17-18.
- 5. EDDD has shown an increase in sales for the FY 2018-19 as against the sales approved by the Hon'ble Commission due to the fact that in the month of

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November 2017, consumers availing open access have reduced the quantum of open access by 31.50 MW out of the 48.50 MW being availed by them till November, 2017. Therefore, proportionate sales against 31.50 MW have been added to the total sales for the period December, 2017 to March, 2018 and the FY 2018-19. It has been assumed that the quantum of open access for the FY 2018-19 shall remain at the same level as during the period December, 2017 to March, 2018.

- 6. The table given below summarizes the projections of category wise increase in energy sales during the FY 2018-19. As can be observed, the overall energy sales in UT of Daman & Diu are significantly dependent upon HT industrial consumption.
- 7. EDDD submits to the Hon'ble Commission to approve the energy sales forecasted herein.

Table 40: Projected Category wise Energy Sales for FY 2018-19

(MU)

Consumer Category	FY 17-18	FY 18-19	FY 18-19
	RE	Approved (6th April, 2016)	Projected
Domestic	111.95	119.18	118.43
LIG/ Kutir Jyoti	0.15	0.11	0.15
Commercial	71.54	54.71	78.94
Agriculture	5.39	2.77	5.44
LT Industry	187.79	179.71	193.01
HT/EHT Industry	1,646.52	1682.46	1,965.96
Public Lighting	9.31	14.04	9.97
Public Water Works	3.40	4.47	3.37
Temp. Supply	3.22	0.00	3.22
Total Sales	2,039.27	2,057.45	2,378.50

4.4 T&D Loss Reduction

- 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 T & D losses in its distribution area.
- 2. EDDD has achieved T&D loss level of 8.48% for the FY 2016-17. Reduction of T&D below 10% involves significant amount of capital expenditure and it is EDDD's endeavor to bring the T&D loss level further down in the subsequent years. Further, the Hon'ble Commission had set a T&D loss level target of 8.30% for the FY 2018-19 in the Tariff Order dated 6th April, 2016. The EDDD proposes





to reduce the T&D losses to 8.30% for FY 18-19. The loss reduction trajectory for the Control Period is as given in the table below:

Table 41: Proposed T&D Loss for FY 2018-19

Particulars	FY 18-19	FY 18-19
	Approved (6th April, 2016)	Projected
Distribution Loss	8.30%	8.30%

3. The EDDD submits to the Commission to approve the T&D losses submitted herein.

4.5 Energy Requirement of the System

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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

(MU) FY 18-19 FY 18-19 **Particulars** Approved Projected (6th April, 2016) 2,378.50 2,057.45 Retail Sales (a) 453.22 143.65 Open Access Sales (b) (0.35)(0.35)Less: Energy Savings (c) 2,521.79 2,510.32 Total Sales (d=a+b-c) 228.25 227.22 Distribution Loss (MU) (e=g-d) 8.30% 8.30% Distribution Loss (%) (f=e/g) 2,737.54 2,750.05 Energy Required at Periphery (g) 8.35 5.85 Sale to common pool consumer/UI Sale(h) 0.00 18.04 Own generation (i) 2,737.86 Total energy requirement at state periphery(j=g+h-i) 2,745.89 Less: Energy Purchased through UI at Periphery (k) 86.00 0.00 475.59 146.03 Less: Open Access Purchase at Periphery (1) Energy requirement at state periphery from tied up 2,505.83 2,270.30 sources (m=j-k-l) 86.25 95.20 Interstate loss (MU) (n=o-m) 3.66% 3.66% Interstate loss (%) Energy requirement at state periphery from 2356.54 2601.03 generator end (o)

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Particulars	FY 18-19	FY 18-19
	Approved (6th April, 2016)	Projected
Total Energy requirement from tied up sources & UI at generator end (p=o+k)	2356.54	2687.03
Total Energy requirement in UT including Open Access (q=p+l)	2832.13	2833.06

4.6 Energy Availability

- 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, Vindyachal, 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 FY 18-19 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 17-18, actual power purchase for the first six months of FY 17-18 has been considered. For projection of energy availability for the FY 2018-19, 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

- 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 17-18 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 2017 to March 2018 has been estimated based on the revised allocation specified in the notification no's. WRPC/Comml-I/6/Alloc/2017/15183 dated 17.10.2017 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	EDDD Allocation	Avg. EDDD Allocation
THE RESERVE OF THE RE	MW	MW	(%)
NTPC Stations			2.220/
KSTPP	2,100	49	2.32%
KSTPP-III	500	6	1.18%
VSTPP-I	1,260	13	1.03%
VSTPP-II	1,000	9	0.90%
VSTPP- III	1,000	11	1.10%
VSTPP- IV	500	12	2.49%
VSTPS-V	500	8	1.63%
KAWAS	656	31	4.73%
IGPP	657	31	4.77%
Bhilai Unit-I &II(NTPC)	500	70	14.00%
Sipat-I	1,980	25	1.26%
Sipat-II	1,000	10	0.97%
MSTPS-I	500	12	2.49%
MOUDA-II	1,000	17	1.69%
SOLAPUR	660	13	1.96%
Subtotal	13,814	318	
Eastern Region			0.400/
KHSTPP-II	1000	1.3	0.13%
Subtotal	1000	1.3	
NPCIL	ive Engi		
NPCIL KAPPS TAPP 3&4	440	9.17	2.08%
TAPP 3&4	1080	12.77	1.18%
Subtotal / 4	1520.00	21.94	
Others	3-1-7		



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Particulars	Plant Capacity	EDDD Allocation	Avg. EDDD Allocation
Ratnagiri	MW 1967	MW 38	(%) 1.93%
Subtotal	1967	38	1.93 %
Grand Total	18,300.59	378.93	

- Actual power purchase in first six months of FY 17-18 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 17-18.
- 4. The EDDD did not receive any power from Ratnagiri Gas Power Plant during the first six months of FY 17-18. Hence, it is expected that EDDD will not be getting power from Ratnagiri for the rest of the FY 2017-18 and therefore power purchase from the plant has not been considered for the remaining six months of FY 2017-18.
- 5. The consumers availing open access have reduced the quantum of open access by 31.50 MW out of the 48.50 MW being availed by them. It is further anticipated that these consumers will not opt for open access during the FY 2018-19. Hence, the EDDD shall be procuring energy from the energy exchange to meet the increased demand for the corresponding increase in sales due to reduction in open access.
- 6. For projecting the power availability for FY 2018-19, EDDD has considered average allocation of firm and infirm power from the western region generation stations (NTPC and NPCIL) of Western Regional Power Committee. For projecting the power purchase from eastern region NTPC generating stations, an allocation of 1.30 MW from KhSTPP has been taken into account.
- Additionally, EDDD has 70 MW allocations from NSPCL Bhilai power stations.
 Energy availability from NSPCL Bhilai power stations for FY 18-19 has been considered by taking 70 MW allocation from the plant.
- 8. Power purchase quantum from the NTPC stations of the current year and FY 2018-19 has been calculated based on the installed capacity of each plant and by applying the average of previous four years (FY 14 to FY 17) PLF to calculate the plant-wise gross generation. For NSPCL, an average PLF of 90% has been considered.
- For gas based generating stations i.e. Kawas (KGPP) and Gandhar (GGPP) weighted average PLF of FY 12-13, FY 2013-14 and FY 2014-15 have been taken into account.



- 10. Auxiliary consumption of 9% and 3% has been considered for estimating the gross generation from coal and gas based generating stations respectively.
- 11. 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.
- 12. As per the RPO obligations the EDDD shall have to purchase 85.63 MUs of solar power and 128.44 MUs of non-solar power during the FY 2018-19. Own generation of solar has been projected at 18.04 MUs for the FY 2018-19. Rest of the solar obligation shall be met by purchasing Renewable Energy Certificates. To meet the non-solar RPO the EDDD shall try to procure non-solar power through the exchange and purchase renewable energy certificates.
- 13. 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 2017-18 and FY 2018-19.
- 14. Table 42 below depicts the station wise power purchase for FY 2017-18 and FY 2018-19.

Table 44: Power Purchase Quantum

(MU)

Source	FY 2017-18	FY 2018-19
NTPC Stations		
KSTPP	358.65	340.44
KSTPP-III	41.60	41.04
VSTPP-I	93.63	90.92
VSTPP-II	64.78	63.18
VSTPP- III	81.66	77.17
VSTPP- IV	87.19	87.03
VSTPS-V	60.75	55.23
KAWAS	125.61	159.68
	157.70	177.72
Sipat-I Cul	ive Engin 169.35 68.25	145.86
Sipat-I Cul	68.25	56.85
MCTDC I	49.54	49.60
MOUDA-II	64.75	114.51

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Source	FY 2017-18	FY 2018-19
KHSTPP-II	11.04	7.24
SOLAPUR	43.65	87.54
Subtotal	1478.14	1554.03
NTPC Bhilai		
Bhilai Unit-I &II(NTPC)	506.62	494.41
Subtotal	506.62	494.41
NPCIL		
KAPPS	0.00	66.47
TAPP 3&4	55.37	78.08
KAPPS (III & IV)	0.00	0.00
Subtotal	55.37	144.55
Others		
Ratnagiri	0.00	0.00
Subtotal	0.00	0.00
Power purchase from Other Sources		
Power purchase from Indian E. Exchange	70.00	390.00
UI	186.77	86.00
Solar	18.04	18.04
Non Solar (Exchange)	0.00	0.00
Solar REC	0.00	0.00
Non Solar REC	0.00	0.00
Subtotal	274.81	494.04
Misc. Arrears		
NTPC Rebate		
Gross Power Purchase	2314.94	2687.03
External Losses		
Total Power Purchase	2314.94	2687.03

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

4.6.2 Energy Requirement & Availability

 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 2018-19.

Table 45: Energy Balance

Particulars	FY 18-19	FY 18-19
Approved (6th April, 2016)	Projected	
Retail Sales (a)	2,057.45	2,378.50



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Particulars	FY 18-19	FY 18-19
raticulats	Approved (6th April, 2016)	Projected
Open Access Sales (b)	453.22	143.65
Less: Energy Savings (c)	(0.35)	(0.35)
Total Sales (d=a+b-c)	2,510.32	2,521.79
Distribution Loss (MU) (e=g-d)	227.22	228.25
Distribution Loss (%) (f=e/g)	8.30%	8.30%
Energy Required at Periphery (g)	2,737.54	2,750.05
Sale to common pool consumer/UI Sale(h)	8.35	5.85
Own generation (i)	0.00	18.04
Total energy requirement at state periphery(j=g+h-i)	2,745.89	2,737.86
Less: Energy Purchased through UI at Periphery (k)	0.00	86.00
Less: Open Access Purchase at Periphery (I)	475.59	146.03
Energy requirement at state periphery from tied up sources (m=j-k-l)	2,270.30	2,505.83
Inter state loss (MU) (n=o-m)	86.25	95.20
Inter state loss (%)	3.66%	3.66%
Energy requirement at state periphery from generator end (o)	2356.54	2601.03
Total Energy requirement from tied up sources & UI at generator end (p=o+k)	2356.54	2687.03
Total Energy requirement in UT including Open Access (q=p+l)	2832.13	2833.06

4.6.3 Power Purchase Cost

- 1. The cost of purchase from the central generating stations for FY 18-19 is estimated based on the following assumptions:
 - Fixed cost for the FY 2018-19 has been projected considering a 5% escalation over the estimated fixed cost for various stations for FY 16-17.
 - Variable cost for each NTPC generating stations for the FY 2018-19 has been projected at the same rate as received during the first six months of FY 2017-18.
 - The EDDD has projected other charges (tax, incentives, etc) for the FY 2017-18 at similar level as estimated for full year of FY 16-17.
 - 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 2017-18 for projecting the power purchase cost for the FY 2018-19.

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- For power purchase from renewable energy sources, for the FY 2018-19, the EDDD has appointed BHEL as EPC and O&M contractor for 1 MW solar plant at Daman and 3 MW solar plant at Diu. Also, EDDD has appointed Ujjas energy limited as EPC and O&M contractor for 6MW solar plant at Diu. For the purchase of solar and non-solar power, the rate of Rs. 1.00/unit and Rs. 1.5/unit has been considered for the FY 2018-19.
- The average power purchase cost for procurement of power from the energy exchange has been considered at Rs. 2.65/unit.
- 2. The Total Power Purchase cost from various sources for FY 18-19 is summarized in the Table below:

Table 46: Power Purchase Cost

(Rs. Crore.) All Per Variable Other Units **Fixed** Source (Rs. Crs) Charges Unit Purchased Charges Charges Charges Total Cost NTPC Stations KSTPP 340.44 23.79 47.53 0.00 71.33 2.10 KSTPP-III 5.49 0.00 11.80 2.87 41.04 6.31 VSTPP-I 0.00 22.23 2.45 90.92 7.87 14.36 2.22 VSTPP-II 63.18 4.69 9.36 0.00 14.04 VSTPP-III 8.82 11.74 20.56 2.66 77.17 0.00 VSTPP-IV 87.03 14.63 12.94 0.00 27.57 3.17 VSTPS-V 55.23 9.93 8.55 0.00 18.48 3.35 **KAWAS** 54.00 159.68 19.98 34.02 0.00 3.38 **JGPP** 34.85 177.72 25.13 0.00 59.98 3.38 Sipat-I 145.86 24.91 19.70 0.00 44.61 3.06 Sipat-II 9.25 0.00 17.33 3.05 56.85 8.08 MSTPS-I 17.97 13.88 0.00 31.84 6.42 49.60 MOUDA-II 114.51 5.04 30.97 0.00 36.01 2.70 0.00 3.34 4.61 KHSTPP-II 7.24 1.59 1.75 9.88 0.00 **SOLAPUR** 87.54 9.88 0.00 0.00 Subtotal 0.00 443.02 2.85 1554.03 189.79 253.23 NTPC Bhilai Bhilai Unit-I &II(NTPC) 104.00 0.00 190.26 3.85 494.41 86.26 Subtotal 494.41 86.26 104.00 0.00 190.26 3.85 **NPCIL** KAPPS 66.47 0.00 19.21 0.00 19.21 2.89 **TAPP 3&4** 78.08 0.00 24.29 0.00 24.29 3.11 0.00 0.00 0.00 KAPPS (III & IV) 0.00 0.00 0.00 43.50 3.01 Subtotal 144.55 43.50 0.00 0.00 Others 0.57 1.94 0.00 1.37 0.00 Ratnagiri 0.00 0.00 0.57 1.94 0.00 0.00 1.37 Subtotal Power purchase from

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Source (Rs. Crs)	Units Purchased	Fixed Charges	Variable Charges	Other Charges	All Charges Total	Per Unit Cost
Other Sources						
Power purchase from						
Indian E. Exchange	390.00		103.35		103.35	2.65
UI	86.00		18.91		18.91	2.20
Solar	18.04				0.00	0.00
Non Solar (Exchange)	0.00		0.00		0.00	0.00
Solar REC	0.00		6.76		6.76	
Non Solar REC	0.00		19.27		19.27	
Subtotal	494.04	0.00	148.28	0.00	148.28	3.00
Misc. Arrears						
NTPC Rebate						
Gross Power Purchase	2687.03	277.43	549.00	0.57	827.00	3.08
External Losses						
Total Power Purchase	2687.03	277.43	549.00	0.57	827.00	3.08

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, considering the changing capacity allocation, EDDD has estimated the transmission charges for FY 17-18 based on, an escalation of 5% over the actual transmission charges of FY 16-17. 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 2018-19, an escalation of 5% over the estimated FY 17-18 transmission charges has been considered in view of the increase in transmission charges. 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 47: Total Power Purchase Cost for FY 2018-19

Particulars

FY 2018-19

Projected

Gross Power Purchase Cost

PGCIL CHARGES

WRLDC

(Rs. Crore.)

FY 2018-19

Response Section (Rs. Crore.)

Section (Rs. Crore.)

FY 2018-19

Response Section (Rs. Crore.)

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Particulars	FY 2018-19
	Projected
MSTCL	4.24
REC	3.76
GETCO	3.87
PGVCL	0.07
POSCO	2.12
Total Power Purchase Cost (including Transmission Cost)	926.57

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 FY 2018-19 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 17-18, EDDD has estimated the total employee cost for full year of FY 17-18 as Rs. 16.06 Crore. Salary expenses for the FY 2018-19 is estimated based on the

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average increase in the Wholesale Price Index (WPI) for immediately preceding three years. The average WPI for the last three years is 0.04%.

3. As per the MYT Regulations, 2014, the employees' expenses have been calculated as per the following formulae:

EMPn = (EMPb * WPI inflation) + Provision

where:

EMPn: Employee expense for the year n

EMPb; including yearly increments of employees, bonus, promotion. VRS.

Employee expense as per the norm

WPI inflation: is the average increase in the Wholesale Price Index (WPI) for immediately preceding three years

Provision: Provision for expenses as necessitated by the licensee due to expansion of the consumer base, yearly increments of Employees, and any expected one-time expenses as such as recovery/adjustment of terminal benefits, implications of pay commission, arrears and Interim Relief.

4. The average growth in the WPI for the last three years is 0.04%. Total employee cost of EDDD for the FY 2018-19 is as given in the table below:

Table 48: Employee Expenses

(Rs. Crore)

Employee Expenses	ee Expenses FY 2018-19	
	Approved	Projected
Employee Expenses	12.99	16.21

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

Repairs & Maintenance Expense

- Repairs and maintenance expense comprise of expenses incurred by the 1. 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.
- The actual R&M expense for FY 2016-17 is Rs. 17.50 Crore. 2.



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&Mn = Kb* GFAn* Inflation Index

where:

R&Mn: Repairs & Maintenance expense for nth year

GFAn: Opening Gross Fixed Assets for nth year

Kb: Percentage point as per the norm

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

Inflation Index is CPI: WPI:: 60:40

CPI is Consumer Price Index issued by Govt. of India & these indices are for immediately preceding three years

WPI is whole sale price Index issued by Govt. of India & these indices are for immediately preceding three years

4. For projecting the R&M expense for the Control Period, the EDDD has considered the inflation index as 4.70% (CPI: WPI :: 60 : 40). Total repair & maintenance cost of EDDD for FY 18-19 is summarized in the table below:

Table 49: Repairs & Maintenance Expense

Repair & Maintenance Expense FY 2018-19 FY 2018-19 Projected R&M Expenses 16.62 20.80

5. 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

 Administrative and General (A&G) expenses comprise of various expenses as given below:



- Rates and taxes
- Travel and conveyance expenses
- Consultancy and regulatory fees
- · Energy auditing fee and consumer indexing
- Insurance and other administration expenses
- 2. The actual A&G expense for FY 16-17 is Rs. 6.75 Crore.
- For projecting the A&G expenses for the Control Period the following formula has been used as given in the MYT Regulations:

A&Gn = (A&Gb * WPI inflation) + Provision

where:

Λ&Gn: Λ&G expense for the year n A&Gb:

A&G expense as per the norm

WPI inflation: is the average increase in the Wholesale Price Index (WPI) for immediately preceding three years

Provision: Cost for initiatives or other one-time expenses as proposed by the Distribution Licensee and validated by the Commission.

The A&G expenses projected for the FY 2018-19 have been given in the table below:

Table 50: A&G Expense

A&G Expense FY 2018-19 FY 2018-19

Approved Projected

A&G Expenses 5.80 6.88

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

3.7.4 Total Operation and Maintenance Expense

Based on the employee cost, R&M and A&G expense projected above, the total O&M expenditure for FY 18-19 is summarized in table below.

Table 51: Total O&M Expense

(Rs. Crore.) FY 18-19 FY 18-19 **Particulars** Approved Projected (6th April, 2016) 12.99 16.21 **Employee Cost** 20.80 R&M 16.62 5.80 6.88 A&G 35.41 43.89 **O&M** Expenses

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

4.8 Capital Expenditure Plan

- 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 2018-19 is given in the table below:

Table 52: Total O&M Expense

(Rs. Crore.)

		Capital Expenditure		
Sr. No.	Name of Project/Work	Estimated Cost	Revised Estimates (FY 2018-19)	
1	Scheme for establishment of 66/11 KV, 2x20 MVA GIS Sub-station alongwith associated line at Dabhel, Daman	31.52	23.52	
2	Scheme for establishment of 66/11 KV GIS Substation at Panchal Industrial Estate, Bhimpore, Daman	33.22	31.22	
3	Scheme for establishment of 2x100 MVA, 220/66 KV GIS Sub-station at Dabhel, Daman alongwith associated 220 KV multicircuit Magarwada-Dabhel transmission line via Kachigam	49.6	5.00	
4	Establishment of new hybrid bay in Sub-station (i.e Dalwada, Bhimpore, Dabhel, Kachigam, Magarwada).	8	3.00	

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		Capital Expenditure		
Sr. No.	Name of Project/Work	Estimated Cost	Revised Estimates (FY 2018-19)	
5	Scheme for inter connection of 66 KV line from Zari Sub-station to Eurocoustic and replacement of Panther conductor from Kachigam Sub-station to EPL	4.5	4.00	
6	Providing Underground power Distribution system in Daman & Diu and Normal Development works & release of service connection	32	10.49	
7	Total	158.84	77.23	

- 3. The EDDD requests the Hon'ble Commission to approve the capital expenditure against the scheme as submitted herewith.
- 4. A summary of the capital expenditure and capitalization for FY 18-19 vis-à-vis approved by the Commission is summarized in Table below:

Table 53: Capital Expenditure & Capitalization for FY 18-19

(Rs. Crore

Particulars	FY 18-19	FY 18-19
	Approved (6th April, 2016)	Projected
Capital Expenditure	117.31	77.23
Capitalisation	119.11	58.73

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

5.9 Gross Fixed Assets

- 1. EDDD had Rs. 468.63 Crore of Opening Gross Fixed Assets (GFA) in FY 16-17. Assets amounting to Rs. 65.52 Crore have been added to the GFA during the FY 2016-17.
- 2. Assets amounting to Rs. 47.73 Crore have been estimated to be added in the GFA during FY 17-18.
- 3. Similarly, based on the capital expenditure plan as detailed above, Rs. 58.73 Crore, is proposed to be capitalized during the FY 2018-19.

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4. A summary of the Opening and Closing GFA and capitalization has been summarized in table below:

Table 54: Opening and Closing GFA for the FY 2018-19

(Rs. Crore)

Particulars	Opening GFA	Additions during the Year	Closing GFA
FY 2018-19(Approved)	560.99	119.11	680.10
FY 2018-19(Projected)	581.89	58.73	640.62

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

5.10 Depreciation

- 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.
- Based on the CERC norms, EDDD has applied the following depreciation rates as specified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014.

Asset Category	Depreciation Rate %		
Plant & Machinery	5.28%		
Buildings	3.34%		
Vehicles	9.50%		
Furniture & Fixtures	6.33%		
Computers & Others	6.33%		
Land	0.00%		

3. Depreciation for the FY 18-19 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 2018-19. 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 2016-17 as given in the fixed asset register and the estimated capitalization for FY 17-18 and FY 2018-19.



4. Therefore the EDDD requests the Hon'ble Commission to approve the depreciation as given in the table below:

Table 55: Depreciation

(Rs. Crore)

Particulars	FY 18-19	FY 18-19	
	Approved (6th April, 2016)	Projected	
Opening GFA	560.99	581.89	
Addition during the year	119.11	58.73	
Closing GFA	680.10	640.62	
Average GFA	620.55	611.25	
Depreciation during the year	31.65	30.64	

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

5.11 Interest & Finance Costs

5.11.1 Interest on Long-term / Capital Loans

- 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 2018-19 have been considered based on normative debt-equity ratio of 70:30 as per the JERC (Multi Year Distribution Tariff) Regulations, 2014.
- 4. Interest rate of 14.05% has been considered for computation of interest cost for long-term loans which is similar to the prevailing SBI Prime Lending Rate. Details of the loan amounts and interest cost computed for FY 2018-19 is summarized in Table below:

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Table 56: Total Interest on Long-term Loans

(Rs. Crore)

Particulars	FY 18-19	FY 18-19	
	Approved (6th April, 2016)	Projected	
Opening Loan	149.17	159.56	
Loan for additional Capex (70:30 debt-equity)	83.38	41.11	
Loan Repayment	31.65	30.64	
Closing Loan	200.89	170.02	
Interest Cost on Avg. Loans	24.59	23.15	

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

5.11.2 Interest on Working Capital Borrowings

- 1 EDDD has computed the Interest on Working Capital for the FY 2018-19 based on normative basis as per the JERC (Multi Year Distribution Tariff) Regulations, 2014.
- 2 The working capital requirement for the FY 2018-19 has been computed considering the following parameters:
 - a. Receivables of two months of billing
 - b. Less power purchase cost of one month
 - c. Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit
 - d. Inventory for two months based on annual requirement for previous year
- A rate of interest of 9.30% has been considered on the working capital requirement, being the SBI Prime Lending Rate as on 1st April of the year. This is in line with the JERC (Multi Year Distribution Tariff) Regulations, 2014 which states that "The rate of interest on working capital shall be equal to the base rate for the State Bank of India on the 1st April of the relevant financial year."
- 4 The normative interest on working capital for the FY 2018-19 considering the above methodology is summarized in the Table below:

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Table 57: Interest on Working Capital for the FY 2018-19

(Rs. Crore)

Particulars Particulars	FY 18-19	FY 18-19	
	Approved (6th April, 2016)	Projected	
Receivables of two months of billing	174.57	168.21	
Less power purchase cost of one month	89.19	77.21	
Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt	39.34	52.68	
Inventory for two months based on annual requirement for previous year	0.69	1.50	
Total Working Capital requirement	46.73	39.82	
Interest on Working Capital	4.35	3.70	

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

5.12 Return on Capital Employed

- 1. As per the JERC (Multi Year Distribution Tariff) Regulations, 2014, EDDD is entitled for a Return on Equity (RoE).
- 2. 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 is given in the Table below:

Table 58: Proposed Return on Equity

(Rs. Crore)

Particulars	FY 18-19	FY 18-19	
	Approved (6th April, 2016)	Projected	
Opening Equity	80.57	75.96	
Addition in equity on account of new capitalization	35.73	17.62	
Closing Equity	116.30	93.58	
Average Equity	98.44	84.77	
Return on Equity	18.61	13.56	

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

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as given above.



5.13 Interest on consumer security deposits

1. The Hon'ble Commission in its last Tariff Order has approved Rs. 3.05 Crore as interest payable on consumer security deposits. EDDD has made a provision to pay Rs. 3.69 Crore as interest on consumer security deposits in FY 18-19. The details of interest on consumer security deposits for the FY 2018-19 have been given in the table below:

Table 59: Interest on Consumer Security Deposit

Particulars

FY 18-19
Approved
(6th April, 2016)

Interest on Security Deposit

(Rs. Crore)

FY 18-19
Approved
(6th April, 2016)

3.05
3.69

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

5.14 Non-Tariff & Other Income

- 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, Delayed payment charges from
 consumers, Interest on advances to suppliers/contractors, and Miscellaneous
 receipts.
- For projecting the non-tariff income for the FY 2018-19, an increase of 5% p.a.
 has been considered over the estimated non-tariff income for FY 17-18. Details
 of the year wise non-tariff income is provided in table below:

Table 60: Non-tariff Income

| Particulars | FY 18-19 | FY 18-19 | Approved (6th April, 2016) | Non-tariff Income | 22.02 | 22.02

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



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5.15 Aggregate Revenue Requirement

Table 61 summarizes EDDD's Aggregate Revenue Requirement for FY 18-19.

Table 61: Aggregate Revenue Requirement

(Rs. Crore)

Particulars	FY 18-19	FY 18-19
	Approved (6th April, 2016)	Projected
Power Purchase Cost	1,070.28	926.57
O&M Expense	35.41	43.89
Depreciation	31.65	30.64
Interest Cost on Long-term Capital Loans	24.59	23.15
Interest on Working Capital Loans	4.35	3.70
Return on Equity	18.61	13.56
Provision for Bad Debt	0.00	0.00
Interest on security deposit	3.05	3.69
Total	1,187.94	1,045.22
Less:		
Non-Tariff Income	22.02	22.02
Revenue from Surplus Power Sale	2.50	0.88
Annual Revenue Requirement	1,163.42	1,022.32

5.16 Revenue at Existing Tariff

- Revenue from sale of power for FY 18-19 is determined based on the energy sales estimated in Table 40 and category wise tariff prevalent in the UT of Daman & Diu.
- EDDD has computed the revenue for the FY 2018-19 based on the tariff notified by the Hon'ble Commission in the Tariff Order for the FY 2017-18 dated 29th May, 2017.
- The table below summarizes the revenue from sale of power at existing tariff for FY 2017-18:

Table 62: Revenue from Sale of Power at Existing Tariff

(Rs. Crore.)

Revenue @ Existing Tariff		FY 18-19	FY 18-19
(Rs Crore)		Approved	Projected
Domestic		28.39	23.33
LIG CULIVE ENGI	2	0.01	0.02
Commercial (4)	Col	17.78	22.19
Agriculture / / / / / / / / / / / / / / / / / / /	100	0.22	0.36
LT Industry	0	68.19	67.89
HT/EHT Industry		925.24	889.21

Revenue @ Existing Tariff	FY 18-19	FY 18-19
(Rs Crore)	Approved	Projected
Public Lighting	5.9	3.75
Public Water Works	1.69	1.11
Temp. Supply	0	1.42
Total	1047.42	1009.28
Revenue from Open access	14.5	15.43
Total Revenue	1061.92	1024.71

5.17 Coverage of Revenue Gap

- 1. Revenue from sale of power with-in the UT (category-wise) is determined in Table 62.
- 2. Table 63 summarizes the ARR for EDDD for FY 2016-17, FY 2017-18 and FY 2018-19 along with the revenue and the resulting revenue (gap)/surplus. The cumulative surplus for the three years is Rs. 215.65 Crores as given in the table below.

Table 63: Revenue Gap for FY 2018-19

			(Rs. Crore.)		
Sr.	Particulars Particulars	FY16-17	FY17-18	FY18-19	
No.		Actual	Revised Estimates	Projected	
1	Total ARR	791.61	843.57	1,022.32	
2	Revenue @ Existing Tariff (including open access)	818.98	880.64	1,024.71	
3	Total Revenue	818.98	880.64	1,024.71	
4	Revenue (Gap) /Surplus(3-1)	27.36	37.06	2.39	
5	Refund of Cross subsidy surcharge	0.00	6.49	0.00	
6	Revenue (Gap) /Surplus(4-5)	27.36	30.57	2.39	
	Covered By			10	
7	Previous Years' (Gap)/Surplus Carried Over	184.19	211.55	213.26	
8	Less: FPPCA not billed to consumers	0.00	28.87	0.00	
9	Total (Gap)/Surplus for three years(6+7-8)	211.55	213.26	215.65	



- 3. It is evident from Table 63 that there is a cumulative surplus of Rs. 215.65 Crore for the three years. The estimated gap has been computed by deducting the ARR from Revenue at Existing Tariff.
- 4. As there is a cumulative surplus at the end of FY 2018-19, the EDDD does not propose any tariff hike for the FY 2018-19. It is further proposed that the Hon'ble Commission may please allow the EDDD to adjust the positive FPPCA against the cumulative surplus for the FY 2018-19 as well. 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 2018-19 may kindly be approved.

5.18 Average Cost of Supply

 Table 64 summarizes Average Cost of supply and total average realization at the existing tariff approved by the Hon'ble Commission.

Table 64: Average Cost of Supply & Revenue Realization

Average Realization & Cost of Supply	FY16-17	FY17-18	FY18-19	
(Rs/Unit)	Actual	Revised Estimate	Projected	
Average Cost of Supply of EDDD	4.44	4.13	4.29	
Average Realization	4.59	4.31	4.30	
Revenue Gap at Existing Tariff	0.15	0.18	0.01	
Net Revenue (Gap)/Surplus(Includes gap of previous year)	1.19	1.04	0.90	

5.19 Tariff Proposal for FY 18-19

 As there is a cumulative surplus of Rs. 215.65 Crore for FY 2016-17, FY 2017-18 and FY 2018-19 the EDDD does not propose any tariff hike for the FY 2018-19. The table below summarizes the existing and proposed tariff structure for various consumer categories for FY 2018-19.



Table 65: Proposed Tariff Structure for FY 18-19

Tariff Structure		Existing (FY 2017-18)		Proposed (FY 2018-19)
	Energy Charges (Rs/Kwh)	Fixed Charges	Energy Charges (Rs/Kwh)	Fixed Charges
LT-D/Domestic	(RS/RWII)		(KS/KWII)	
0 to 100 Units	1.10		1.10	
101 to 200	01 59	-		
Units	1.60	Rs./Consumer/Month	1.60	Rs./Consumer/Month
201 to 400 Units	1.95	Single Phase: Rs. 20 Three Phase: Rs. 45	1.95	Single Phase: Rs. 20 Three Phase: Rs. 45
Beyond 401 Units	2.30		2.30	
Low Income Group		Rs. 10/connection /month		Rs. 10/connection /month
LT-		,		
C/Commercial			1	
1st 100 Units	2.40	Rs./Consumer/Month	2.40	Rs./Consumer/Month
Beyond 100 Units	3.25	Single Phase: Rs. 25 Three Phase: Rs. 50	3.25	Single Phase: Rs. 25 Three Phase: Rs. 50
LT- Ag/				
Agriculture				
Upto 10 HP per unit	0.65		0.65	
Beyond 10 HP per unit	0.90	_	0.90	
LTP Motive Power(Including Public Water Work)				
For the category	3.10	Rs. 25/HP/month	3.10	Rs. 25/HP/month
LT-PL/Public				
Public	3.75		3.75	
Lighting LT-Public Water				
Works For the				
category	3.30	Rs. 25/HP/month	3.30	Rs. 25/HP/month
HTC General Industrial / Motive Power 11KV or 66KV having CMD above 100KVA				
For all units	4.15	Rs. 105/kva/month	4.15	Rs. 105/kva/month
HT Industrial((Ferro Metallurgical/	eculive	Engine		-

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Tariff Structure	Existing (FY 2017-18)		Proposed (FY 2018-19)		
	Energy Charges (Rs/Kwh)	Fixed Charges	Energy Charges (Rs/Kwh)	Fixed Charges	
Steel Melting/ Steel Rerolling Power Intensive)					
For all units	4.10	Rs. 275/kva/month	4.10	Rs. 275/kva/month	
Hoardings/Sign Boards					
For all units	6.20	Rs. 100/kva/month	6.20	Rs. 100/kva/month	

2. EDDD, requests the Hon'ble Commission to approve the fuel purchase adjustment formula including the "k" factor for FY 18-19 as well, which can take care of any variation in the ARR over and above the approved level by the Commission for FY 18-19.



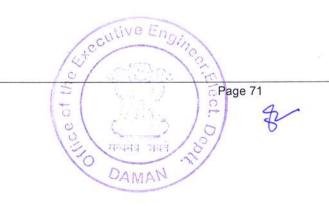
Chapter 5: Determination of Open access charges

3.1 Allocation Matrix

The allocation between wheeling and retail supply business for FY 2017-18 as per the ARR proposed for FY 2017-18 is provided in the table below:

Table 66: Allocation of ARR between Wheeling and Retail Supply

	West Control of the C					
Annual Revenue Requirement	ent Allocation (%)			Allocation FY 2018-19		
Rs. Crs	Wheeling	Supply	Wheeling	Supply		
Fuel Cost	0%	100%	0	0		
Power Purchase Cost	0%	100%	_	926.57		
Employee	70%	30%	11.35	4.86		
R&M	50%	50%	10.40	10.40		
A&G	90%	10%	6.19	0.69		
Depreciation	90%	10%	27.58	3.06		
Interest Cost on Long-term Capital Loans	90%	10%	20.84	2.32		
Interest on Working Capital Loans	22%	78%	0.81	2.89		
Interest on Security Deposit	0%	100%	-	3.69		
Return on Equity	90%	10%	12.21	1.36		
Provision for Bad Debt	0%	100%	-	-		
Annual Revenue Requirement			89.38	955.84		
Less: Non-Tariff Income	0%	100%	-	22.02		
Less: Revenue from Surplus Power Sale	0%	100%	-	0.88		
Less Revenue from OA consumer	0%	100%		15.43		
Net Revenue Requirement			89.38	917.52		



3.2 Voltage wise Wheeling Charges

The EDDD has considered the voltage wise losses for FY 2018-19 as considered by the Hon'ble Commission in its Tariff Order for the FY 2017-18.

The total loss for FY 2018-19 has been considered as 8.30%. The balancing loss has been considered as the loss at the LT level.

To arrive at the network usage, the input energy at each level has been arrived and shown in the table below.

Table 67: Determination of input energy for network usage percentage

Particulars	UoM	FY 2018-19	
Sales at 11 kV and above (HT/EHT)	MU	1,965.96	
Losses in % for HT/EHT network	%	1.81%	
Input required for sales at 11 kV and above	MU	2002.20	
Projected total Input	MU	2750.05	
Projection of HT/EHT network usage	%	72.81%	
Balance proportion of LT network usage	MU	27.19%	

Accordingly the wheeling cost has been considered in the ratio of 72.81:27.19 and the wheeling charge so arrived has been shown in the table below.

Table 68: Wheeling charges proposed for FY 2018-19

Particulars	UoM	S.No.	FY 2018-19
Wheeling Cost	Rs. Crore	A	89.38
Wheeling Cost at HT/EHT network	Rs. Crore	B=A*72.81%	65.07
Input required for sales at 11 kV and above	MU	С	2,002.20
Wheeling Charges for HT/EHT network usage	Rs. per unit	D=B/C*10	0.33
Wheeling Cost for LT network	Rs. Crore	Е	24.31
Input required for sales at LT level	MU	F	747.85
Wheeling Charges for HT/EHT network usage	Rs. per unit	G=E/F*10	0.33

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3.3 Cross Subsidy Surcharge

The cross-subsidy surcharge is based on the following formula as given in the Tariff Policy dated 28.01.2016:

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

Where,

S is the surcharge

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

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

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

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

R is the per unit cost of carrying regulatory assets.

The computation of each item is as below.

Table 69: Calculation of "T"

Particular	Sale (MU)	Revenue from approved tariff (Rs. Crore)	Average Tariff (Rs./kwh)
T	1,965.96	889.21	4.52

Table 70: Calculation of "C"

Station	Energy Procured (MU)	Average Rate (Rs./kwh)	Total Power Purchase Cost (Rs. Crore)
С	2687.03	3.45	926.57

The cross subsidy surcharge based on the above formula is worked out in the table below:



Table 71: Proposed Cross Subsidy Surcharge for FY 2018-19

Cross Subsidy Surcharge	UoM	HT & EHT Industry
T =-	Rs. per kwh	4.52
С	Rs. per kwh	3.45
D	Rs. per kwh	0.33
L	%	1.81%
R		0.00
Surcharge	Rs. per kwh	0.75

3.4 Application and Agreement Fees

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



Chapter 6: Directives

The Hon'ble Commission vide Tariff Order dated 29th May, 2017 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, 2014."

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: Roadmap for reduction in Cross-Subsidy

Directive: The Petitioner is directed to propose a road map for an increase in the tariff rate which progressively reduces to bring the gap between per unit tariff and the average cost of supply over a period of 5 years in two phases i.e. first 3 years from FY 2013-14, FY 2014-15 and FY 2015-16, a review thereafter and further reduction during FY 2016-17 and FY 2017-18.

a. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated March 22' 2013

Petitioner's submission

'The EDDD is pursuing the matter with the Administration of the UT of Daman & Diu and a letter written to the Administration for the same is being enclosed along with this petition as Annexure V^\prime

Commission's Comments

Action taken is noted. Persistent efforts should be made by the Petitioner to formulate the proposed road map for reduction of cross-subsidy and submit the same to the Commission keeping in view the demographics and the consumer-mix of the licensee.

b. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 1st May, 2014



Petitioner's Submission

Not submitted.

Commission's Comments

The Petitioner has not submitted the road-map for reduction of cross-subsidy. The Commission views it seriously; and directs the Petitioner to submit the report along with the next ARR & tariff filing failing which the Commission shall initiate action as per the Act/Regulation.

c. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 31st July, 2015

It is submitted that road-map for reduction of cross-subsidy is under preparation and the report will be submitted to the Commission shortly.

Commission's Comments

The report on the road map for reduction of cross subsidy should be submitted positively by 31st July, 2015.

d. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 6th April, 2016

Petitioner's Submission

The EDDD would like to submit that report on the road map for reduction of cross subsidy is under preparation and shall be submitted to the Hon'ble Commission shortly.

Commission's Comments

17 and FY 2017-18.

The Petitioner is directed to propose a road map for an increase in the Tariff rate which progressively reduces to bring the gap between per unit Tariff and the average cost of supply over a period of 5 years in two phases i.e. first 3 years from FY 2013-14, FY 2014-15 and FY 2015-16, a review thereafter and further reduction during FY 2016-

मन्यम्य जयने हैं DAMAN Page 76 The Petitioner is directed to submit the report by 30 September 2016 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by JERC.

e. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 29th May, 2017

Petitioner's Submission

ED-DD would like to submit that almost 90% of the sales in the UT of Daman and Diu is HT and EHT sales. In such a scenario it would not be feasible to reduce the cross subsidy and bring the Tariff of the domestic consumers at par with the HT consumers.

Commission's Comments

The Commission notes with serious concern that the Petitioner is yet to submit the road map despite repeated directives of the Commission and despite the Petitioner's earlier submissions that report on the road map for reduction of cross subsidy is under preparation, Submitting the fact that almost 90% of the sales in the UT of Daman and Diu are HT and EHT sales as justification for not being able to reduce the cross subsidy cannot be accepted.

The Commission now directs the Petitioner to prepare and submit the above mentioned report

within 3 months of issuance of this Order. Any further non-compliance will be viewed very seriously by the Commission.

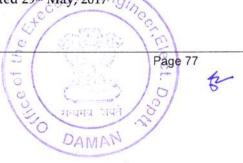
Petitioner's Submission

The EDDD would like to submit that the roadmap for reduction of cross subsidy is being submitted along with this petition as Annexure III.

2. Directive 2: Information for determination of Voltage-wise Wheeling Charges

The Petitioner is directed to provide the details of voltage wise assets and expenses along with the allocation methodology if any for the determination of voltage wise wheeling charges in the next tariff petition.

a. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 29th May, 2017/1977



Petitioner's Submission

The details of voltage-wise assets and expenses along with the allocation methodology shall be

submitted to the Hon'ble Commission shortly.

Commission's Comments

The Commission notes that the Petitioner has not submitted the details of voltage wise assets and expenses along with the allocation methodology as yet.

The Petitioner is now directed to submit the details of voltage wise assets and expenses along with the allocation methodology by 31st July 2017.

Petitioner's Submission

The EDDD would like to submit that the details of voltage wise assets and expenses along with the allocation methodology shall be submitted to the Hon'ble Commission shortly.

3. Directive 3: Management Information System

Directive: The Petitioner is directed to submit the quarterly reports in the RIMS formats specified by CERC from the implemented computerized system.

a. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated March 22nd 2013

Petitioner's Submission

ED-DD had submitted that RACE (Revenue Administration through Computerized Energy Billing System) is running and is being upgraded for all consumers and necessary changes in report generation are also in progress. Simultaneously, the study of preparation of report in the format of RIMS is under progress and is expected to be completed in this financial year.

Commission's Comments

Action taken is noted and the Petitioner is directed to submit the status report and progress of the said facility. The submission should be ensured before the next ARR filing.

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b. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 1st May, 2014

Petitioner's Submission

ED-DD has submitted that integration and validation of the reports in the RIMS format with RACE (Revenue Administration through Computerized Energy Billing System) is under progress and the report would be submitted to the Commission by the end of FY 2013-14.

Commission's Comments

The pending submission should be ensured as per the date committed by the Petitioner.

c. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 31st March, 2015

Petitioner's Submission

The ED-DD would like to submit that the integration and validation of the reports in the RIMS format with RACE (Revenue Administration through Computerized Energy Billing System) has been done and the said facility is running online.

Commission's Comments

Acton taken is noted. A copy of the latest report prepared the RIMS format with RACE (Revenue Administration through Computerized Energy Billing System) may be submitted for perusal of the Commission.

d. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 6th April, 2016

Petitioner's Submission

A copy of the latest report prepared the RIMS format with RACE (Revenue Administration through Computerized Energy Billing System) is being enclosed along with this petition as Annexure I.

Commission's Comments



The Petitioner hasn't submitted the Annexure. A copy of the latest report prepared in the RIMS format with RACE (Revenue Administration through Computerized Energy Billing System) shall be submitted by 30th June 2016 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by JERC.

e. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 29th May, 2017

Petitioner's Submission

The RIMS format were submitted along with the MYT Petition. The formats were again re-submitted on 15th July 2016 to the Commission. The same have been submitted along with the present Tariff Petition.

Commission's Comments

The action taken is noted and the Petitioner is directed to continue submission of the reports on quarterly basis.

Petitioner's Submission

The EDDD would like to submit that the RIMS format for the FY 2016-17 are being submitted along with this petition as **Annexure IV**.

4. Directive 4: Unbundling and Corporatization of Electricity Department as per Electricity Act 2003

Reforms in the Energy sector are absolutely necessary to overhaul the energy sector to make it more vibrant and commercially, viable. As part of the reforms envisaged, the state government will have to consider seriously, the huge monopolistic role of government departments in the generation, transmission and distribution of electricity in the state.

The Electricity Department, Daman and Diu, in consultation with the Government of Daman and Diu, should initiate action for unbundling of the Electricity Department into separate Generation, Transmission and Distribution Departments duly Corporatizing the same.

The action plan for the same may be submitted to the Commission by 31st December, 2015.

The Commission directs the Petitioner that reforms in the Energy sector are absolutely necessary to overhaul the energy sector to make it more vibrant and commercially,



viable. It should initiate action for unbundling of the Electricity Department into separate Generation, Transmission and Distribution Departments duly Corporatizing the same.

a. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 6th April, 2016

Petitioner's Submission

The key function of the EDDD is distribution of electricity in the Union Territory and hence there is very limited scope and usefulness of unbundling the ED-Daman and Diu.

Commission's Comments

The Commission directs the Petitioner that reforms in the Energy sector are absolutely necessary to overhaul the energy sector to make it more vibrant and commercially, viable. It should initiate action for unbundling of the Electricity Department into separate Generation, Transmission and Distribution Departments duly Corporatizing the same.

b. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 29th May, 2017

Petitioner's Submission

The key function of the EDDD is distribution of electricity in the Union Territory and hence there is very limited scope and usefulness of unbundling the ED-Daman and Diu.

Commission's Comments

The Commission has taken a serious view of the fact that the Petitioner is yet to undertake any action on this directive. The Petitioner is directed to take up the matter of unbundling and corporatization of the department with the Government within 3 months of issuance of this Order and submit monthly progress updates for the review of the Commission.

Petitioner's Submission



The EDDD would like to submit that the matter of unbundling and corporatization of the Department is under the consideration of the Administration of UT of Daman and Diu.

5. Directive 5: Implementation of Smart Grid

The Petitioner is directed to submit a detailed action plan by 30 September 2016 for roll out of smart grid in Daman and Diu within this MYT Control Period.

a. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 29th May, 2017

Petitioner's Submission

Meters under the Energy Management System (EMS) have been installed at the substation and the Distribution Transformers throughout the territory of the UT of Daman and Diu to monitor the loading of the distribution system and also for energy accounting purposes. Further, all the

consumers having connected load till 20 HP have also been covered under the EMS to monitor their energy consumption and loading pattern. The ED-DD is now in the process of covering the

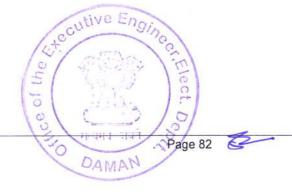
consumers below 20 HP including the domestic and commercial consumers under the EMS.

Commission's Comments

The Commission appreciates the efforts undertaken by the Petitioner. The Commission directs the Petitioner to complete the Roll-out of Smart Grid in the FY 2017-18 and submit quarterly progress reports to the Commission.

Petitioner's Submission

The EDDD would like to submit that the report on implementation of Smart Grid is being submitted along with this petition as Annexure V.



6. Directive 6: Promotion of Solar Generation

The Petitioner is directed to take-up with the Government for formulation of a comprehensive policy for promotion of solar energy in its licensee area especially among the industrial consumers.

a. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 29th May, 2017

Petitioner's Submission

The draft Solar Policy for the UT of Daman and Diu has been prepared and is under the consideration of the Administration. As soon as the Solar Policy is finalized, the same shall be

submitted to the Commission.

Commission's Comments

The Commission appreciates the efforts undertaken by the Petitioner. The Commission directs the Petitioner to take up the matter with Government to finalize the Policy at the earliest and submit the monthly status report on the actions taken.

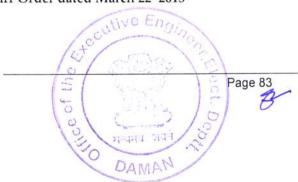
Petitioner's Submission

The EDDD would like to submit that the Solar Policy of the UT of Daman and Diu shall be finalized by March, 2018 and submitted to the Hon'ble Commission. Further, the report on Promotion of Solar generation is being submitted along with this petition as **Annexure VI**.

7. Directive 7: Demand Side Management and Energy Conservation

Directive: Even after 8 months as directed earlier by the Commission, the utility is still in the process of sharing the scope of work and not the result of the study. The Commission directs that the process of completion of the study be expedited and the same shall be submitted to the Commission by November 30′ 2012.

a. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated March 22' 2013



Petitioner's Submission

ED-DD had submitted that studies are being carried out for implementation of the various Demand Side Management (DSM) activities in the UT of Daman & Diu. The final study report of the consultant on DSM implementation shall be submitted to the Commission in this financial year.

Commission's Comments

Action taken is noted. The pending submission should be made before the next ARR filing.

b. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 1st May, 2014

Petitioner's Submission

The final study report of the consultant on DSM implementation has been enclosed along with this submission as Annexure I.

Commission's Comments

The Commission has noted the compliance of the directive by the Petitioner. The Commission finds that no concrete proposal as regards to the DSM implementation has been given in the report. The Commission directs the Petitioner to submit concrete proposals with specific schemes along with timeline and funding sources by September 30′ 2014.

c. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 31st March, 2015

The EDDD would like to submit that a comprehensive scheme for DSM is under preparation and will be submitted shortly to the Hon'ble Commission.

Commission's Comments

The comprehensive scheme for DSM shall cover the LED lighting, demand response and peak load shavings cetc. and the same should be submitted positively by 30th June, 2015.

d. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 6th April, 2016

Petitioner's Submission

The EDDD would like to submit that a comprehensive scheme for DSM shall cover the LED lighting, demand response and peak load shavings etc. is under preparation and shall be submitted to the Hon'ble Commission shortly.

Commission's Comments

The Petitioner is directed to submit the details by 30 September 2016 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by JERC.

e. Compliance/Action Taken by the Petitioner and Commission's comments as per Tariff Order dated 29th May, 2017

Petitioner's Submission

The document containing a comprehensive scheme for DSM covering the LED lighting, demand

response and peak load shavings etc. is being submitted along with this Petition as Annexure II.

Commission's Comments

The Commission appreciates the efforts undertaken by the Petitioner. The Commission directs the Petitioner to roll out the comprehensive scheme for DSM in the FY 2017-18 and submit monthly progress reports to the Commission.

Petitioner's Submission

The EDDD would like to submit that the report on DSM and Energy Efficiency activities undertaken by the Department is being submitted along with this petition as Annexure VII.



8. Directive 8: Enforcement Cell

The Petitioner is directed to submit the status of the functioning of enforcement cell and quarterly progress report detailing number of cases, amount involved sub-judice cases, and reduction in losses as a consequence. The 1st status report for FY 2011-12, first half of FY 2012-13 i.e. April to September 2012 is to be submitted in the ARR filing for FY 2013-14.

a. Compliance / Action Taken by the Petitioner and the Commission's comments as per Tariff Order dated March 22nd 2013

Petitioner's Submission

It is submitted that the Electricity Department Daman & Diu has a separate section headed by Assistant Engineer for Vigilance to conduct vigilance check on all category of consumers. The 1st status report for first half of FY 2012-13 i.e. April to September 2012 will be submitted to the Hon'ble Commission shortly.

Commission Analysis

Action taken is noted. The Commission directs that the process of completion of the study be expedited and the same be submitted to the Commission by September 2013.

b. Compliance/Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 1st May, 2014

Petitioner's Submission

ED-DD has submitted that the report is still with the vigilance department and is being compiled by them. Once it is finalized by the vigilance department and submitted to ED - DD, it will be validated and submitted to the Commission by the end of FY 2013-14.

Commission Analysis

The submission of the Petitioner is noted. The submission of the report should be ensured as per the time-line committed by the Petitioner.

c. Compliance/Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 31st March, 2015

Petitioner's Submission

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The 1st quarter progress report from vigilance department is submitted.

Commission Analysis

The Compliance of the Petitioner is noted. The Petitioner is directed to ensure submission of the reports on half yearly basis as already directed.

d. Compliance/Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 6th April, 2016

Petitioner's Submission

No Response Submitted

Commission Analysis

The Petitioner is directed to ensure submission of the reports on half yearly basis as already directed by 30th September 2016 failing which the Commission will be constrained to take appropriate action under various provisions of Electricity Act 2003 and Regulations framed by JERC.

e. Compliance/Action taken by the Petitioner and the Commission's comments as per Tariff Order dated 6th April, 2016

Petitioner's Submission

The report on the enforcement cell is being submitted along with this Petition as Annexure III.

Commission Analysis

The Commission appreciates the efforts undertaken by the Petitioner. The Commission directs the Petitioner to continue the submission of quarterly status reports to the Commission.

Petitioner's Submission



The EDDD would like to submit that it shall comply with the directive and submit quarterly status reports to the Hon'ble Commission.

B. New Directives

1. Directive 1: Treatment of the accumulated surplus

The Commission directs the Petitioner to adjust the cumulative revenue surplus with:

- 1. The arrear bills issued by CGS.
- The refund of excess cross-subsidy surcharge as directed in the Order dated 09 May 2017 in the Petition No. 231/2017.
- 3. Positive FPPCA

Accordingly, the Petitioner is directed not to levy any FPPCA till this surplus is fully adjusted.

Petitioner's Submission

The EDDD would like to submit that the Department has complied with the Directive given by the Hon'ble Commission and the status of the same is given below:

1. The arrear bills issued by CGS.

The EDDD is not passing the arrears received from the CGS and is adjusting the arrears against the cumulative revenue surplus.

2. The refund of excess cross-subsidy surcharge as directed in the Order dated 09 May 2017 in the Petition No. 231/2017.

Excess cross subsidy of Rs. 6.49 Crores has been refunded to the consumers in compliance to the Order dated 09 May 2017 in the Petition No. 231/2017.

3. Positive FPPCA

Positive FPPCA during the first quarter of Rs. 28.87 Core has not been levied to the consumers and is being adjusted against the cumulative revenue surplus.

4. Directive 2: Impact of variation in amount of Security Deposit

As detailed in section 3.13, average security deposit of Rs 43.06 crore is available with the Petitioner against Rs 53.99 crore claimed in the True-up Petition for the FY 2015-16.

The Commission further observes that the opening amount of security deposit as on 1 April, 2015 now submitted by Petitioner varies from the closing amount for the FY



2014-15 (as approved by the Commission during the True-up of the FY 2014-15 on the basis of past submissions of the Petitioner).

The Commission directs the Petitioner to submit the details and impact of such variation in the ARR of the FY 2014-15 and the same shall be factored in during the Tariff determination process for the next financial year.

Petitioner's Submission

The EDDD would like to submit that the details of consumer security deposit for the period FY 2013-14 to FY 2016-17 is being submitted along with this petition as Annexure VIII.



Tariff Schedule

General Terms and Conditions:

- 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 4000 KVA (including licensee common feeders and express feeders/dedicated feeders) shall generally be at 11 KV and for more than 4000 KVA up to 25000 KVA at 66 KV. For the consumer who requires load more than 25000 KVA load, the supply voltage shall be at 220 KV level. Further, to avoid the overloading of the existing 11 KV feeder the consumers with contracted load of 2000 KVA and above shall have to erect a dedicated feeder.
- 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 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. If the consumer fails to pay the energy bill presented to him by the due date, the Department shall have the right to disconnect the supply after giving 15 days' notice as per provision of the Act and the Supply Code Regulation.
- 7. 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.

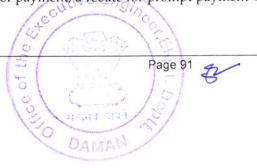


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8. The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 85% of contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of 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*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.

- 9. Unless specifically stated to the contrary, the figures of energy charges relates to paisa per unit (kWh) charge for energy consumed during the month..
- 10. 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 next rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only up to the month of permanent disconnection.
- 11. Advance Payment Rebate: If payment is made in advance well before commencement of consumption period for which bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.
- 12. 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.

13. TOD Tariff: For the purpose of TOD Tariff, the peak/off-peak/normal hours and charges for the corresponding period shall be as under:

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	130% of normal rate of energy charges
Off-peak load period (10:00 p.m to 6:00 a.m)	Normal Rate	85% of normal rate of energy charges

- 14. The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with FPPCA formula separately notified by the Commission under the Regulation. Such charges shall be recovered/refunded in accordance with the terms and conditions specified in the FPPCA formula.
- 15. 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 for the FY 2018-19.

DETAILED TARIFF SCHEDULE

I. (A) Domestic Category

This schedule shall apply to private houses, hostels, hospitals run on Non-commercial lines, Charitable, Educational and Religious Institutions 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./Unit)
0-100 units	110
101-200 units 5	160
4	-

Usage(Units/Month)	Energy Charge (Ps./Unit)
201-400 units	195
401 and above	230

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 5x40 W bulbs only)

Power supply to low income group connections will be charged at Rs.10 per service connection per month upto 30 units. For consumption more than 30 units per month energy charges as defined for domestic category shall be levied. For any unauthorized increase in the load beyond 5*40 watts, penal charges at the rate of Rs.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 for Shops, Offices, Restaurants, Bus Stations, Photo Studios, Laundries, Cinema Theatres, Industrial Lighting, clubs and other Commercial installations.

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./Unit)
1-100 units	240
101 units and above	325

2. Fixed Charges

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



Usage(Rs./Consumer/month)	Fixed Charge
	Three Phase: Rs. 50

III. LT Industrial Category

This schedule shall apply to all Low Tension Industrial Motive Power Connections including water pumps with sanctioned load up to 99 HP.

1. LTP Motive Power

i. Energy Charges

Usage(Units/month)	Energy Charge (Ps./Unit)-
For all units	310

ii. Fixed Charges

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

iii. Power Factor Charges

Any motive power connection above 3 HP running without proper capacitors installed so as to maintain Power Factor 0.90 as per the Commission's Regulation 11/2010 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. In case of abnormal power factor decrease, the department will give the consumer 15 days' time to install appropriate capacitors and maintain the standard power factor. If the consumer is not able to rectify the problem within the notice time, the connection will be liable for disconnection. 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.

iv. Penalty Charges: Twice the applicable charges.

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- a) Penalty charges will be levied on those units which are drawn beyond the contract demand. These units will be worked out on pro-rata basis co-relating the total consumption of the month with billing demand.
- b) If Industries are overdrawing power by more than 20% of the Contract Demand, their electricity connection will be disconnected immediately.

2. LT Public Water Works

i. Energy Charges

Usage(Units/month)	Energy Charge (Ps/Unit)-
For all units	330

ii. Fixed Charges

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

iii. Power Factor Charges

Any motive power connection above 3 HP running without proper capacitors installed so as to maintain Power Factor 0.90 as per the Commission's Regulation 11/2010 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. In case of abnormal power factor decrease, the department will give the consumer 15 days' time to install appropriate capacitors and maintain the standard power factor. If the consumer is not able to rectify the problem within the notice time, the connection will be liable for disconnection. 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.

iv. Penalty Charges: Twice the applicable charges.

a) Penalty charges will be levied on those units which are drawn beyond the contract demand. These units will be worked out on pro-rata basis co-relating the total consumption of the month with billing demand.



b) If consumers are overdrawing power by more than 20% of the Contract Demand, their electricity connection will be disconnected immediately.

IV. 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 105/kVA/month or part thereof

2. Energy Charges

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

- 3. Penalty Charges: Twice the applicable charges.
- a) Penalty charges will be levied on those units which are drawn beyond the contract demand. These units will be worked out on pro-rata basis co-relating the total consumption of the month with billing demand.
- b) If Industries are overdrawing power by more than 20% of the Contract Demand, their electricity connection will be disconnected immediately.

4. Power Factor Charges

(a) The monthly average power factor of the supply shall be maintained by the consumer not less than 0.95 (lagging). If the monthly average power factor of a consumer falls below 95% (0.95 lagging), such consumer shall pay a surcharge in addition to his normal Tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor up to 0.7 (lagging).

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- (b) In case the monthly average power factor of the consumer is more than 98% (0.98 lagging), a power factor incentive @ 1.00% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.98 (lagging).
- (c) If the average power factor is 0.70 (lagging) or below the consumer shall be billed as per the kVAH billing.
- (d) If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.
- (e) The power factor shall be rounded off to two decimal places. For example, 0.944 shall be treated as 0.94 and 0.946 shall be treated as 0.95

5. Billing Demand

Billing demand will be the highest among the following:

- (a) 100 kVA
- (b) 85% of the Contract demand
- (c) Actual Demand Established
- 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
Up to Contract Demand	Rs 275.00/- per kVA per month

2. Energy Charges

Usage(Units/Month)	Tariff (Ps/Unit)
For all units	410

- 3. Penalty Charges: Twice the applicable charges.
- a) Penalty charges will be levied on those units which are drawn beyond the contract demand. These units will be worked out on pro-rata basis co-relating the total consumption of the month with billing demand.



b) If Industries are overdrawing power by more than 20% of the Contract Demand, their electricity connection will be disconnected immediately.

4. Power Factor Charges

- (a) The monthly average power factor of the supply shall be maintained by the consumer not less than 0.95 (lagging). If the monthly average power factor of a consumer falls below 95% (0.95 lagging), such consumer shall pay a surcharge in addition to his normal Tariff @ 1% on billed demand and energy charges for each fall of 0.01 in power factor up to 0.7 (lagging).
- (b) In case the monthly average power factor of the consumer is more than 98% (0.98 lagging), a power factor incentive @ 1.00% on demand and energy charges shall be given for each increase of 0.01 in power factor above 0.98 (lagging).
- (c) If the average power factor is 0.70 (lagging) or below the consumer shall be billed as per the kVAH billing.
- (d) If the average power factor falls below 0.70 (lagging) consecutively for 3 months, the licensee reserves the right to disconnect the consumer's service connection without prejudice for the levy of the surcharge.
- (e) The power factor shall be rounded off to two decimal places. For example, 0.944 shall be treated as 0.94 and 0.946 shall be treated as 0.95

5. Billing Demand

Billing demand will be the highest among the following:

- (a) 100 kVA
- (b) 85% of the Contract demand
- (c) Actual Demand Established

V. 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

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Usage	Tariff (Ps./Unit)
For connected load upto 10 HP	65
Beyond 10 HP and upto 99 HP connected load	95

2. Power Factor Charges

Any motive power connection above 3 HP running without proper capacitors installed so as to maintain Power Factor 0.90 as per the Commission's Regulation 11/2010 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. In case of abnormal power factor decrease, the department will give the consumer 15 days' time to install appropriate capacitors and maintain the standard power factor. If the consumer is not able to rectify the problem within the notice time, the connection will be liable for disconnection. 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.

VI. Public Lighting

3. Energy Charges

Usage	Tariff (Ps./Unit)
For all units	375

VII. Hoardings /Signboards

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
620	Rs 100 per kVA per Month or part Thereof

VIII. 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 are applicable for temporary period of supply up to 1 (one) month, which can be extended for another period of supply up to a maximum period of 2 years.

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
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

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

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c. Service Connection Charges

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 25/meter
2	Three Phase	Rs 50/meter

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

e. Cost of HT connection

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

f. Service connection charges for- Under Ground Lines

- (a) Single phase consumers
- (i) Area outside municipal limit Full cost plus 15% supervision charges
- (ii) Area within municipal limit Rs. 250/- plus Rs. 50/- per meter beyond 30 meters
- (b) Three phase consumers
- (i) Area outside municipal limit Full cost plus 15 % supervision charges
- (ii) Area within municipal limit Rs. 1000/- plus Rs. 100 /- per meter beyond 30 meters



Note: In case of all the connections (both industrial and commercial) U/G service cable and metering system approved by the Department will have to be provided by the consumer at his own cost.

g. 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

h. 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
9	HT Industries above 2500 KVA	15000

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Prayer

- 1. EDDD requests the Hon'ble Commission to:
 - Admit the Aggregate Revenue Requirement for the FY 2018-19 as submitted herewith as well as the revised estimates for FY 17-18.
 - Admit and approve the Trued up ARR for FY 2016-17.
 - 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:

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FORMATS





Format -1

Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 ENERGY DEMAND FY 2016-17

1		No. of Consumers at the end of FY 16-	her I harrange	Energy Sale/Demand
Jar.No.	Category or Consumer	3	5	9
-	Domestic	000	00 100 101	97.89
2	LIG/ Kutir Jyoti	47,403	121,627.00	0.10
3	Commercial	7,875	20,781.00	55.37
4	Agriculture	1,283	3,812.00	2.81
5	LT Industry	1,755	104,148.00	179.85
9	HT/EHT Industry	800	536,544.00	1,407.81
7	Public Lighting	571	880.00	7.89
8	Public Water Works	127	795.00	3.22
6	Temp. Supply	366	672.83	2.17
10	Total	60,180	789,459.83	1,757.11



Format -1

Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 ENERGY DEMAND FY 2017-18

Sr.No.	Category of Consumer	No. of Consumers at the end of FY 17- 18 (Nos.)	Connected Load	Energy Sale/Demand (MUs)
-	2	3	5	9
-	Domestic	700.01	00 404 004	111.95
2	LIG/ Kutir Jvoti	48,93/	132, 124.00	0.15
3	Commercial	8,668	21,984.00	71.54
4	Agriculture	1,312	5,391.00	5.39
5	LT Industry	1,806	116,537.00	187.79
9	HT/EHT Industry	804	563,344.13	1,646.52
7	Public Lighting	596	924.00	9.31
80	Public Water Works	137	905.00	3.40
6	Temp. Supply	0	00.00	3.22
10	Total	62,260	841,209.13	2,039.27



Format -1

Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 ENERGY DEMAND FY 2018-19

		the end of FY 18-		Sale/Demand
Sr.No.	Category of Consumer	19 (Nos.)	Connected Load	(MUs)
-	2	3	5	9
-	Domestic	380 03	722 700 000	118.43
2	LIG/ Kutir Jyoti	50,215	132,700.00	0.15
3	Commercial	8,889	22,158.00	78.94
4	Agriculture	1,342	5,954.00	5.44
5	LT Industry	1,823	118,291.00	193.01
9	HT/EHT Industry	810	591,482.91	1,965.96
7	Public Lighting	622	970.20	9.97
8	Public Water Works	148	913.00	3.37
6	Temp. Supply	0	00.00	3.22
10	Total	63,849	872,549.11	2,378.50



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Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Information regarding AT&C Loss OF Licensee

S. O.	Particulars	Calculation	Unit	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
-	Generation (own as well as any other connected generation net after deducting auxiliary consumption) within area of supply of DISCOM	∢	M	14.48	18.04	18.04
2	Input energy (metered Import) received at interface points of DISCOM network.	œ	M			
m	Input energy (metered Export) by the DISCOM at interface points of DISCOM network.	U	MU	2404	2558	2732
4	Total energy available for sale within the licensed area to the consumers of the DISCOM	D=A+BC	⊇ M	2419	2576	2750
'n	Energy billed to metered consumers within the licensed area of the DISCOM	ш	MU	2226	0360	2522
φ	Energy billed to unmetered consumers within the licensed area of the DISCOM	u.	MU	i		
_	Total energy billed	G=E+F	MU	2214	2360	2522
00	Amount billed to consumer within the licensed area of DISCOM.	I	Rs	780.69	848.27	1009.28
o	Amount realized by the DISCOM out of the amount Billed at H#	_	Rs	794.47	848 27	1009.28
5	Collection efficiency (%) (= Revenue realized/ Amount billed)	J=(I/H)×100	%	101.76%	100 00%	100.00%
11	Energy realized by the DISCOM	K=JxG	MU	2253	2360	2522
12	Distribution loss (%)	L={(DG)/D]×11%	% 11	8.48%	8.40%	8 30%
13	AT&C Loss (%)*	M={(DK)/Djx1 %	1 %	6.87%	8.40%	8.30%



Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE MYT CONTROL PERIOD FY 18-19 ENERGY BALANCE

(all figures in Mus)

Sr.No.	Category of Consumer	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
-	2	4	5	9
(A	ENERGY REQUIREMENT			
-	Energy sales to metered category within the State/UT	1,757.11	2,039.27	2,378.50
2	Energy sales to Agriculture consumers			
8	Open Access Sales	456.63	321.09	143.65
4	Total sales within the State/UT	2,213.74	2,360.36	2,522.14
2	Sales to common pool consumers/ UI	26.61	5.08	5.85
9	Sales outside state/UT			
7	Sales to electricity traders & through PX			
	Sales to other distribution			
	licensees			
	a) Bilateral Trade			
œ	b) Banking Arrangement			
6	Total sales	2,240.35	2,365.44	2,528.00
10	T&D losses			
Ξ	%	8.48%	8.40%	8.30%
(E)	MU	205.22	216.42	228.25
17	Total energy requirement	2,445.57	2,581.86	2,756.25
B)	ENERGY AVAILABILITY			
-	Net own generation	14.48	18.04	18.04
2	Net Purchase	2,020,28	2,296.90	2,668.99
e	Injection through Open access	464.20	326.41	146.03
4	Net power purchase (1 +2 +3)	2,498.96	2,641.36	2,833.06
12	Total energy availability	2,498.96	2,641.36	2,833.06

Format 4

Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19. POWIE PURCHASE COST FY 17-18(RE)

					80000000	1							İ	(Rs. Crores)
		- >	Firm allocation to Licensee (in		Availability/	Licensee	Purchase			9	Others		Credit	Total
Sr.No.	Source	(MM)	MW)	Gen. (MU)	PLF(in %)		(MU)	Dult)	FC (Rs. Cr.)	(Rs. Cr)	(KS. Cr)	Nebate 13	14	15
-	NTPC Stations	,									П	П		
-	KSTPP	2,100	П	16,103		2.32%	359	140	22.66	50.08	1.70			74.43
2	KSTPP-III	900	5.88		88%				6.01	5.56			T	22.58
-	VSTPP-I	1,260	1						4.46	0.50			T	14.25
4	VSTPP.II	1,000				L			8.40	12 42				21 07
0 4	VS VS VS VS VS VS VS VS	500							13.94	12.96				27.49
0 1	VSTESV	500							9.46	9.40				19.04
80	KAWAS	959				П		Ш	19.03	26.77				46.70
6	ddDl	657							23.93	30.93				59.53
0	Sipat-1	1,980							23.73	22.87	1			47.04
=	Spat-II	1,000							6.61	0/6				CD 01
12	MSTPS-I	200							4.80	200			T	684
13	WOUDA-B	000.							151	267				417
9 9	XHS:FF:	000							00.0	000				000
4	000000000000000000000000000000000000000	0							000	0.00				00.0
17	SOLAPUR	099							941	1141				20.82
90	LARA	4,000	П	29,784		%000			000	000	000		1	000
19	GADARWARA	2,640							0000	000		40	100	375.83
138	Subtotal	20,954					1,478		181	535		40	(0)	20,070
= -	NTPC BRISH	500	70.00		%68	14 00%	202	210	82.16	106.57	(0.42)			188 30
- 2	Subtotal	200	70.00	3,881			202	210	82.16	106.57	(0.42)			188.30
=	NPCIL									-			Ī	000
-	KAPPS	440	9.17	3,523	91%	2.08%	0	0	000	17.33	000		Ī	17 22
2	1A00 384	1,080						0		0000				000
	Subfotal	1,620		L				311		17.22				17.22
2	Others			Ш										42.4
-	Ramagin	1,967	36 00	13,785	%08	1.93%	0	0 0	1.30	0 86	0.57			273
2	Subtotal	1,967	38					2			0.0			
>	Power purchase from Indian E Exchange						70							24.50
- 2	[U]						187							41.06
6	Strat						80 0	0 0	000	000	00.00		Ī	000
2	Non Solar	-					0							3.29
0 4	SOUR ATIO	-					0							12.85
1	Subtotal	25,041	379	178,367			275			Ц				82
5	Misc. Arrears													000
5	NTPC Rebate						2 244 04		264 22	441 43	86.6	49.37	(0.47)	665.79
	Gross Power Purchase Cost						0.015.0							
	The state of the s												And Add.	06 300
5	Total Power Purchase						2,314.94		264.22	441.43	9.98	49.37	(10.47)	75 20
4	PGCIL CHARGES	-												0.46
	No.	L												3.85
4	REC					The same								341
2	GE*CO			1	11116	4	1							0.07
9	PGV	-		1	2	0.	1			-				1 93
	Grand Total of Charges			0	1	/	2,314.94							756.31
	The state of the s		1	113			C							
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Electricity Department of Daman & Diu ANNUAL REVENUE RECUIREMENT FOR THE FY 18-19 POWER PURCHASE COST FY 18-19(P)

Capacide	Capacity Libraries (no. 1994) Part Par	Capacity Licenses in Care Noval Particles Capacity Control Capac	Capacity Letters in Capacity Letters Capa													
2,100	1,000 1,00	1,000 1,00	1,000 1,00			Capacity	Firm allocation to Licensec (in	in a	Availability/	Licensee	Purchase		FC (Rs. Cr)	NC NC	Others (Rs. Cr.)	Total (Rs. Cr)
2.00	1,000 10	1,000 1,00	1,000 10	1		(MAIN)	(a a w	Gen. (mo)	E LE LES	7	8	т	10	11	12	13
2 100	1,000 1,00	1,000 1,00	1,000 1,00	1	1	2			,							
1,000 1,10	1,000 1,00	1,000 1,00	1,000 1,00	1	KSTPP	2,100	48 79	16,103	88%		340	140	23.79		0.00	71.33
1,000 12.0 6.65 8.8% 0.8% 0.9% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8% 0.8	1,1000 110,0 110,0 110,0 110,0 110,0 11,0	1,100 1,104 1,10	1,1000 110,00 11	1	KSTPP.III	200	5.88	3,834			41	134	6.31		000	11.80
1,000 10,04 7,665 8,85% 1,10% 77 71 71 71 71 71 71 7	1,000 19 to 7,855 8644 9,854 777 132 875 9,000 2,000 2,145 3,142 8644 2,4544 819 1340 819 1340 9,000 2,000 2,145 3,142 8644 2,444 819 1340 1340 9,000 1,000 2,145 3,142 8644 14,444 14,644 14,644 14,644 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,0	1,1000 19,04 7,845 8,844 9,854 777 132 8,85 1,117 1,000	1,1000 19,04 7,104 19,	1	VSTPP-I	1,260	13.00	9,683			16	158	7.87		000	22.23
1,000 17,0 4 5,685 885% 1,10% 77 1152 882, 17,74 0.00 1,000 17,0 4 5,685 885% 2,49% 87 1152 1253 1253 1254 1,000 17,0 5 1372 885% 2,49% 87 1152 1253 1253 1253 1254 1,000 2,54 13,27 13,28 12,28 14,27 12,51 12,51 12,51 1,000 2,54 13,27 13,28 12,27 13,28 12,27 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000 1,000	1,000	1000 1164 1540 1640 1640 1640 1700 1710	1,000 1,104 5,000 1,104 1,000 1,104 1,000 1,104 1,000		VSTPP-II	1,000	9.04	7,685			63	140	469		000	14 04
1,000 12,43 3,827 8,845 2,46% 87 1458 1458 1,294 0.00 1,000 12,43 3,827 8,949 4,77% 169, 213 9,53 8,55 0.00 1,000 12,43 2,173 2,173 2,78 1,178 1,178 1,198 2,513 1,294 0.00 1,000 12,43 2,173 2,173 2,173 2,249 1,128 1,128 0.00 1,000 12,43 2,173 2,173 2,174 2,174 2,120 2,26 1,129 0.00 1,000 1,130 2,130 2,130 2,130 2,130 2,130 1,128 0.00 1,000 1,130 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,130 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,130 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,130 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,130 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,130 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,130 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,000 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,000 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,000 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,000 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,000 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,000 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,000 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,000 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,000 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,000 2,130 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,000 2,130 2,130 2,130 2,130 2,130 2,130 1,000 1,000 1,000 2,130	1,000 1,14 3,124 1,004 1,14	Second 12-45 33-24 6-544 2-4544 8-15 1-45	Second 12-45 31-24 31-		VSTPP. III	1,000	11.04	7,685			77	152	8.82		000	20.56
1,000 1,10	1,000	1,000 1,00	850 815 373 189 1894 1894 1894 1895 85 100 000 000 000 000 000 000 000 000 00	1	VSTPP. IV	200	12.45	3.842			87	149	14.63		000	27.57
1,000 12,00 2,450 17,00 17,00 1,00	1980 24 24 24 24 24 24 24 2	1,900 3,104 3,440 67% 4,77% 178 178 198 24.91 198 10.00 1,900 2,48 2,724 73% 1,78% 1,78% 1,98 24.91 198 10.00 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,90	1,100 1,104 1,10		VSTPS-V	500	8.15	3,723			55	155	9.93		000	18.48
1,960	1 967	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1967 21 37 3 38 9 67 37 4 178 4 1 448 178 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4	1	KAWAS	959	31.04	3,480			160	213	19.98		000	54.00
1,000 1,00	1,900 2,44 2,724 7734 1734 1754 175 17	1980 26 44 2774 7794 7794 17874 17874 1787	1,900 26.54 27.724 7794 1789	1	JGPP	199	31.37	3,839			178	196	25 13		000	59.98
1,000 1,00	1000	1000 12 42 2190 12 42 12 12 12 12 12 12 12 12 12 12 12 12 12	1000	1	Sipat-I	1,980	24.94	12,724		П	146	135	24.91		000	44.61
1,000 12,45 2,190 699, 410 200 2200 1797 1797 1788 0.00 1,000 100 100 0.00 1,000 100 0.00 0.00 1,000 100 0.00 0.00 1,000 0.00 0.00 0.00 1,000 0.00 0.00 0.00 1,000 0.00 0.00 0.00 1,000 0.00 0.00 0.00 1,000 0.00 0.00 0.00 1,000 0.00 0.00 0.00 1,000 0.00 0.00 0.00 1,000 0.00 0.00 0.00 1,000 0.00 0.00 0.00 1,000 0.00 0.00 0.00 1,000 0.00 0.00 0.00 1,000 0.00 0.00 0.00 1,000 0.00 0.00 0.00 1,000 0.00 0.00 1,000 0.00 0.00 1,000 0.00 0.00 1,000 0.00 0.00 1,000 0.00 0.00 1,000 0.00 0.00 1,000 0.00 0.00 1,000 0.00 0.00 1,000 0.00 0.00 1,000 0.00 0.00 1,000 0.00 0.00 1,000 0.00 0.00 1,0	1,000 16.90 2,499 2,499 16.994 19.90 19.	1000 15 de 2,190 5,090 1,190	1000 15 de 2,140 5,044 15 de 15 de 10 de 17 de 17 de 10 de	1	Sipat-II	1,000	9.72	6,426			25	142	9.25		000	17.33
1,000 16,00 10,00	1000 1690 7480 169W 155 220 150 1000 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1000 1150 7.440 169% 175 220 1504 1000 1100 1100 1100 1100 0 1100	1000 196 0 12	1	MSTPS.I	200	12.45	2,190			20	280	17.97		000	3184
1,000 1,00	100	100	100 100 100 100 100 100 100 100 100 100	1	MOUDA-II	1,000	16 90	7,446			115	270	5.04	(0.1	0 00	36.01
Columbia	Columbia	Color	Columbia	1	KHSTPP-II	1,000	1.30	6,121			7	Ĭ	1.59		0 00	3.34
4,000 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Color Colo	Georgia Geor	Georgia Control Cont	1	KHS1/FST1	0	000	o			0		00.0		000	0.00
4,000 0.00 0.00 0.00 0.00 0.00 0.00 0.00	4 600 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Color Colo	GeO 17 20 28 14 28 54 18 54	1	RSIDS	0	000	0			0		000		0.00	000
4,000 0,00 0,9784 85% 0,00% 0 0 0 0 0 0 0 0 0	4,000 0,00	2,8,00 0,00 20,754 8,595 0,00% 0 0 0 0 0 0 0 0 0	2,840 20 10 10 10 10 10 10 1	1	BUILD IOS	660	12.92	4.814			88		9.88		00.0	9.88
2.56.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00	20,544 20,00 19,657 6594 0,004 1,554 16,0 0,00	2,545 2.00 19,657 6.594 0.00% 1,554 1,554 1,59	25,544 2 20 1 1987 6594 0 00% 1659 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	П	4664	4 000	000	29 784			0		000		0000	0.00
Science 249 149,156 1,554 183 180 253 0	1,554 129 129,156 14,00% 424 210 86.76 104.00 0.00 1,000 170 00 3,811 89.96 14,00% 424 210 86.76 104.00 0.00 1,000 170 00 3,811 170 110 110 110 110 110 1,000 170	1,000 1,00	1,000 1,00	1	Canadiana	2 840	000	19.657			0		000		000	0.00
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Solid 170 00 3,881 8994 14,00% 494 210 86,78 104,00 0.00 444 210 86,78 104,00 0.00 1,000 12.77 2.96 777% 118% 6.28 104,00 0.00 1,000 12.77 2.96 777% 118% 6.00 1.00 0.00 1,000 12.77 2.96 777% 118% 0.00 0.00 1,000 12.77 2.96 777% 118% 0.00 0.00 1,000 13.78 11,000 1.00 0.00 0.00 1,000 13.78 11,000 1.00 0.00 1,000 13.78 11,000 0.00 1,000 13.78 11,000 0.00 1,000 13.78 11,000 0.00 1,000 13.78 11,000 0.00 1,000 12,000 0.00 1,000 12,000 0.00 1,000 0.00 0.00 1,000	1080 70 00 3,881 8994 14 00% 494 210 86,36 104,00 0.00 1080 70 00 3,881 8994 14 00% 494 210 86,36 104,00 0.00 1080 12 77 2,923 777% 119% 66,28 104,00 0.00 1080 12 77 2,923 777% 119% 66,28 104,00 0.00 1080 12 77 2,923 777% 119% 67,00 0.00 1080 12 77 2,923 11,866 14,59 0.00 13 7 0 0 0 1080 13 78 13 78 80% 13 9% 13 9% 0.00 0.00 1080 13 78 178,367 126,00 0.00 1080 12 77 12,967 12,697 1080 12 77 12,967 12,697 12,697 1080 12 77 12,967 12,967 12,967 1080 12 77 12,967 12,967 12,967 1080 12 77 12,967 12,967 1080 12 77 12,967 12,967 12,967 1080 12,967 12,967 12,967 12,967 1080 12,967 12,967 12,967 12,967 1080 12,967 12,967 12,967 12,967 1080 12,967 12,967 12,967 12,967 1080 12,967 12,967 12,967 12,967 1080 12,967 12,967 12,967 12,967 12,967 1080 12,967 12,967 12,967 12,967 12,967 1080 12,967 12,967 12,967 12,967 12,967 1080 12,967 12,967 12,967 12,967 12,967 1080 12,967 12,967 12,967 12,967 12,967 1080 12,967 12,967 12,967 12,967 12,967 12,967 12,967 1080 12,967 12,9	1080 70 00 3,881 8994 14,00% 494 210 86,76 104,00 0.00 1080 70 00 3,881 8994 14,00% 494 210 86,76 104,00 0.00 1080 72 77 3,293 9174 72,484 76 311 0.00 24,350 0.00 1080 72 77 72,486 72,487 72,487 72,43	1,000 70,00 3,881 8,949 14,00% 4,64 210 86,26 104,00 0,00 1,420 77 3,523 91,44 15% 78 14,00 0,00 1,420 77 7,269 774 11% 78 11,00 74 10 0,00 1,420 7,27 7,289 774 11% 78 10 0,00 10 0,00 1,420 7,27 7,289 774 11% 7,00 0,00 1,420 7,27 7,289 7,74 11% 7,00 0,00 1,420 7,27 7,289 7,74 11% 7,00 0,00 1,420 7,27 7,289 7,74 11% 7,00 0,00 1,420 7,27 7,289 7,74 11% 7,00 0,00 1,420 7,44 7,00 7,44 7,00 7,00 0,00 1,420 7,44 7,00 7,44 7,00 7,00 0,00 1,420 7,44 7,00 7,44 7,00 0,00 1,420 7,44 7,44 7,44 7,44 7,00 0,00 1,44 7,4 7,4 7,4 7,4 7,4 7,4 7,4 7,4 1,420 7,4 7,4 7,4 7,4 7,4 7,4 7,4 1,420 7,4 7,4 7,4 7,4 7,4 7,4 1,420 7,4 7,4 7,4 7,4 7,4 7,4 1,420 7,4 7,4 7,4 7,4 7,4 7,4 1,420 7,4 7,4 7,4 7,4 7,4 7,4 1,420 7,4 7,4 7,4 7,4 7,4 1,420 7,4 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 7,4 1,440 7,4 7,4 7,4 1,440 7,4 7,4 7,4 1,440 7,4 7,4 7,4 1,440 7,4 7,4 7,4 1,440 7,4 7,4 7,4 1,440 7,4 7,4 1,440 7,4 7,4 7,4 1,440 7,4 7,4 7,4 1,440 7,4 7,4 7,4 1,440 7,4 7,4 7,4 1,440 7,4 7,4 7,4 1,440 7,4 7,4 7,4 1,440 7,4 7,4 1,440 7,4 7,4 1,440 7,4 7,4 1,440 7,4 7,4 1,440 7,4 7,4 1,440 7,4 7,4	-	Subtotal	40,334	247	140,150								
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Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Investment Plan (year-wise)

		Project Details	ils					SOURCE OF FINANCING FOR SCHEME	ANCING FOR S	SCHEME	
		Nature of					Equity co	Equity component	Subsidi	Consumer	
		Project (Select				Total capital	Internal Accrual		es/	Contributi	
		appropriate	Approved by the		Project	expenditure	(from free		grants	uo	Actual
Name of		code from	Ü	Date (DD-MM-	Date (DD-MM- Completion date	approved by	reserves and	100 PERSON NAME	compon	compone	Expen
scheme	Year of Start	(moleq	(YES/NO)	(X	(DD-MMYY)	JERC (Rs. Cr.)	surblus)	Equity infused**	ent	±	diture
-	2	က	4	5	9	7	8	6	10	1	12
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· 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

1. System augmentation

II. System improvement

c Metering schemes

d Capacitor e. SCADA / DMS etc.

f. Miscellaneous



Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Capital Base and Return

(all figures in Crs)

Sr.No.	Category of Consumer	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Previous Year Current Year FY Ensuing Year FY FY 2016-17 2017-18 2018-19 (Actual) (RE) (Projections)
-	2	4	5	9
-	Gross block at beginning of the year	468.63	534.15	581.89
2	Less accumulated depreciation	181.25	209.08	239.72
က	Net block at beginning of the year	287.39	325.07	342.16
4	Less accumulated consumer contribution	00.00	00.00	00.00
5	Net fixed assets at beginning of the year	287.39	325.07	342.16
9	Reasonable return @3% of NFA	8.62	9.75	10.26



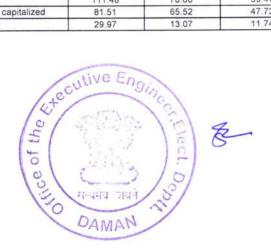
Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Original Cost of Fixed Assets

ſ						Closing		Closing		Closing
		Value of assets	Addition	Closing balance at	Addition	balance at the	Addition	balance at	Addition	bajance at
S. S.	Particulars Name of the	at the beginning of the year	during the FY2015-16	the end of FY2015- during FY2016- end of FY2016-	during FY2016- 17	end of FY2016- 17	during the FY2017-18	the end of FY2017-18	during FY2018-19	the end of FY2018-19
	2	3	4	5	9	7	8	6	10	11
	Plant & Machinery	347.74	63.73	411.48	62.95	474.43	47.73	522.16	58.73	580.90
	Buildings	68.6	13.38	23.26	0.44	23.70	0.00	23.70	00.0	23.70
	Vehicles	0.67	00.0	79.0	00'0	29'0	00.00	79.0	00:00	0.67
	Furniture & Fixtures	0.38	1.48	1.86	0.47	2.33	0.00	2.33	0.00	2.33
	Computers & Others	3.65	2.92	6.57	1.67	8.24	00.00	8.24	0.00	8.24
	Land	24.79	00.00	24.79	00:00	24.79	00'0	24.79	00.0	24.79
	Total	387.13	81.51	468.63	65.52	534.15	47.73	581.89	58.73	640.62



Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Works-in-Progress

Sr.No.	Particulars	FY 15-16 (Actuals)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6
1	Opening balance	79.20	29.97	13.07	11.74
2	Add: New investments	32.28	48.62	46.40	77.23
3	Total	111.48	78.60	59.47	88.97
4	Less investment capitalized	81.51	65.52	47.73	58.73
5	Closing balance	29.97	13.07	11.74	30.24



Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Interest Capitalized

Sr.No.	Particulars	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (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 18-19 Details of loans for the year

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



ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Electricity Department of Daman & Diu

Information regarding restructuring of outstanding loans during the year

(Rs. Crores)

New rate of 10 interest restructured (Rs. in Amount now being crores) 6 Revised rate of interest œ Amount already restructured (Rs. in crores) Old rate of interest 9 Amount of original loan (Rs. in crores) Source of Loan

Sr.No.

N/A



- 811 -

Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Value of Assets and Depreciation Charges

			Previou	Previous Year	Currer	Current Year		Ensuing Year	Year	
		Rate of	Assets value at the		Assets value at the		Assets value at the	3	Assets value at the	33
2	Particulars Name of the	depreciati	beginning of FY 2015-16	Depreciation	beginning of FY 2016-17	Depreciation charges	beginning of FY 2017-18	Depreciation	beginning of FY 2018-19	Depreciation charges
-	Plant & Machinery	5 28%	347.74	18.36	411,48	21.65	474.43	26.31	522,16	29.12
- 6	Building	334%	9 89	0.33	23.26	0.78	23.70	62.0	23.70	0.79
3 2	Vehicles	9 50%	0.67	0.02	0.67	0.01	29.0	90.0	79.0	90.0
0 4	Firmitine & Fixtures	6 33%	0.38	0.02	1.86	0.12	2.33	0.15	2.33	0.15
r u	Computers & Others	6.33%	3.65	0.55	6.57	66.0	8.24	0.52	8.24	0.52
9	Land	0.00%	24.79	00.00	24.79	00.0	24.79	00.00	24.79	00.00
,	Total		387 13	19.28	468.63	23.55	534.15	27.83	581.89	30.64



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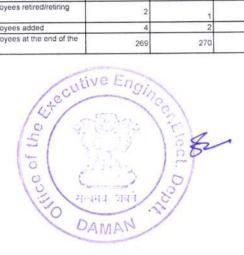
Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Repair and Maintenance Expenses

Sr.No.	Particulars	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	4	5	6
1	Plant & machinery			
	-Plant & Apparatus	1		
	-EHV substations	1		
	- 33kV substation	1		
	- 11kV substation	1		
	- Switchgear and cable connections	1		
	- Others	1		
	Total	1		
2	Building	1		
3	Hydraulic works & civil works	1		
4	Line cable & network	1		
	-EHV Lines	1		
	- 33kV lines	1		
	- 11kV lines	1		
	- LT Lines	1	Breakup not availab	le
	- Meters and metering equipment	1		
	- Others	1		
	Total	1		
5	Vehicles			
6	Furniture & fixtures	1		
7	Office equipments	1		
8	Operating expenses			
9	Total			
10	Add/Deduct share of others (To be specified)			
11	Total expenses			
12	Less capitalized			
13	Net expenses	7		
14	Add prior period *			
15	Total expenses charged to revenue as R&M expenses	17.50	19.10	20.8



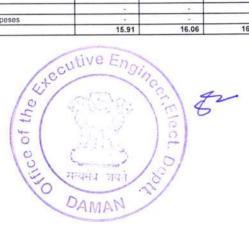
Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Total Number of Employees

Sr.No.	Particulars	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (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	C
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



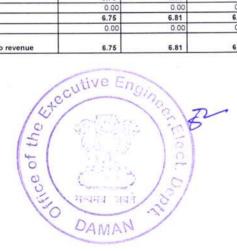
Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Employee Cost

Sr.No.	Particulars	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
		Total	Total	Total
1	2	3	4	5
	Salaries & Allowances			
1	Basic Pay	7.80	7.88	7.98
2	Dearness Pay	2.00	2.02	2.04
3	Dearness Allowance	4.07	4.11	4.15
4	House Rent Allowance	0.85	0.86	0.86
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
	Other allowances (detailed list to be			
8	attached)	0.00	0.00	0.0
a.	Washing allowance	0.00	0.00	0.0
b.	Transport allowance	0.85	0.86	0.8
С	L.T.C.	0.00	0.00	0.0
d.	Children Education All.	0.14	0.14	0.1
e.	Family Planning Allow.	0.03	0.03	0.0
9	Generation incentive	0.00	0.00	0.0
10	Bonus	0.17	0.17	0.1
11	Total	15.91	16.06	16.2
	Terminal Benefits			
12	Leave encashment	===		
13	Gratuity	-	-	
14	Commutation of Pension		10	
15	Workmen compensation	4.		
16	Ex-gratia	¥6		3
17	Total			-
	Pension Payments			
18	Basic Pension			-
19	Dearness Pension			-
20	Dearness Allowance			
21	Any other expenses			
22	Total			
23	Total (11+17+22)	15.91	16.06	16.2
24	Amount capitalized	-		
25	Net amount			
26	Add prior period expeses		-	
27	Grand total	15.91	16.06	16.2



Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Administration and General Expenses

Sr.No.	Particulars	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5
1	Advertisement expenses	0.34	0.35	0.35
2	Amc expense	0.31	0.31	0.33
3	Building Maintanance	0.11	0.11	0.1
4	Celebration expenses	0.73	0.74	0.7
5	Cleanning expense	0.02	0.02	0.0
6	Commission & Brokerage	0.02	0.02	0.0
7	Data download charges & Internet Expenses	0.35	0.35	0.3
8	Diesel expenses	0.07	0.07	0.0
9	Digital document & data entry charge	0.34	0.35	0.3
10	Electric Expense	0.06	0.06	0.0
11	Electricity expenses	0.15	0.15	0.1
12	E-tendring expenses	0.08	0.08	0.0
13	Garden expense	0.44	0.45	0.4
14	ISO Fees	0.01	0.01	0.0
15	License fees ierc	1.05	1.06	
16	Meeting Expense	0.00	0.00	0.0
17	Meter reading expense	0.52	0.53	0.5
18	News paper & magazine expense	0.01	0.01	0.0
19	Office cleaning expense	0.13	0.13	
20	Office expense daman & diu	0.25	0.26	0.2
21	Office rental expenses	0.00	0.00	
22	Postage stamp	0.00	0.00	0.0
23	Printing & stationery expenses	0.28	0.28	-
24	Professional charges	0.63	0.64	
25	Security service charges	0.43	0.43	
26	TCC/WRPC Meeting	0.28	0.28	0.2
27	Telephone expenses	0.07	0.07	0.0
28	Vat Penalty	0.00	0.00	0.0
29	Vehicles maintenence & repairs	0.02	0.02	0.0
30	Water charge expenses	0.01	0.01	0.0
38	Total	6.75	6.81	6.8
39	Add/Deduct share of others (to be specified)	0.70	0.01	
40	Total expenses	6.75	6.81	6.8
41	Less capitalized	0.00	0.00	0.0
42	Net expenses	6.75	6.81	6.8
43	Add prior period	0.00	0.00	0.0
44	Total expenses charges to revenue	6.75	6.81	6.8



Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 17-18 Information regarding Bad and Doubtful Debts

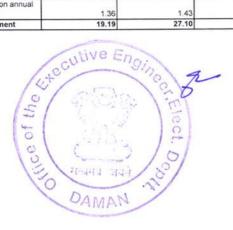
Rs. Crore

Sr.No.	Particulars	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)	
1	2	4	5	6	
- 1	Amount of receivable	780.69	848.27	1,009.28	
1	Provision made for debts in ARR	0.00	0.00	0.00	
			7		



Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Information regarding Working Capital for the current and ensuing year

		Amount (in Crores Rs.)			
Sr.No.	Particulars	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)	
1	2	3	4	5	
1	Receivables of two months of billing	130.12	141.38	168.21	
2	Less power purchase cost of one month	59.61	63.03	77.21	
3	Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt	52.68	52.68	52.68	
4	Inventory for two months based on annual requirement for previous year	1.36	1.43	1.50	
5	Total Working Capital requirement	19.19	27.10	39.82	



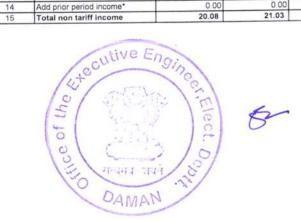
Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 17-18 Information regarding Foreign Exchange Rate Variation (FERV)

Sr.No.	Particulars	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5
1	Amount of liability provided		<u> </u>	
2	Amount recovered		NA	
3	Amount adjusted			



Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Non Tariff Income

Sr.No.	Particulars	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5
1	Meter/service rent	1.14	1.14	1.14
2	Late payment surcharge	12.76	13.40	14.07
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	6.18	6.49	6.82
13	Total income	20.08	21.03	22.02
14	Add prior period income*	0.00	0.00	0.00
15	Total non tariff income	20.08	21.03	22.02



Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Information regarding Revenue from Other Business

Sr.No.	Particulars	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (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 18-19 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



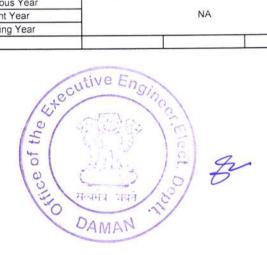
Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Information regarding Wholesale Price Index (All Commodities)

Sr.No.	Period	WPI/CPI	Increase over	
1	2	3	4	
1	FY 2015-16	109.72	-3.65%	
2	FY 2016-17	111.62	1.73%	
3	FY 2017-18	113.90	2.05%	



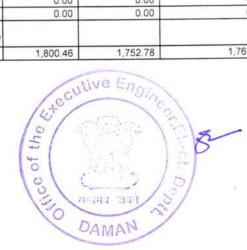
Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Information regarding amount of equity and loan

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



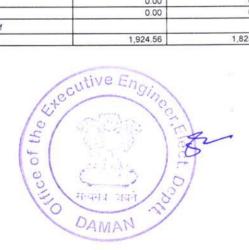
Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19

Sr.No.	Particular	FY 2016-17 Proposed by the Licensee	FY 2016-17 Revised by the Licensee	FY 2016-17 Approved by the Commission (Tariff Order dated 29th May, 2017)	FY 2016-17 Actuals
1	Cost of power purchase	851.98	753.27	726.49	715.30
2	Employee costs	11.23	12.59	11.10	15.91
3	R&M expenses	12.98	13.01	13.57	17.50
4	Administration and General expenses	7,24	6.34	4 96	6.75
5	Depreciation	21.37	23.73	25.10	23.55
6	Interest charges (including interest on working capital	21.67	21.37	22.86	21.85
7	Return on NFA / Equity	7.40	7.17	8.03	8.29
8	Provision for Bad Debt	0.86	0.00	0.00	0.00
9	Interest on security deposit	3.50	3.45	3.50	3.69
10	RPO provisioning to cover backlog of the previous years upto current year	0.00	0.00	0.00	0.00
11	Total revenue requirement	938.23	840.93	815.61	812.83
12	Less: non tariff income	19.86	19.14	19.20	20.08
13	Net revenue requirement (10-11)	918.37	821.79	796.41	792.76
14	Revenue from tariff	862.44	823.96	873.34	818.98
15	Revenue from UI	1.06	0.40	0.13	1,14
16	(Gap)/surplus (12-13)	(54.87)	2.57	77.06	27.36
17	(Gap)/surplus for previous year	56.78	158.84	184 19	184 19
18	Carrying cost	0.00	0.00	20.71	0.00
19	Total gap (14+15)	1.91	161.41	281.96	211.55
20	Revenue surplus carried over	0.00	0.00	0.00	0.00
21	Carrying Cost	0.00	0.00	0.00	0.00
22	Additional revenue from proposed tariff				
23	Energy sales (MU)	1,800.46	1,752.78	1,765.59	1,757.11



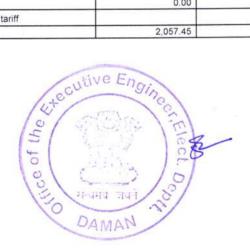
Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19

Sr.No.	Particular	FY 2017-18 Proposed by the Licensee	FY 2017-18 Revised by the Licensee	FY 2017-18 Approved by the Commission (Tariff Order dated 29th May, 2017)
1	Cost of power purchase	929.06	857.51	757.02
2	Employee costs	11.90	12.73	11.62
3	R&M expenses	14.73	13.53	15 16
4	Administration and General expenses	7.67	6,66	5.19
5	Depreciation	25.50	27.87	29.27
6	Interest charges (including interest on working capital	28.92	25.18	26.69
7	Return on NFA / Equity	8.40	12.06	11.79
8	Provision for Bad Debt	0.92	0.00	0.00
9	Interest on security deposit	3.50	3.45	2.99
10	RPO provisioning to cover backlog of the previous years upto current year	0.00	0.00	0.00
11	Total revenue requirement	1,030.60	958.99	859.73
12	Less: non tariff income	20.81	20.05	20.16
13	Net revenue requirement (10-11)	1,009.79	938.94	839.57
14	Revenue from tariff	921.57	857.40	927.78
15	Revenue from UI	1.84	1.96	0.00
16	(Gap)/surplus (12-13)	(86.38)	(79,58)	88.21
17	Gap for previous year	1.92	161.41	281.94
18	Carrying cost	0.00	0.00	29.67
19	Total gap (14+15)	(84.46)	81.83	399.82
20	Revenue surplus carried over	0.00	0.00	0.00
21	Carrying Cost	0.00	0.00	0.00
22	Additional revenue from proposed tariff			
23	Energy sales (MU)	1,924.56	1,825.51	1,843.86



Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19

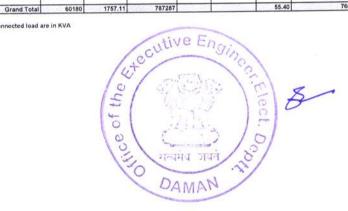
Sr.No.	Particular	FY 2018-19 Proposed by the Licensee	FY 2017-18 Approved by the Commission (Tariff Order dated 6th April, 2016)
1	Cost of power purchase	1,020.15	1,070.28
2	Employee costs	12.61	12.99
3	R&M expenses	18.00	16.62
4	Administration and General expenses	8.13	5.80
5	Depreciation	31.33	31.65
6	Interest charges (including interest on working capital	38.77	28.94
7	Return on NFA / Equity	10.69	18.61
8	Provision for Bad Debt	0.98	0.00
9	Interest on security deposit	3.50	3.05
10	RPO provisioning to cover backlog of the previous years upto current year	0.00	0.00
11	Total revenue requirement	1,144.16	1,187.94
12	Less: non tariff income	21.80	22.02
13	Net revenue requirement (10-11)	1,122.36	1,165.92
14	Revenue from tariff	984.63	1,061.92
15	Revenue from UI	1.63	2.50
16	(Gap)/surplus (12-13)	(136.10)	(101.50)
17	Gap for previous year	(84.46)	(50.71)
18	Carrying cost	0.00	. 0.00
19	Total gap (14+15)	(220.56)	(152.21)
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)	2,057.45	2,057.45



Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Revenue from Existing Tariff

	The state of the s								2016-17
S.No.	Category of Consumers	No. of Consumers	Energy Sales (MU)	Contracted Max Demand KVA	Demand Charges (Rs/KVA)	Tariff Rates (P/unit)	Demand Charges (Rs. In Crore)	Energy Charges (Rs. In Crore)	Total Revenues (Rs. In Crore)
1	Domestic								
	Up to 50 units		30.28		0	1.20		3.63	3.63
	51-200 units		27.85		0	1.80		5.01	5.01
	201-400 units		21.44		. 0	2 20		4.72	4.72
	401 units and above		18.32			2.55		4.67	4.67
_	Total Domestic	47,403	97.89	121827	0		1	18.03	18.03
2	LIGH								
	All units		0.10		10		0.01		0.01
3	NRS/Commercial					L			
	0-100 units		27 22		0	2 65		7.21	7.21
	above 100 units		28.15		0	3.65		10 27	10.27
	Total Commercial	7,875	55.37	20781	0		1	17.49	17.49
								7	
4	Public Lighting	571	7.89	880	0	4.20	0.00	3.31	3.31
5	Public Water Work	127	3.22	795	0		0.02	1.19	1.21
	Above 20 HP Connected Load	-	3.22	795	25	3.70	0.02	1.19	
6	Industrial								
	HT								
	HT (A) General	778	1354.13	523234	105		50.10	636.44	686.55
- 1)	For all units	- 110	1354.13		105	4.70	-	636 44	
- 111	AND DESCRIPTION OF THE PARTY OF	22				1.10	2.92	24.42	27.35
11)	HT (B) Furnace		53.66		275	4.55		24.42	
	For all units	800			367.0	4.55	53.03	660.86	
	Total HT Industrial	800	1407.0	555044			30.00		
bi	LT	1,755	179.8	5 104148			2.34	62.95	
	For all units		179.85	5 104148	25	3.50	2 34	62 95	
	Total HT+LT Industrial	255	1587.66	6 639192			55.37	723.81	779.1
7	Agriculture Consumption	1,28	3 2.8	1 3812	. 0			0.22	
	Upto 10 HP		1.95	5		0.70		0.14	
	Beyond 10 HP		0.8			1.00		0.09	
8	Temporary	365.0	2 1	7 673				1.7	1.7
	All units							***	2004
9	Total Revenue Billed	6018	1757.1	1 787959.83			55.40	766	
	PF Charges								2.3
	PF Incentive								-19.3
12	FPPCA								-19.3
13	OA Charges								-0.2
- 14	Prompt Rebate								1.1
15	U I Charges								-0.7
16	Other Charges								1.3
17	RRAS Charges					-			0.0
	Congestion Charges				1	1	1		0.0

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



Electricity Department of Daman & Diu ANNUAL REVENUE REQUIREMENT FOR THE FY 18-19 Revenue from Existing Tariff

2018-19

S.No.	Category of Consumers	No. of Consumers	Energy Sales (MU)	Contracted Max Demand KVA	Demand Charges (Rs/KVA)	Tariff Rates (P/unit)	Demand Charges (Rs. In Crore)	Energy Charges (Rs. In Crore)	Total Revenues (Rs. In Crore)
1	Domestic		2000000						
	Up to 100 units		39.00		0	1.10		4.29	4.29
	101-200 units		21.86		0	1.60		3 50	3 50
	201-400 units		18.36		0	1.95	-	3 58	3.58
-	401 units and above		39.21			2 30		9 02	9.02
	Total Domestic	50,215	118.43	132780	0			20,39	20.39
2	LIGH								
	All units		0.15		10		0.01		0.01
2	NRS/Commercial				UCATILLE !				12 11 12 12
	0-100 units		38.81		D	2.40		931	9.31
	above 100 units		40.14		0	3.25		13.04	13 04
	Total Commercial	8,889	78.94	22158	0			22.36	22.38
3	Public Lighting	622	9.97	970	0	3.75	0.00	3.74	3.74
4	Public Water Work	148	3.37	913	0		0.02	1.11	1.13
	Above 20 HP Connected Load		3.37		25	3.30	0.02	1.11	
5	Industrial								
	HT								
	HT (A) General	788	1891.00	579673	105		77.48	784.76	862.24
	For all units		1891.00		105	4.15		784.76	
411	HT (B) Furnace	22			275		3.98	30.73	34.7
	For all units	-	74.96		275	4.10		30.73	
	Total HT Industrial	810			(e : - : - : - : - : - : - : - : - : -	DATE TAK	81.45	815.50	896.9
bi	LT	1,823	193.01	118291			3.05	59.83	62.88
	For all units		193.01	118291	25	3.10	3.05	59 83	62.8
6	Total HT+LT Industrial	2633	2158.96	709774			84.51	875.33	959.8
	Agriculture Consumption	1,342	5.44	5954	0			0.39	
	Upto 10 HP		3.78			0.65		0.25	
7	Beyond 10 HP		1.66			0.90		0.15	
	Temporary	0.00	3.22					1.42	
	All units		3.22					1.42	
7	Total Revenue Billed	63849	2378.50	872549.11			84.54	925	
8	FPPCA								0.00
9	OA Charges						- 1000		15 4
	Other Charges			and the same					0.00
	REC charges								0.00
12									0.88
13		63849	2378.50	872549.1095			84.54	925	1025.5

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

