

**Administration of,  
Dadra and Nagar Haveli, U.T.,  
Electricity Department,  
Transmission Division,  
Silvassa.**

No. 1-1(704)/ELE/2017/463

Dtd. 15/12/2017

To,

**The Secretary**

Joint Electricity Regulatory Commission  
(for the state of Goa and Union Territories)  
'VanijyaNikunj', 2nd Floor  
UdyogVihar, Phase V  
Gurgaon, (122016) Haryana...  
Telephone : +91(124) 2342851-53  
Telefax: +91(124) 2342853

**Sub: Approval of Annual Revenue Requirement (ARR) Petition and Tariff Proposal of Electricity Department (Transmission Division) UT of Dadra and Nagar Haveli for FY 2018-19 under section 61, 62 and 64 of The Electricity Act 2003**


Respected Ma'am,

With reference to the above cited subject please find enclosed herewith the Annual Revenue Requirement (ARR) Petition and Tariff Proposal of Electricity Department (Transmission Division) UT of Dadra and Nagar Haveli for FY 2018-19 under section 61, 62 and 64 of The Electricity Act 2003.

The fees for the said petition for an amount of Rs. 20,00,000/- is being enclosed along with this letter (DD No. 126263 dtd. 15/12/2017).

The Electricity Department (Transmission Division) UT of Dadra and Nagar Haveli most respectfully submits the above petition to the Hon'ble Joint Electricity Regulatory Commission.

**Yours faithfully,**

  
(H.M.Patel) 15/12/2017  
Executive Engineer (Trans),  
Electricity Department,  
Transmission Division,  
Silvassa

**List of Enclosures. :-**

1. Six Copies of the ARR & Tariff Petition for FY 2018-19 ( Vol 1)
2. Audited Annual Accounts for the FY 2013-14, FY 2014-15, FY 2015-16 and FY 2016-17 (Annexure I)
3. Fixed Asset Register for the FY 2013-14, FY 2014-15, FY 2015-16 and FY 2016-17 (Annexure II)
4. Feasibility Study Report for installation of Transmission Ring Main System (Annexure III)
5. Transmission Infrastructure Details of Electricity Department (Transmission Division) (Annexure IV)
6. Report on Transmission System Availability (Annexure V)

MANIPAL TECHNOLOGIES LTD. MANIPAL, CT/19/2010

वारी होने की तारीख से तीन महीने तक वैध Valid for 3 Months from date of issue

सेवा में To



**देना बैंक**  
**DENA BANK**

प्रेषक देना बैंक FROM DENA BANK

SILVAGAN  
शाखा  
BRANCH

0250

DATE  
दिनांक

1 5 1 2 2 0 1

15 DEC 2017

माँग किये जानेपर प्राप्त राशि के निमित्त  
On demand pay

\*\*\*\*\* THE SECRETARY JERC GURGAON, HARYANA \*\*\*\*

को या उनके आदेश पर  
Or Order

रुपये  
Rupees

\*\*Twenty Lakh only\*\*

अदा करें

₹ \*\*2000000.00

for value received

आदेशिती शाखा कूट सं.  
DRAWEE BRANCH CODE NO.

7 1 4 0

TM 2126263

रु. दस लाख से अधिक परन्तु एक सौ लाख से कम के लिए।  
For ₹ 10 lakhs and above but below ₹ 100 Lakhs

कृते देना बैंक For Dena Bank

NOT OVER ₹ A/C PAYEE

Accountant

Branch Manager  
Please sign above

TM.....

SERVICE BR-NEW DELHI  
128263

126263 0000180001

16

Below  
Lakhs  
100  
90  
80  
70  
60  
50  
40  
30

ARINDRA KUMAR  
C-7837

AFFIDAVIT

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

File No. \_\_\_\_\_

Case No. \_\_\_\_\_

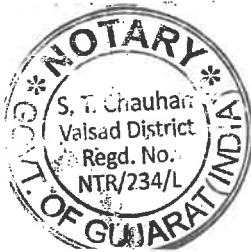
IN THE MATTER OF: Filing of Annual Revenue Requirement (ARR) Petition and  
Tariff Proposal for F.Y.2018-19 for Electricity Department  
(Transmission Division) under Section 61, 62 and 64 of the  
Electricity Act, 2003

AND

IN THE MATTER OF Electricity Department (Transmission Division)  
(hereinafter referred to as "Electricity Department  
(Transmission Division)" or "The Petitioner" or "The  
Department")  
..... Petitioner

I, Shri Harshadrai Mohanlal Patel, son of Shri Mohanlal Patel (aged 54 years), (occupation)  
Government Service residing at Silvassa, the deponent named above do hereby solemnly  
affirm and state on oath as under:

1. That the deponent is the Executive Engineer (Tr.), Electricity Department (Transmission  
Division), who is authorized by the order of the Administration of Dadra & Nagar  
Haveli and is acquainted with the facts deposed as below.
2. I, the deponent name above do hereby verify that the contents of the accompanying  
petition are based on the records of the Electricity Department (Transmission Division)  
maintained in the ordinary course of business and believed them to be true and I  
believe that no part of it is false and no material facts have been concealed therefrom.



Details of enclosures:

Proposal for Annual Revenue Requirement (ARR) Petition and Tariff Proposal for F.Y.2018-19 for determination of tariff.


Petition fee - ₹. 20,00,000/- vide DD No. 126263 dated 15/12/2017 .

As per The Joint Electricity Regulatory Commission for Goa & Union Territories (Conduct of Business) (Fourth Amendment) Regulations, 2015

For the Electricity Department (Transmission Division)

Petitioner




  
Place: काठमाडौं & नगर हवेली, Silvassa  
**Executive Engineer (Trans.)**  
विद्युत विभाग  
**Electricity Department**  
**दादरा एवं नगर हवेली**  
**Dadra & Nagar Haveli**  
**सिलवासा/Silvassa**

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

Advocate

Solemnly affirmed before me on this \_\_\_\_\_ day of September 2017 at \_\_\_\_\_ p.m/a.m by the deponent who has been identified by the aforesaid Advocate. I have satisfied myself by examining the deponent that he understood the contents of the affidavit which has been read over and explained to him. He has also been explained about section 193 of Indian Penal Code that whoever intentionally gives false evidence in any of the proceedings of the Commission or fabricates evidence for purpose of being used in any of the proceedings shall be liable for punishment as per law.

  
**S. T. Chauhan**  
Notary Valsad District,  
Yogi Smruti, Mullawadi,  
Valsad-396 001  
Gujarat-INDIA

Book No.: 1  
Page No.: 41  
Serial No.: 311  
Date: 16/12/2017  
Certificate of Practice  
Valid till: 23/7/2022

Solemnly affirmed before me  
by Shri पुनर्बाल  
who has been identified by Shri  
\_\_\_\_\_ whom I know Personally

Truing up for FY 2014-15, FY 2015-16  
and FY 2016-17,

Review for FY 2017-18

AND

Aggregate Revenue Requirement and  
Tariff Proposal for FY 2018-19

Main Text & Formats (Volume I)

Submitted to:

Joint Electricity Regulatory Commission  
Gurgaon

By

Electricity Department, Transmission Division,  
UT of Dadra and Nagar Haveli

December 2017

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

Filing No.....

Case No.....

IN THE MATTER OF: Filing of Aggregate Revenue Requirement (ARR) for the  
FY 18-19 for Electricity Department, Transmission  
Division, Union Territory of Dadra and Nagar Haveli  
under Section 61, 62 and 64 of the Electricity Act, 2003

AND

IN THE MATTER OF Electricity Department, Transmission Division, UT of  
Dadra and Nagar Haveli  
(hereinafter referred to as "ED-DNH" or "The Petitioner"  
or "The Department")  
..... Petitioner

The Applicant respectfully submits as under: -

1. Electricity Department, Transmission Division is a statutory body engaged in the transmission of electricity in the Union Territory of Dadra & Nagar Haveli. 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 61, 62 and 64 of the Act, Electricity Department, Transmission Division is filing the current Petition, in order to meet its financial requirements.
2. This is a Petition indicating the True up for the FY 2014-15, FY 2015-16 and FY 2016-17, Review for FY 2017-18 and Aggregate Revenue Requirement (ARR) and Tariff Proposal of Electricity Department, Transmission Division for the FY 18-19 (Financial Year 2018-19).

*R. J. J.*

## TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION .....	8
1.1 ELECTRICITY DEPARTMENT, TRANSMISSION DIVISION PROFILE .....	8
1.2 TARIFFS REGULATIONS .....	8
1.3 CONTENTS OF THIS PETITION.....	9
CHAPTER 2: ABOUT THE ELECTRICITY DEPARTMENT, TRANSMISSION DIVISION.....	10
2.1 EXISTING TRANSMISSION SYSTEM OF ELECTRICITY DEPARTMENT, TRANSMISSION DIVISION.....	10
2.2 LOADING PROJECTIONS ELECTRICITY DEPARTMENT, TRANSMISSION DIVISION DURING FY 2018-19 .....	11
CHAPTER 3: TRUE UP FOR FY 2014-15 .....	13
3.1 PRINCIPLES FOR TRUE UP FOR FY 2014-15 .....	13
3.2 OPERATIONS AND MAINTENANCE EXPENSES .....	13
3.3 DEPRECIATION .....	14
3.4 INTEREST AND FINANCE CHARGES.....	15
3.5 INTEREST ON WORKING CAPITAL .....	16
3.6 RETURN ON EQUITY .....	17
3.7 AGGREGATE REVENUE REQUIREMENT FOR FY 2014-15 .....	18
3.8 REVENUE FOR FY 2014-15.....	18
3.9 REVENUE (GAP)/SURPLUS FOR FY 2014-15 .....	18
CHAPTER 4: TRUE UP FOR FY 2015-16.....	20
4.1 PRINCIPLES FOR TRUE UP FOR FY 2015-16.....	20
4.2 OPERATIONS AND MAINTENANCE EXPENSES .....	20
4.3 DEPRECIATION .....	21
4.4 INTEREST AND FINANCE CHARGES.....	22
4.5 INTEREST ON WORKING CAPITAL .....	23
4.6 RETURN ON EQUITY .....	24
4.7 AGGREGATE REVENUE REQUIREMENT FOR FY 2015-16 .....	25
4.8 REVENUE FOR FY 2015-16.....	26
4.9 REVENUE (GAP)/SURPLUS FOR FY 2015-16 .....	26
CHAPTER 5: TRUE UP FOR FY 2016-17 .....	28
5.1 PRINCIPLES FOR TRUE UP FOR FY 2016-17 .....	28
5.2 OPERATIONS AND MAINTENANCE EXPENSES .....	28



5.3	DEPRECIATION .....	29
5.4	INTEREST AND FINANCE CHARGES.....	30
5.5	INTEREST ON WORKING CAPITAL .....	31
5.6	RETURN ON EQUITY .....	32
5.7	AGGREGATE REVENUE REQUIREMENT FOR FY 2016-17 .....	33
5.8	REVENUE FOR FY 2016-17.....	34
5.9	REVENUE (GAP)/SURPLUS FOR FY 2016-17 .....	34
	CHAPTER 6: ANNUAL REVENUE REQUIREMENT FOR FY 2018-19.....	35
6.1	OPERATION & MAINTENANCE COSTS.....	35
6.1.1	EMPLOYEE EXPENSE .....	36
6.1.2	REPAIRS & MAINTENANCE EXPENSE.....	37
6.1.3	ADMINISTRATION & GENERAL EXPENSE.....	38
6.1.4	TOTAL OPERATION AND MAINTENANCE EXPENSE .....	38
6.2	CAPITAL EXPENDITURE PLAN .....	39
6.3	GROSS FIXED ASSETS.....	40
6.4	DEPRECIATION .....	41
6.5	INTEREST & FINANCIAL COSTS.....	42
6.5.1	INTEREST ON LONG-TERM / CAPITAL LOANS.....	42
6.5.2	INTEREST ON WORKING CAPITAL BORROWINGS .....	42
6.6	RETURN ON EQUITY .....	43
6.7	NON-TARIFF & OTHER INCOME.....	44
6.8	AGGREGATE REVENUE REQUIREMENT.....	45
	CHAPTER 7: TARIFF DETERMINATION .....	47
7.1	DETERMINATION OF THE TRANSMISSION CAPACITY OF THE SYSTEM .....	47
7.2	TARIFF DETERMINATION.....	47
7.3	REVENUE GAP FOR PREVIOUS YEARS .....	48
	CHAPTER 8: DIRECTIVES.....	49
	COMMISSION'S RESPONSE:.....	53
	COMMISSION'S RESPONSE:.....	54
	COMMISSION'S RESPONSE:.....	54
	PRAYER.....	56

*R. Lij.*



**LIST OF TABLES**

TABLE 1: STATUS OF TRANSMISSION ASSETS – DC KMS .....	10
TABLE 2: DETAILS OF EXISTING SUBSTATIONS.....	10
TABLE 3: CGS – CENTRAL GENERATION CAPACITY DURING FY 2018-19 .....	12
TABLE 4: CGS – PROJECTED CAPACITY AND ENERGY AVAILABILITY .....	12
TABLE 5: OPERATION & MAINTENANCE EXPENSES FOR FY 2014-15 .....	14
TABLE 6: DEPRECIATION .....	15
TABLE 7: INTEREST AND FINANCE CHARGES .....	15
TABLE 8: INTEREST ON WORKING CAPITAL .....	16
TABLE 9: RETURN ON EQUITY.....	17
TABLE 10: AGGREGATE REVENUE REQUIREMENT FOR FY 2014-15 .....	18
TABLE 11: REVENUE FOR FY 2014-15.....	18
TABLE 12: REVENUE (GAP)/SURPLUS FOR FY 2014-15.....	19
TABLE 13: OPERATION & MAINTENANCE EXPENSES FOR FY 2015-16 .....	21
TABLE 14: DEPRECIATION.....	22
TABLE 15: INTEREST AND FINANCE CHARGES .....	23
TABLE 16: INTEREST ON WORKING CAPITAL APPROVED FOR FY 2015-16 .....	24
TABLE 17: INTEREST ON WORKING CAPITAL FOR FY 2015-16 .....	24
TABLE 18: RETURN ON EQUITY.....	25
TABLE 19: AGGREGATE REVENUE REQUIREMENT FOR FY 2015-16 .....	25
TABLE 20: REVENUE FOR FY 2015-16.....	26
TABLE 21: REVENUE (GAP)/SURPLUS FOR FY 2015-16.....	27
TABLE 22: OPERATION & MAINTENANCE EXPENSES FOR FY 2016-17 .....	29
TABLE 23: DEPRECIATION .....	30
TABLE 24: INTEREST AND FINANCE CHARGES .....	31
TABLE 25: INTEREST ON WORKING CAPITAL FOR FY 2016-17 .....	31
TABLE 26: RETURN ON EQUITY.....	33
TABLE 27: AGGREGATE REVENUE REQUIREMENT FOR FY 2016-17 .....	33
TABLE 28: REVENUE FOR FY 2016-17 .....	34
TABLE 29: REVENUE (GAP)/SURPLUS FOR FY 2016-17.....	34
TABLE 30: PROJECTED EMPLOYEE EXPENSE FOR FY 18-19 .....	37
TABLE 31: PROJECTED REPAIRS & MAINTENANCE EXPENSE FOR FY 18-19 .....	37
TABLE 32: PROJECTED A&G EXPENSES FOR FY 18-19.....	38
TABLE 33: TOTAL O&M EXPENSE FOR FY 18-19 .....	39
TABLE 34: ONGOING SCHEMES .....	40
TABLE 35: CAPITAL EXPENDITURE & CAPITALIZATION FOR FY 18-19.....	40
TABLE 36: OPENING AND CLOSING GFA IN FY 18-19.....	41
TABLE 37: DEPRECIATION.....	41
TABLE 38: TOTAL INTEREST ON LONG-TERM LOANS.....	42
TABLE 39: INTEREST ON WORKING CAPITAL FOR FY 18-19 .....	43
TABLE 40: RETURN ON EQUITY FOR FY 18-19 .....	44
TABLE 41: NON-TARIFF INCOME FOR FY 18-19 .....	45
TABLE 42: AGGREGATE REVENUE REQUIREMENT FOR FY 18-19 .....	45
TABLE 43: TRANSMISSION CAPACITY OF THE TRANSMISSION SYSTEM.....	47
TABLE 44: DETERMINATION OF TRANSMISSION TARIFF (RS. /MW/DAY).....	47
TABLE 45: DETERMINATION OF TRANSMISSION TARIFF (RS. /UNIT).....	48



ACRONYM	DEFINITION
A&G Expenses	Administrative & General Expenses
CEA	Central Electricity Authority
CERC	Central Electricity Regulatory Commission
CPP	Captive Power Plant
Ckt. Km / ckm	Circuit Kilometres
Discom	Distribution Company
EA 2003	Electricity Act 2003
G,T and D	Generation, Transmission and Distribution
IPPs	Independent Power Producers
IDC	Interest During Construction
MU	Million Units
MYT	Multi-Year Tariff
ND	Normal Development
PE	Power Evacuation
O&M	Operations and Maintenance
R&M Expenses	Repair & Maintenance Expenses
RoE	Return on equity
T&D	Transmission and Distribution
GFA	Gross Fixed Assets
R&M	Renovation & Modernisation
S/S	Sub Station
O&M	Operation & Maintenance
PGCIL	Power Grid Corporation of India Limited



**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, Formats and Annexure (Volume II)**

*Elif.*

## Chapter 1: Introduction

---

### 1.1 Electricity Department, Transmission Division Profile

The power sector has grown significantly since 1950s, in terms of capacity of its generation and transmission & distribution (T&D) assets. Presently the sector and its business arrangements are in transition from a monopolistic government control system to market driven competition. Electricity Act 2003 (EA 2003) provides for consolidation of laws relating to generation, transmission, distribution, trading & use of electricity and for taking measures to restructuring the power sector, promoting competition, protecting customer interests and ensuring viability of the sector. Amongst other steps like open access etc, EA 2003 mandated unbundling of State Electricity Boards (SEB) into generation, transmission and distribution businesses.

The share of power generated by Central Sector Stations is transmitted to load centers in the UT of Dadra and Nagar Haveli through an extensive network of 400KV, 220KV, and 132KV, transmission lines and substations. The major functions of ED-DNH are:

1. Ensure reliable supply energy to DNHPDCL which in turn supplies power to the end consumers across the state.
2. Development of transmission network to meet the growing needs of the DNHPDCL.
3. Provide short term open access depending upon the margins in the existing facilities.

### 1.2 Tariffs Regulations

ED-DNH's tariffs are governed by JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. The regulations provide a framework for calculating tariffs on a cost-plus basis and allow the licensee to recover operational expenses including depreciation, interest on working capital and debt, and return on equity amongst others.

*alip*

**1.3 Contents of this Petition**

The present Tariff Petition is being submitted in compliance with the provisions of JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. This Petition covers the True up of FY 2014-15, FY 2015-16, FY 2016-17, Review for GY 2017-18 and basis, assumptions and projections of individual elements constituting the determination of Aggregate Revenue Requirement of the ED-DNH for the FY 2018-19.



## Chapter 2: About the Electricity Department, Transmission Division

### 2.1 Existing Transmission System of Electricity Department, Transmission Division

Key assets of Electricity Department, Transmission Division include the transmission lines and sub-stations. The total length of the transmission assets as on March 31, 2015 was 36.88 DC Kilo meters (DC Kms). The EHV lines in DC km existing at end of FY 2015-16 and their growth are shown in the table below:

**Table 1: Status of Transmission Assets - DC kms**

ASSETS	UNITS	FY 2015-16
EHT		
220 KV lines	DC kms	36.88

The details of existing substations of the Electricity Department, Transmission Division are as given below:

**Table 2: Details of existing Substations**

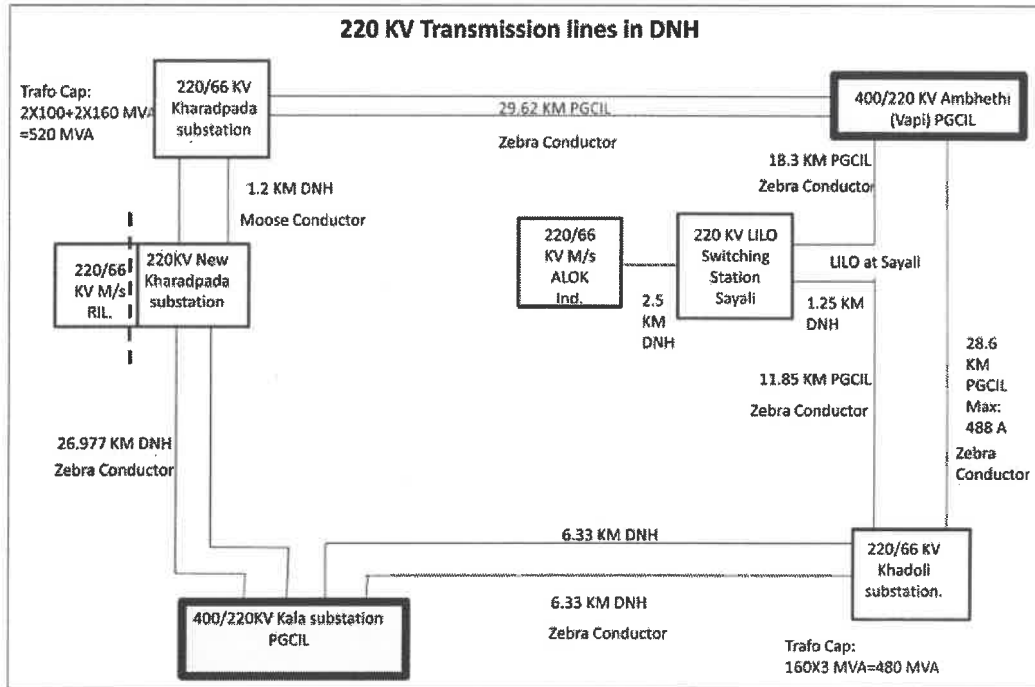
SR. NO.	SUB-STATION	CAPACITY	TOTAL
1	400 KV Ambheti-Vapi Sub-Station (CTU-PowerGrid)	3 x 315 MVA	945 MVA
2	400 KV Kala Sub-Station (CTU-Power Grid)	2 x 315 MVA	630 MVA
3	220 KV Kharadpada Sub-Station	2 x 100 + 2 x 160 MVA	520 MVA
4	220 KV Khadoli Sub-Station	3 x 160 MVA	480 MVA
5	220KV Switching Stations at Sayli and New Kharadpada	02 Nos	
	<b>TOTAL Capacity (220KV Level)</b>		<b>1000 MVA</b>

The present the transmission system of Electricity Department, Transmission Division consists of 36.88 DC km of 220 kV double circuit (D/C) lines.

*Elip.*

At present, the UT of Dadra & Nagar Haveli gets power from 400/220 kV PGCIL Vapi and 400/220 kV Kala substation of PGCIL.

**Figure 1: 220kV Transmission Lines in DNH**



## 2.2 Loading Projections Electricity Department, Transmission Division during FY 2018-19

The objective of this section is to project the availability of power to transmit through Electricity Department, Transmission Division transmission system. Based on the energy availability and transmission through the Electricity Department, Transmission Division system to DNHPDCL, transmission charges are to be arrived at.

## 2.3 Power & Energy availability from Central Sector Generation

Present and future power availability from Central sector against allocated quota during the FY 2018-19 are given below-

**Table 3: CGS – Central Generation Capacity during FY 2018-19**

Name of the plant	Weighted average Infirm allocation	Weighted Average Firm allocation	Weighted average total allocation
KSTPP	51.30	0.00	51.30
KSTPS -3	20.12	2.20	22.32
VSTPP-I	37.60	5.00	42.60
VSTPP-II	28.36	4.00	32.36
VSTPP- III	28.36	6.00	34.36
VSTPP- IV	40.22	5.55	45.77
KAWAS	56.24	25.00	81.24
GGPP	56.75	2.00	58.75
Sipat - I	79.65	9.00	88.65
Sipat - II	26.89	4.00	30.89
KHSTPP - II	3.50	0.00	3.50
Mauda I (MSTPS)	40.22	5.55	45.77
VSTPP-V	20.12	5.55	25.67
Mauda II	53.10	8.60	61.70
NPCIL - KAPS	14.90	2.00	16.90
NPCIL - TAPP 3&4	36.52	7.00	43.52
<b>Total</b>	<b>593.85</b>	<b>91.45</b>	<b>685.30</b>
NSPCL Bhilai		100	100.00
RGPPL		38	38.00
EMCO Energy Ltd. (GMR Group)		200	200.00

On the basis of above power availability , projection of energy availability from central sector plants during the FY 2018-19 has been worked out and given below:-

**Table 4: CGS – Projected Capacity and Energy Availability**

S. No.	Particulars	2018-19
1	Total Capacity in MW	980.00
2	Energy Availability in MU	6722.06

*Relif.*



## Chapter 3: True up for FY 2014-15

---

---

### 3.1 Principles for True up for FY 2014-15

As per JERC Terms and Conditions for determination of Tariff Regulations, 2009, the Hon'ble Commission shall undertake the True Up of licensee for FY 2014-15 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 Regulations, Electricity Department, Transmission Division is filing for True Up for the year FY 2014-15. Information provided in the True Up for FY 2014-15 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.

Accordingly, revised Aggregate Revenue Requirement, revenue and gap for FY 2014-15 are given in the following sections of this chapter.

### 3.2 Operations and Maintenance Expenses

Operations and Maintenance (O&M) Expenses of the company 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 maintenance of the distribution network of the Electricity Department, Transmission Division

*Reliy.*

and form an integral part of the company's efforts 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.

During FY 2014-15, Electricity Department, Transmission Division incurred actual O&M expense of Rs. 5.70 Crore which included Employee cost of Rs. 1.99 Crore, Repair & Maintenance charges of Rs. 3.21 Crore and Administration & General Expenses of Rs. 0.50 Crore as given in the Table below:

**Table 5: Operation & Maintenance Expenses for FY 2014-15**

Particulars	(Rs. Crore)
	FY 2014-15 Actual
Employee Cost	1.99
R&M	3.21
A&G	0.50
O&M Expenses	5.70

Therefore, the Electricity Department, Transmission Division requests the Hon'ble Commission to approve the O&M expenses as per above submission.

### 3.3 Depreciation

The depreciation has been worked out after applying the Depreciation rates as per the JERC (Terms and Conditions for determination of Tariff), Regulations, 2009.

For computation of depreciation, Electricity Department, Transmission Division has considered the opening balance of the GFA for FY 14-15 and subsequently added the assets capitalized in FY 14-15.

Accordingly, the depreciation so arrived and approved depreciation for FY 14-15 are as shown below:

*Rulif.*

**Table 6: Depreciation**

Particulars	(Rs. Crore)
	FY 2014-15 Actual
Opening GFA	123.17
Addition during the year	54.73
Closing GFA	177.90
Average GFA	150.54
Depreciation during the year	7.90

The Electricity Department, Transmission Division, requests the Hon'ble Commission to approve the actual depreciation for FY 14-15 without any deduction.

### 3.4 Interest and Finance Charges

For assessing interest on Loans in FY 14-15, Electricity Department, Transmission Division has considered the Opening Balance of Loans for FY 14-15 equal to the closing balance of loan for the 2013-14. The normative loan addition in FY 14-15 has been computed as 70% of the capitalization for FY 14-15 which works out to Rs. 38.31 Crore. The capitalization for FY 14-15 was Rs. 54.73 Crore as per the annual accounts for FY 14-15.

The repayment of loans has been considered equal to the depreciation during the FY 2014-15. Further the rate of interest has been considered as equal to the SBI PLR of 14.45%.

The total Interest & Financial charges for FY 2014-15 computed by Electricity Department, Transmission Division is as shown below:

**Table 7: Interest and Finance Charges**

Particulars	(Rs. Crore)
	FY 2014-15 Actual
Opening Loan	2.34
Loan for additional Capex (70:30 debt-equity)	38.31
Loan Repayment	7.90
Closing Loan	32.75
Interest Cost on Avg. Loans	2.54

*ulij.*

The Electricity Department, Transmission Division, requests the Hon'ble Commission to approve the interest on loan computed for FY 14-15.

### 3.5 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 (Terms and Conditions for determination of Tariff), Regulations, 2009.

The working capital requirement for the FY 2014-15 has been computed considering the following parameters:

- a. Receivables equivalent to two months of fixed cost
- b. Maintenance spares @15% of operation and maintenance expenses
- c. Operation and maintenance expenses for one month

Electricity Department, Transmission Division has computed interest on working capital at 14.45% (SBI base rate). The interest on working capital for FY 14-15 incurred by Electricity Department, Transmission Division is as shown below:

**Table 8: Interest on Working Capital**

Particulars	(Rs. Crore)
	FY 2014-15 Actual
Receivables equivalent to two months of fixed cost	3.04
Maintenance spares @15% of operation and maintenance expenses	0.86
Operation and maintenance expenses for one month	0.48
<b>Total Working Capital requirement</b>	<b>4.37</b>
<b>Interest on Working Capital</b>	<b>0.63</b>

The Electricity Department, Transmission Division, requests the Hon'ble Commission to approve the interest on working capital computed for FY 14-15.

*ulip.*

### 3.6 Return on Equity

As per the JERC Tariff Regulations, 2009, the Petitioner is entitled for a Return on Equity (RoE). However, the Rate of return has not been specified in the Regulations issued by the JERC.

As per the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014, Generation and Transmission, utilities are entitled for a pre-tax Return on Equity @ 15.50% with an additional return of 0.50% for projects completing before a specified timeline.

A normative debt-equity ratio of 70:30 is considered on the assets capitalized during the FY 2014-15 as per the JERC Tariff Regulations, 2009. As per the Regulations, "For the purpose of determination of tariff, debt-equity ratio in case of existing, ongoing as well as new projects commencing after the date of notification of these Regulations shall be 70:30."

Hence, a normative equity on the assets created after FY 2013-14 is considered and claimed the RoE of 15.50% for FY 2014-15 in this Petition.

The Return on Equity as submitted is shown in the Table below:

**Table 9: Return on Equity**

Particulars	(Rs. Crore)
	FY 2014-15 Actual
Opening Equity	1.06
Addition in Equity on account of new capitalization (70:30 debt-equity)	16.42
Closing Equity	17.48
Average Equity	9.27
<b>Return on Capital Base</b>	<b>1.44</b>

The Electricity Department, Transmission Division, requests the Hon'ble Commission to approve the return on Equity computed for FY 14-15.

*Relif.*

### 3.7 Aggregate Revenue Requirement for FY 2014-15

Based on above expenses, the Table below summarizes Aggregate Revenue Requirement for FY 14-15 for Electricity Department, Transmission Division:

**Table 10: Aggregate Revenue Requirement for FY 2014-15**

Particulars	(Rs. Crore)
	FY 2014-15 Actual
O&M Expense	5.70
Depreciation	7.90
Interest Cost on Long-term Capital Loans	2.54
Interest on Working Capital Loans	0.63
Return on Equity	1.44
<b>Total</b>	<b>18.21</b>
<b>Less:</b>	
Non-Tariff Income	0.00
<b>Annual Revenue Requirement</b>	<b>18.21</b>

Electricity Department, Transmission Division requests the Hon'ble Commission to kindly approve the ARR submitted hereinabove.

### 3.8 Revenue for FY 2014-15

During the FY 2014-15 the Electricity Department, Transmission Division did not raise any bill and hence the revenue collected by the Department was nil for the FY 2014-15.

**Table 11: Revenue for FY 2014-15**

Particulars	(Rs. Crore)
	FY 2014-15 Actual
Revenue @ Existing Tariff	0.00
<b>Total revenue</b>	<b>0.00</b>

### 3.9 Revenue (Gap)/Surplus for FY 2014-15

Electricity Department, Transmission Division has arrived at the trued-up Aggregate Revenue Requirement for FY 14-15 of Rs. 18.21 Crore.

*Rulip.*

This revised Aggregate Revenue Requirement is compared against the revised income with existing tariff. Accordingly, total revenue gap of Electricity Department, Transmission Division for FY 14-15 is computed at Rs. 18.21 Crore as depicted in the Table below:

**Table 12: Revenue (Gap)/Surplus for FY 2014-15**

Particulars	(Rs. Crore)
	FY 2014-15 Actual
Annual Revenue Requirement	18.21
Revenue from sale of power	0.00
Revenue (Gap)/Surplus	(18.21)

Electricity Department, Transmission Division requests the Hon'ble Commission to consider the revenue gap of Rs. 18.21 Crore for FY 14-15 arrived as part of truing up process.

*Relif.*

## Chapter 4: True up for FY 2015-16

---

---

### 4.1 Principles for True Up for FY 2015-16

As per JERC Terms and Conditions for determination of Tariff Regulations, 2009, the Hon'ble Commission shall undertake the True Up of licensee for FY 2015-16 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 Regulations, Electricity Department, Transmission Division is filing for True Up for the year FY 2015-16. Information provided in the True Up for FY 2015-16 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 30<sup>th</sup> March, 2015 for the FY 15-16.

Accordingly, revised Aggregate Revenue Requirement, revenue and gap for FY 2015-16 are given in the following sections of this chapter.

### 4.2 Operations and Maintenance Expenses

Operations and Maintenance (O&M) Expenses of the company 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 maintenance of the distribution network of the Electricity Department, Transmission Division and form an integral part of the company's efforts towards reliable and quality power supply as also in the reduction of losses in the system.

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

The Hon'ble Commission had approved the O&M cost at Rs. 3.45 Crore vide Tariff Order dated 30<sup>th</sup> March, 2015.

During FY 2015-16, Electricity Department, Transmission Division incurred actual O&M expense of Rs. 5.27 Crore which included Employee cost of Rs. 2.72 Crore, Repair & Maintenance charges of Rs. 2.14 Crore and Administration & General Expenses of Rs. 0.41 Crore as given in the Table below:

**Table 13: Operation & Maintenance Expenses for FY 2015-16**

Particulars	(Rs. Crore)	
	FY 2015-16 Approved (30th March, 2015)	FY 2015-16 Actual
Employee Cost	1.29	2.72
R&M	1.98	2.14
A&G	0.18	0.41
O&M Expenses	3.45	5.27

Therefore, the Electricity Department, Transmission Division requests the Hon'ble Commission to approve the O&M expenses as per above submission.

#### 4.3 Depreciation

The depreciation has been worked out after applying the Depreciation rates as per the JERC (Terms and Conditions for determination of Tariff), Regulations, 2009.

*Rulif.*

For computation of depreciation, Electricity Department, Transmission Division has considered the opening balance of the GFA for FY 15-16 and subsequently added the assets capitalized in FY 15-16.

Accordingly, the depreciation so arrived and approved depreciation for FY 15-16 are as shown below:

**Table 14: Depreciation**

Particulars	(Rs. Crore)	
	FY 2015-16 Approved (30th March, 2015)	FY 2015-16 Actual
Opening GFA	147.34	177.90
Addition during the year	40.85	36.61
Closing GFA	188.19	214.52
Average GFA	167.77	196.21
Depreciation during the year	7.62	11.01

The Electricity Department, Transmission Division, requests the Hon'ble Commission to approve the actual depreciation for FY 15-16 without any deduction.

#### 4.4 Interest and Finance Charges

For assessing interest on Loans in FY 15-16, Electricity Department, Transmission Division has considered the Opening Balance of Loans for FY 15-16 equal to the closing balance of loan for the 2014-15. The normative loan addition in FY 15-16 has been computed as 70% of the capitalization for FY 15-16 which works out to Rs. 25.63 Crore. The capitalization for FY 15-16 was Rs. 36.61 Crore as per the annual accounts for FY 15-16.

The repayment of loans has been considered equal to the depreciation during the FY 2015-16. Further the rate of interest has been considered as equal to the SBI PLR of 14.45%.

The total Interest & Financial charges for FY 2015-16 computed by Electricity Department, Transmission Division is as shown below:

*July*

**Table 15: Interest and Finance Charges**

Particulars	(Rs. Crore)	
	FY 2015-16 Approved (30th March, 2015)	FY 2015-16 Actual
<b>Opening Loan</b>	13.17	32.75
Loan for additional Capex (70:30 debt-equity)	28.60	25.63
Loan Repayment	7.62	11.01
<b>Closing Loan</b>	34.15	47.37
<b>Interest Cost on Avg. Loans</b>	3.42	5.79

The Electricity Department, Transmission Division, requests the Hon'ble Commission to approve the interest on loan computed for FY 15-16.

#### 4.5 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 (Terms and Conditions for determination of Tariff), Regulations, 2009.

The working capital requirement for the FY 2015-16 has been computed considering the following parameters:

- d. Receivables equivalent to two months of fixed cost
- e. Maintenance spares @15% of operation and maintenance expenses
- f. Operation and maintenance expenses for one month

Electricity Department, Transmission Division has computed interest on working capital at 14.45% (SBI base rate). The interest on working capital for FY 15-16 incurred by Electricity Department, Transmission Division against that approved by the Hon'ble Commission is as shown below:

**Table 16: Interest on Working Capital approved for FY 2015-16**

(Rs. Crore)

Particulars	FY 2015-16
	Approved (30th March, 2015)
Receivables equivalent to two months of fixed cost	2.88
Operation and maintenance expenses for one month	0.29
Maintenance Spares 1% of historical cost escalated at 6% pa	1.29
<b>Total Working Capital requirement</b>	<b>4.46</b>
<b>Interest on Working Capital</b>	<b>0.64</b>

**Table 17: Interest on Working Capital for FY 2015-16**

(Rs. Crore)

Particulars	FY 2015-16
	Actual
Receivables equivalent to two months of fixed cost	4.41
Maintenance spares @15% of operation and maintenance expenses	0.79
Operation and maintenance expenses for one month	0.44
<b>Total Working Capital requirement</b>	<b>5.63</b>
<b>Interest on Working Capital</b>	<b>0.81</b>

The Electricity Department, Transmission Division, requests the Hon'ble Commission to approve the interest on working capital computed for FY 15-16.

#### 4.6 Return on Equity

As per the JERC Tariff Regulations, 2009, the Petitioner is entitled for a Return on Equity (RoE). However, the Rate of return has not been specified in the Regulations issued by the JERC.

As per the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014, Generation and Transmission, utilities are entitled for a pre-tax Return on Equity @ 15.50% with an additional return of 0.50% for projects completing before a specified timeline.



A normative debt-equity ratio of 70:30 is considered on the assets capitalized during the FY 2015-16 as per the JERC Tariff Regulations, 2009. As per the Regulations, "For the purpose of determination of tariff, debt-equity ratio in case of existing, ongoing as well as new projects commencing after the date of notification of these Regulations shall be 70:30."

Hence, a normative equity on the assets created after FY 2013-14 is considered and claimed the RoE of 15.50% for FY 2015-16 in this Petition.

The Return on Equity as submitted is shown in the Table below:

**Table 18: Return on Equity**

Particulars	(Rs. Crore)	
	FY 2015-16 Approved (30th March, 2015)	FY 2015-16 Actual
Opening Equity	7.82	17.48
Addition in Equity on account of new capitalization (70:30 debt-equity)	12.26	10.98
Closing equity	20.80	28.46
Average Equity	13.95	13.95
<b>Return on Equity</b>	<b>2.16</b>	<b>3.56</b>

The Electricity Department, Transmission Division, requests the Hon'ble Commission to approve the return on Equity computed for FY 15-16.

#### 4.7 Aggregate Revenue Requirement for FY 2015-16

Based on above expenses, the Table below summarizes Aggregate Revenue Requirement for FY 15-16 for Electricity Department, Transmission Division in comparison with values approved by the Hon'ble Commission in the Tariff Order dated 30<sup>th</sup> March, 2015:

**Table 19: Aggregate Revenue Requirement for FY 2015-16**

Particulars	(Rs. Crore)	
	FY 2015-16 Approved (30th March, 2015)	FY 2015-16 Actual
O&M Expense	3.45	5.27

*Reliq.*

Particulars	FY 2015-16	FY 2015-16
	Approved (30th March, 2015)	Actual
Depreciation	7.62	11.01
Interest Cost on Long-term Capital Loans	3.42	5.79
Interest on Working Capital Loans	0.64	0.81
Return on Equity	2.16	3.56
<b>Total</b>	<b>17.29</b>	<b>26.44</b>
<b>Less:</b>		
Non-Tariff Income	0.04	0.00
<b>Annual Revenue Requirement</b>	<b>17.25</b>	<b>26.44</b>

Electricity Department, Transmission Division requests the Hon'ble Commission to kindly approve the ARR submitted hereinabove.

#### 4.8 Revenue for FY 2015-16

During the FY 15-16, Electricity Department, Transmission Division's actual revenue from approved tariff amounted to Rs. 3.23 Crore.

**Table 20: Revenue for FY 2015-16**

Particulars	(Rs. Crore)
	FY 2015-16 Actual
Revenue @ Existing Tariff	3.23
<b>Total revenue</b>	<b>3.23</b>

#### 4.9 Revenue (Gap)/Surplus for FY 2015-16

Electricity Department, Transmission Division has arrived at the trued-up Aggregate Revenue Requirement for FY 15-16 of Rs. 26.44 Crore.

This revised Aggregate Revenue Requirement is compared against the income with existing tariff. Accordingly, total revenue gap of Electricity Department, Transmission Division for FY 15-16 is computed at Rs. 23.21 Crore as depicted in the Table below:

*Relip.*

**Table 21: Revenue (Gap)/Surplus for FY 2015-16**

Particulars	(Rs. Crore)	
	FY 2015-16	
	Actual	
Annual Revenue Requirement	26.44	
Total Revenue	3.23	
Revenue (Gap)/Surplus	(23.21)	

Electricity Department, Transmission Division requests the Hon'ble Commission to consider the revenue gap of Rs. 23.21 Crore for FY 15-16 arrived as part of truing up process.



## Chapter 5: True up for FY 2016-17

---

---

### 5.1 Principles for True Up for FY 2016-17

As per JERC Terms and Conditions for determination of Tariff Regulations, 2009, 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 Regulations, Electricity Department, Transmission Division is filing for 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 31<sup>st</sup> March, 2016 for the FY 16-17.

Accordingly, revised Aggregate Revenue Requirement, revenue and gap for FY 2016-17 are given in the following sections of this chapter.

### 5.2 Operations and Maintenance Expenses

Operations and Maintenance (O&M) Expenses of the company 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.

*Relip.*



Repairs and Maintenance Expenses go towards the day to day maintenance of the distribution network of the Electricity Department, Transmission Division and form an integral part of the company's efforts towards reliable and quality power supply as also in the reduction of losses in the system.

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

The Hon'ble Commission had approved the O&M cost at Rs. 2.85 Crore vide Tariff Order dated 31<sup>st</sup> March 2016.

During FY 2016-17, Electricity Department, Transmission Division incurred actual O&M expense of Rs. 4.46 Crore which included Employee cost of Rs. 2.28 Crore, Repair & Maintenance charges of Rs. 1.91 Crore and Administration & General Expenses of Rs. 0.27 Crore as given in the Table below:

**Table 22: Operation & Maintenance Expenses for FY 2016-17**

Particulars	(Rs. Crore)	
	FY 16-17 Approved (31st March, 2016)	FY 16-17 Actual
Employee Cost	1.16	2.28
R&M	1.51	1.91
A&G	0.18	0.27
<b>O&amp;M Expenses</b>	<b>2.85</b>	<b>4.46</b>

Therefore, the Electricity Department, Transmission Division requests the Hon'ble Commission to approve the O&M expenses as per above submission.

### 5.3 Depreciation

The depreciation has been worked out after applying the Depreciation rates as per the JERC (Terms and Conditions for determination of Tariff), Regulations, 2009.

*Relij.*

For computation of depreciation, Electricity Department, Transmission Division has considered the opening balance of the GFA for FY 16-17 and subsequently added the assets capitalized in FY 16-17.

Accordingly, the depreciation so arrived and approved depreciation for FY 16-17 are as shown below:

**Table 23: Depreciation**

Particulars	(Rs. Crore)	
	FY 16-17 Approved (31st March, 2016)	FY 16-17 Actual
Opening GFA	191.97	214.52
Addition during the year	49.74	15.20
Closing GFA	241.71	229.72
Average GFA	216.84	222.12
Depreciation during the year	9.97	11.39

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

#### 5.4 Interest and Finance Charges

For assessing interest on Loans in FY 16-17, Electricity Department, Transmission Division has considered the Opening Balance of Loans for FY 16-17 equal to the closing balance of loan for the 2015-16. The normative loan addition in FY 16-17 has been computed as 70% of the capitalization for FY 16-17 which works out to Rs. 10.64 Crore. The capitalization for FY 16-17 was Rs. 15.20 Crore as per the annual accounts for FY 16-17.

The repayment of loans has been considered equal to the depreciation during the FY 2016-17. Further the rate of interest has been considered as equal to the SBI PLR of 14.05%.

The total Interest & Financial charges for FY 2016-17 computed by Electricity Department, Transmission Division is as shown below:

*Relif.*

**Table 24: Interest and Finance Charges**

Particulars	(Rs. Crore)	
	FY 16-17 Approved (31st March, 2016)	FY 16-17 Actual
Opening Loan	37.13	47.37
Loan for additional Capex (70:30 debt-equity)	34.82	10.64
Loan Repayment	9.97	11.39
Closing Loan	61.98	46.63
Interest Cost on Avg. Loans	6.96	6.60

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

### 5.5 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 (Terms and Conditions for determination of Tariff), Regulations, 2009.

The working capital requirement for the FY 2016-17 has been computed considering the following parameters:

- g. Receivables equivalent to two months of fixed cost
- h. Maintenance spares @15% of operation and maintenance expenses
- i. Operation and maintenance expenses for one month

Electricity Department, Transmission Division has computed interest on working capital at 14.05% (SBI base rate). The interest on working capital for FY 16-17 incurred by Electricity Department, Transmission Division against that approved by the Hon'ble Commission is as shown below:

**Table 25: Interest on Working Capital for FY 2016-17**

Particulars	(Rs. Crore)	
	FY 16-17 Approved (31st March, 2016)	FY 16-17 Actual
Receivables equivalent to two months of fixed cost	4.16	4.67

*File*

Particulars	FY 16-17	FY 16-17
	Approved (31st March, 2016)	Actual
Maintenance spares @15% of operation and maintenance expenses	0.43	0.67
Operation and maintenance expenses for one month	0.24	0.37
<b>Total Working Capital requirement</b>	<b>4.83</b>	<b>5.71</b>
<b>Interest on Working Capital</b>	<b>0.68</b>	<b>0.80</b>

The Electricity Department, Transmission Division, requests the Hon'ble Commission to approve the interest on working capital computed for FY 16-17.

### 5.6 Return on Equity

As per the JERC Tariff Regulations, 2009, the Petitioner is entitled for a Return on Equity (RoE). However, the Rate of return has not been specified in the Regulations issued by the JERC.

As per the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014, Generation and Transmission, utilities are entitled for a pre-tax Return on Equity @ 15.50% with an additional return of 0.50% for projects completing before a specified timeline.

A normative debt-equity ratio of 70:30 is considered on the assets capitalized during the FY 2016-17 as per the JERC Tariff Regulations, 2009. As per the Regulations, "For the purpose of determination of tariff, debt-equity ratio in case of existing, ongoing as well as new projects commencing after the date of notification of these Regulations shall be 70:30."

Hence, a normative equity on the assets created after FY 2013-14 is considered and claimed the RoE of 15.50% for FY 2016-17 in this Petition.

The Return on Equity as submitted is shown in the Table below:

**Table 26: Return on Equity**

Particulars	(Rs. Crore)	
	FY 16-17 Approved (31st March, 2016)	FY 16-17 Actual
Opening Equity	21.69	28.46
Addition in Equity on account of new capitalization (70:30 debt-equity)	14.92	4.56
Closing Equity	36.61	33.02
Average Equity	29.15	30.74
<b>Return on Equity</b>	<b>4.52</b>	<b>4.76</b>

The Electricity Department, Transmission Division, requests the Hon'ble Commission to approve the return on Equity computed for FY 16-17.

### 5.7 Aggregate Revenue Requirement for FY 2016-17

Based on above expenses, the Table below summarizes Aggregate Revenue Requirement for FY 16-17 for Electricity Department, Transmission Division in comparison with values approved by the Hon'ble Commission in the Tariff Order dated 31<sup>st</sup> March, 2016:

**Table 27: Aggregate Revenue Requirement for FY 2016-17**

Particulars	(Rs. Crore)	
	FY 16-17 Approved (31st March, 2016)	FY 16-17 Actual
O&M Expense	2.85	4.46
Depreciation	9.97	11.39
Interest Cost on Long-term Capital Loans	6.96	6.60
Interest on Working Capital Loans	0.68	0.80
Return on Equity	4.52	4.76
<b>Total</b>	<b>24.98</b>	<b>28.02</b>
<b>Less:</b>		
Non-Tariff Income	0.03	0.00
<b>Annual Revenue Requirement</b>	<b>24.95</b>	<b>28.02</b>

Electricity Department, Transmission Division requests the Hon'ble Commission to kindly approve the ARR submitted hereinabove.

*Aliq.*

**5.8 Revenue for FY 2016-17**

During the FY 16-17, Electricity Department, Transmission Division's actual revenue from approved tariff amounted to Rs. 22.68 Crore.

**Table 28: Revenue for FY 2016-17**

Particulars	(Rs. Crore)
	FY 16-17 Actual
Revenue @ Existing Tariff	22.68
<b>Total revenue</b>	<b>22.68</b>

**5.9 Revenue (Gap)/Surplus for FY 2016-17**

Electricity Department, Transmission Division has arrived at the trued-up Aggregate Revenue Requirement for FY 16-17 of Rs. 28.02 Crore.

This revised Aggregate Revenue Requirement is compared against the income with existing tariff. Accordingly, total revenue gap of Electricity Department, Transmission Division for FY 16-17 is computed at Rs. 5.35 Crore as depicted in the Table below:

**Table 29: Revenue (Gap)/Surplus for FY 2016-17**

Particulars	(Rs. Crore)
	FY 16-17 Actual
Annual Revenue Requirement	28.02
Total Revenue	22.68
Revenue (Gap)/Surplus	(5.35)

Electricity Department, Transmission Division requests the Hon'ble Commission to consider the revenue gap of Rs. 5.35 Crore for FY 16-17 arrived as part of truing up process.

*Rely.*

## Chapter 6: Annual Revenue Requirement for FY 2018-19

---

---

Electricity Department, Transmission Division is submitting its ARR and Tariff petition for the determination of tariff for FY 18-19 broadly on the basis of the principles outlined in Tariff Regulations notified by JERC. Electricity Department, Transmission Division has considered the past trends and taken cognizance of other internal and external developments to estimate the likely performance for FY 18-19.

The following sections explain in detail the basis and forecasts of the following elements for FY 18-19:

- a. Determination of Aggregate Revenue Requirement (ARR) by forecasting the following costs, other income & returns:
  - i. Employee Cost
  - ii. Repairs & Maintenance Cost
  - iii. Admin & General Cost
  - iv. Capital Investment Plan
  - v. Interest Cost
  - vi. Interest on Working Capital
  - vii. Depreciation
  - viii. Return on Equity
  - ix. Non-Tariff Income
  
- b. Tariff proposal for FY 18-19 to meet the Aggregate Revenue Requirement.

### 6.1 Operation & Maintenance Costs

Operation and Maintenance expenses comprise of the following heads:

- **Employees Expenses** which includes the salaries, dearness allowances, dearness pay, other allowances and retirement benefits 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, regulatory and consultancy fees such as energy auditing and chartered accountant fees, conveyance and travel expenses, water charges etc.

The total O&M expense for FY 16-17 was Rs. 4.46 Crores. The methodology adopted by Electricity Department, Transmission Division for projecting the values of each component of the O&M expense for FY 17-18 has been explained in following section.

#### 6.1.1 Employee Expense

The Employee expense estimated by the Petitioner comprise of all costs related to employees like basic salary, dearness allowances, medical cost, leave travel allowances, honorarium, etc. But the Petitioner does not maintain cost related to leave salary contribution and pension 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.

Electricity Department, Transmission Division has considered the actual six monthly employee expenses for FY 17-18 for forecasting the employee expenses for FY 17-18 and the FY 18-19.

Based on the various expense head related to employee booked during six months of FY 17-18, Electricity Department, Transmission Division has estimated the total employee cost for full year of FY 17-18. Employee expenses for FY 18-19 is estimated based on the variation in the rate of WPI Index per annum published by the Office of Economic Adviser, Government of India.

For projecting the employee cost for FY 18-19, the Petitioner has considered an 0.94% escalation over the estimated employee cost for FY 17-18. The employee cost for FY 18-19 is summarized in table below:



**Table 30: Projected Employee Expense for FY 18-19**

Particular	(Rs. Crore)	
	FY 2017-18 RE	FY 2018-19 Projected
Employee Expenses	2.30	2.32

Electricity Department, Transmission Division would like to pray to the Hon'ble Commission that salaries/employee cost increase should be considered as uncontrollable factor specially factors like DA/Basic hike through Government. Therefore, Electricity Department, Transmission Division requests the Hon'ble Commission to approve the employee costs as projected in the foregoing table by the Petitioner.

#### 6.1.2 Repairs & Maintenance Expense

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

The actual R&M expense for FY 16-17 for Electricity Department, Transmission Division was Rs. 1.91 Crore. The revised estimate of R&M expense for FY 17-18 has been estimated at Rs. 3.77 Crore.

Based on WPI index and CPI index, the R&M expense for FY18-19 has been estimated at Rs. 3.83 Crore.

The R&M cost for FY 18-19 is summarized in the Table below:

**Table 31: Projected Repairs & Maintenance Expense for FY 18-19**

Particular	(Rs. Crore)	
	FY 2017-18 RE	FY 2018-19 Projected
R&M Expenses	3.77	3.83

Electricity Department, Transmission Division 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.



### 6.1.3 Administration & General Expense

Administrative and General (A&G) expense comprise of various sub-heads including the following:

- Telephone, postage & telegrams charges;
- Travel and conveyance expenses;
- Consultancy and regulatory fees; and
- Consumer indexing fee

The actual A&G expense for FY 16-17 was Rs. 0.27 Crore. Further, Electricity Department, Transmission Division has estimated the A&G expense of Rs. 0.27 Crore for FY 17-18.

For FY 18-19 the A&G expenses has been projected at Rs. 0.28 Crore in consideration of the above expenses.

The A&G cost for FY 18-19 is summarized in the Table below:

**Table 32: Projected A&G Expenses for FY 18-19**

Particular	(Rs. Crore)	
	FY 2017-18 RE	FY 2018-19 Projected
A&G Expenses	0.27	0.28

Electricity Department, Transmission Division, therefore, requests the Hon'ble Commission to approve the A&G expenses projected for the FY 2017-18.

### 6.1.4 Total Operation and Maintenance Expense

Based on the employee, R&M and A&G expenses projected above, the total O&M expenditure for FY 18-19 is summarized in table below. The Hon'ble Commission is requested to approve the total O&M expense as projected by Electricity Department, Transmission Division.

**Table 33: Total O&M Expense for FY 18-19**

Particulars	(Rs. Crore)	
	FY 2017-18 RE	FY 2018-19 Projected
Employee Cost	2.30	2.32
R&M	3.77	3.83
A&G	0.27	0.28
<b>O&amp;M Expenses</b>	<b>6.34</b>	<b>6.43</b>

## 6.2 Capital Expenditure Plan

ED-DNH has undertaken the capital expenditure for the following purpose:

- I. Laying of new transmission lines
- II. Strengthening of the existing transmission network to cope up with the growing demand and connectivity to the new areas under development.

Further, considering the increasing demand from HT & LT consumers, Electricity Department, Transmission Division would be required to undertake significant capital expenditure for system augmentation and strengthening. System augmentation would not only help Electricity Department, Transmission Division in handling increased load but would also ensure better quality of supply and network reliability to the consumers.

Electricity Department, Transmission Division each year drafts an Annual Plan for the capital investment for new schemes and continuing schemes which it plans to incur in the ensuing year. The details of the same has been given below:

### A. Ongoing Schemes

The ongoing schemes have been given in the table below:

*Relif.*

**Table 34: Ongoing Schemes**

Sr.No.	Name of Scheme	Total Estimated amount (Lakh)	Proposed Expenditure in Lakh.			
			2015-16	2016-17	2017-18	2018-19
1	Establishment of 220/66 KV, 2x160 MVA Sub-Station at Waghchipa with associated transmission line.	6543.00	1055.00	1025.00	1000.00	3463.00
	<b>Total</b>	<b>6543.00</b>	<b>1055.00</b>	<b>1025.00</b>	<b>1000.00</b>	<b>3463.00</b>

The total capital expenditure estimated for the FY 2017-18 is Rs. 10.00 Crore and the total capital expenditure proposed for the FY 2018-19 is Rs. 34.63 Crore. The ongoing scheme in Electricity Department, Transmission Division is Establishment of 220/66 KV, 2x160 MVA Sub-Station at Waghchipa with associated transmission line which has an estimated cost of Rs. 65.43 Crore. Out of the Rs. 65.43 Crore, technical sanction for Rs. 55.07 Crore has been given by the CEA and the technical sanction for the remaining Rs. 10.36 is under consideration of the CEA. A summary of the capital expenditure and capitalization for FY 2017-18 and FY 2018-19 is summarized in Table below:

**Table 35: Capital Expenditure & Capitalization for FY 18-19**

Particulars	(Rs. Crore)	
	FY 2017-18 RE	FY 2018-19 Projected
Capital Expenditure	10.00	34.63
Capitalisation	4.00	19.85

**6.3 Gross Fixed Assets**

The Opening Gross Fixed Assets (GFA) for FY 16-17 was Rs. 214.52 Crore and the asset addition during the FY 2016-17 was Rs. 15.20 Crore. Thus the closing GFA of FY 2016-17 was Rs. 229.72 Crore. Electricity Department, Transmission Division has further proposed an addition of Rs. 4.00 Crore during FY 17-18 and Rs. 19.85 during FY 2018-19.



## 6.5 Interest & Financial Costs

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

Assets capitalized during FY 18-19 have been considered based on normative debt-equity ratio of 70:30 as per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. As per the regulations, "For the purpose of determination of tariff, debt-equity ratio in case of existing, ongoing as well as new projects commencing after the date of notification of these Regulations shall be 70:30."

Hence, the Electricity Department, Transmission Division has considered normative debt on the assets created after FY 2013-14. The 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 18-19 is summarized in Table below:

**Table 38: Total Interest on Long-term Loans**

Particulars	(Rs. Crore)	
	FY 2017-18 RE	FY 2018-19 Projected
Opening Loan	46.63	37.51
Loan for additional Capex (70:30 debt-equity)	2.80	13.90
Loan Repayment	11.91	12.54
Closing Loan	37.51	38.87
Interest Cost on Avg. Loans	5.91	5.37

Therefore, Electricity Department, Transmission Division requests the Hon'ble Commission to approve the interest cost on long-term loans as projected above.

### 6.5.2 Interest on Working Capital Borrowings

Electricity Department, Transmission Division has computed the Interest on Working Capital for FY 18-19 based on normative basis as per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009.

The working capital requirement for FY 18-19 has been computed considering the following parameters:

- a. Receivables equivalent to two months of fixed cost;
- b. Maintenance spares @ 15% of operation and maintenance expenses; and
- c. Operation and maintenance expenses for one month.

A rate of interest of 14.05% has been considered for FY 18-19 on the working capital requirement, being the SBI Prime Lending Rate.

The normative interest on working capital for FY 18-19 considering the above methodology is summarized in the Table below:

**Table 39: Interest on Working Capital for FY 18-19**

Particulars	(Rs. Crore)	
	FY 2017-18 RE	FY 2018-19 Projected
Receivables equivalent to two months of fixed cost	5.04	5.16
Maintenance spares @15% of operation and maintenance expenses	0.95	0.96
Operation and maintenance expenses for one month	0.53	0.54
<b>Total Working Capital requirement</b>	<b>6.52</b>	<b>6.67</b>
<b>Interest on Working Capital</b>	<b>0.92</b>	<b>0.94</b>

Therefore, Electricity Department, Transmission Division requests the Hon'ble Commission to approve the interest cost on working capital as projected above.

#### 6.6 Return on Equity

As per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009, Electricity Department, Transmission Division is entitled for a Return on Equity (RoE). However, the Rate of return has not been specified in the Regulations issued by JERC.

As per the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2014, Generation and Transmission utilities are entitled for a pre-tax Return on Equity of 15.50% with an additional return of 0.50% for projects completing before a specified timeline.

*Elip.*

Assets capitalized during FY 18-19 have been considered based on normative debt-equity ratio of 70:30 as per the JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009. As per the regulations, "For the purpose of determination of tariff, debt-equity ratio in case of existing, ongoing as well as new projects commencing after the date of notification of these Regulations shall be 70:30."

Hence, the Electricity Department, Transmission Division has considered normative equity on the assets created after FY 2013-14. Electricity Department, Transmission Division has claimed RoE of 15.50% for FY 18-19 in this Petition.

The details of the same have been given in the Table below:

**Table 40: Return on Equity for FY 18-19**

Particulars	(Rs. Crore)	
	FY 2017-18 RE	FY 2018-19 Projected
Opening Equity	33.02	34.22
Addition in Equity on account of new capitalization (70:30 debt-equity)	1.20	5.96
Closing equity	34.22	40.18
Average Equity	33.62	37.20
<b>Return on Equity</b>	<b>5.21</b>	<b>5.77</b>

#### 6.7 Non-Tariff & Other Income

The Electricity Department, Transmission Division is doing the O&M work of the 220 kV bays of PGCIL. The revenue earned by the Electricity Department, Transmission Division for doing the O&M work has been included in the non-tariff income.

For estimating the non-tariff income for FY 17-18, the actual non-tariff income during the first six months has been considered and the non-tariff income for the remaining six months has been estimated based on the actual non-tariff income for the first six months. An increase of 5% p.a. has been considered over the estimated non-tariff income of FY 17-18 (revised estimate) to project the non-tariff income for the FY 2018-19.

Details of the year wise non-tariff income is provided in the Table below:

*aly.*

**Table 41: Non-tariff Income for FY 18-19**

Particulars	(Rs. Crore)	
	FY 2017-18 RE	FY 2018-19 Projected
<b>Non-tariff Income</b>	<b>0.050</b>	<b>0.053</b>

**6.8 Aggregate Revenue Requirement**

The following Table summarizes Electricity Department, Transmission Division's Aggregate Revenue Requirement for FY 18-19.

Aggregate Revenue Requirement for FY 18-19 is estimated to be Rs 30.99 Crore.

**Table 42: Aggregate Revenue Requirement for FY 18-19**

Particulars	(Rs. Crore)	
	FY 2017-18 RE	FY 2018-19 Projected
O&M Expense	6.34	6.43
Depreciation	11.91	12.54
Interest Cost on Long-term Capital Loans	5.91	5.37
Interest on Working Capital Loans	0.92	0.94
Return on Equity	5.21	5.77
<b>Total</b>	<b>30.29</b>	<b>31.04</b>
<b>Less:</b>		
Non-Tariff Income	0.05	0.05
<b>Annual Revenue Requirement</b>	<b>30.24</b>	<b>30.99</b>

Aggregate Revenue Requirement (ARR) is the amount required by Electricity Department, Transmission Division to discharge its functions efficiently. It also allows the utility to earn a reasonable amount of return. It consists of a number of cost elements as elaborated in the table below. The justification for each of these expenses has duly been elaborated in the relevant chapters of this report.

Electricity Department, Transmission Division proposes to meet with the revenue requirements through the following modes of recoveries;



- Appropriate transmission cost to be recovered through Transmission Charges from Long Term Open Access consumers in terms of charges per unit or monthly fixed charges.
- Usage based charges for short term open access consumers.

*only.*

## Chapter 7: Tariff Determination

Electricity Department, Transmission Division considers power tariff as a sensitive subject having substantial impact on social, economic and financial well-being of the State as well as the viability and growth of power sector. The transmission tariff has been determined based upon the energy transmitted through the system, aggregate revenue requirement.

### 7.1 Determination of the transmission capacity of the system

The transmission system capacity is the contracted capacity made available to the beneficiary during the given period. The present capacity of Kharadpada substation is 509.60 MW and the present capacity of Khadoli substation is 470.40 MW. The contracted transmission capacity of the system is as under:

**Table 43: Transmission Capacity of the Transmission system**

Tariff Determination	FY 17-18	FY 18-19
Transmission Capacity (MW)	980	980

### 7.2 Tariff Determination

Based upon the projected capacity of the transmission capacity, the tariff in terms of Rs per MW per Day is determined as follows:

**Table 44: Determination of Transmission Tariff (Rs./MW/Day)**

Tariff Determination	FY 17-18	FY 18-19
Aggregate revenue requirement (Rs. Crore)	30.24	30.99
Transmission Capacity (MW)	980	980
Energy Required at periphery	6101.96	6475.44
Long/Medium Term Transmission charges (Rs./MW/Day)	857.22	878.38
Short Term Open Access Transmission charges (Rs./MW/Day)	214.30	219.60

The tariff in terms of Rs. per unit has been computed by considering the energy estimated to be received by the DNHPDCL during the FY 2018-19 from various generating stations. The computation of the same has been given in the table below:

**Table 45: Determination of Transmission Tariff (Rs./unit)**

Tariff Determination	FY 17-18	FY 18-19
Aggregate revenue requirement (Rs. Crore.)	30.24	30.99
Energy required at periphery (MUs)	6101.96	6475.44
Transmission charges (Rs./unit)	0.05	0.05

### 7.3 Revenue Gap for previous years

The total cumulative revenue gap for the period FY 2014-15 to FY 2016-17 as determined in the True up for the relevant years sums upto Rs. 46.77 Crores. The same has to be passed on to the consumers of Electricity Department, Transmission Division by way of increase in the transmission tariff. However, passing the gap in a single year may result in tariff shock for the consumers of Electricity Department, Transmission Division. It is therefore requested that the Hon'ble Commission may pass on the gap by way of increase in the transmission tariff over a period of two to three years or as deemed fit by the Hon'ble Commission.

## **Chapter 8: Directives**

---

The Hon'ble Commission vide Tariff Order dated 19<sup>th</sup> April, 2017 had issued a set of directives to be followed by DNHPDCL to comply with the JERC (Terms and Conditions of Determination of Tariff) Regulations, 2009.

In line with the directives, DNHPDCL 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 DNHPDCL on this matter since the issuance of the aforesaid tariff order.

### **Directive 1: Submission of audited annual accounts along with true up Petitions for the FY 14-15 onwards.**

The Petitioner is directed to submit the Transmission True up Petition of FY 2014-15 along with annual audited accounts of FY 2013-14 & FY 2014-15 with the ARR Tariff Petition of FY 2017-18.

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

The accounts of the transmission business are being maintained separately and the accounts are audited by the Comptroller and Auditor General (CAG), Rajkot.

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

The Commission observes that the Petitioner is yet to submit the True-up Petition of FY 2014-15 along with audited accounts for the FY 2013-14 and FY 2014-15. The Commission reiterates its direction to submit the True-up Petition for the FY 2014-15.

Further, the Commission directs the Petitioner to submit the True-up Petitions for the FY 2015-16 and FY 2016-17 along with the Annual Performance Review of FY 2017-18 and the ARR and Transmission Tariff Petition for the FY 2018-19. In case of further non-compliance, the Commission shall be constrained to take appropriate action against the Petitioner in terms of the applicable Regulations.

*Julif.*

**Petitioner's Submission:**

The Electricity Department Transmission Division would like to submit that it is submitting the True-up Petition of FY 2014-15 along with audited accounts for the FY 2013-14 and FY 2014-15. Further, the Department is also submitting the True-up Petitions for the FY 2015-16 and FY 2016-17 along with the Annual Performance Review of FY 2017-18 and the ARR and Transmission Tariff Petition for the FY 2018-19.

**Directive 2: Functioning of SLDC.**

The Petitioner has submitted that the SLDC is already operational and an Assistant Engineer of the DNHPDCL has been appointed as the nodal officer of the SLDC. The scheduling of power is being done on a day to day basis.

However, as per the provisions of Grid Code Regulations 2010:

“(3)(a) Establishment of SLDC: The State Government of Goa and the Appropriate Governments in respect of Union Territories of Andaman & Nicobar Islands, Chandigarh, Dadra & Nagar Haveli, Daman & Diu, Lakshadweep and Puducherry shall establish a centre to be known as the State Load Despatch Centre (SLDC) in the State of Goa and in the Union Territories. The State Load Despatch Centre shall be operated by a Government company or any Authority or Corporation established or constituted by or under any State Act, as may be notified by Appropriate Government. Until a Government company or any authority or corporation is notified by the Appropriate Government, the State Transmission Utility shall operate the State Load Despatch Centre.

b) Functions of SLDC: State Load Despatch Centre shall discharge the functions as stipulated under Sections 32 (2) and 33 of the Act.

(c) Manning of SLDC:

- i) SLDC shall be manned by qualified and experienced Engineers who are well acquainted with State Transmission System and grid operation.
- ii) Periodical Training shall be imparted to the personnel of the State Load Despatch Centre to update their skills in order to enable them to discharge their functions stipulated under Section 32 (2) & 33 of the Act”

In presence of provisions of Electricity Act 2003 and already laid down sector specific guidelines, the operations of SLDC should not be entrusted with the distribution company (DNHPDCL).

So, the Commission observes that the compliance of relevant directive, issued in Transmission Tariff Order FY 15-16 is still due. Hence, the Commission takes this on a serious note and again directs to the Petitioner to comply the following points:

- ✓ To establish an independent SLDC for DNH.
- ✓ To segregate the accounts of SLDC business and transmission business.
- ✓ Filing separate ARR Petitions for SLDC and transmission business compulsorily from FY 17-18 onwards.

The compliance status report of above directive should be submitted to Commission with in next six month of issuance of this order.

**Petitioner's Submission:**

An independent SLDC has been established and an Assistant Engineer of the DNHPDCL has been appointed as the nodal officer of the SLDC. The scheduling of power is being done on a day to day basis.

Presently the accounts of the SLDC have not been segregated and the SLDC is operational under the DNHPDCL. Once the accounts of the SLDC are segregated the ARR and Tariff Petition of the SLDC shall be filed separately.

**Commission's Response:**

The Commission has noted that the Petitioner has not complied with this directive as per the intent and spirit of the Act and Regulations framed thereunder. The Commission reiterates that in presence of provisions of Electricity Act 2003 and already laid down sector specific guidelines, the operations of SLDC should not be entrusted with the distribution company (DNHPDCL).

So, the Commission observes that the compliance of relevant directive, issued in Transmission Tariff Order FY 2015-16 is still due. Hence, the Commission takes this seriously note and again directs to the Petitioner to comply with the following points:

- ✓ To establish an independent SLDC for DNH.
- ✓ To segregate the accounts of SLDC business and transmission business.

- ✓ To file separate ARR Petitions for SLDC and transmission business compulsorily from FY 2018-19 onwards.

Till the operational and financial segregation of SLDC is complete, the Commission directs the Petitioner to undertake necessary actions to take over operations of the SLDC from DNHPDCL within the next 3 months and report the compliance to the Commission.

**Petitioner's Submission:**

The Electricity Department Transmission Division would like to submit that an independent SLDC has been established for the DNHPDCL which is functioning independently. However, the personnel have been deployed from Electricity Department Transmission Division to run the daily operations of the SLDC. The Electricity Department Transmission Division is in the process of segregating the accounts of SLDC business and the transmission business.

**Directive 3: Submission of feasibility study of transmission ring main system.**

The Petitioner is directed to submit a feasibility study report for installation of ring main system along with other reliability improvement provisions in order to increase transmission network reliability.

**Petitioner's Submission:**

The work of preparing feasibility study report for installation of ring main system along with other reliability improvement provisions in order to increase transmission network reliability has been given to PGCIL. The draft report has been submitted by PGCIL and same shall be finalized within two months.

**Commission's Response:**

The Commission has noted the compliance and directs the Petitioner to submit the final report before 30<sup>th</sup> June 2017.

**Petitioner's Submission:**

The feasibility report is being submitted along with this petition as Annexure III.

*Relly.*

**Directive 4: Submission of O&M allocation methodology.**

The Petitioner is directed to submit basis of O&M allocation between transmission & distribution function (if any). The submission of organization structure and designation hierarchy is also desired, in order to reconcile the O&M expense allocation.

**Petitioner's Submission:**

The O&M allocation methodology shall be submitted shortly to the Commission.

**Commission's Response:**

The Commission observes that the Petitioner is yet to submit the allocation methodology. While DNHPDCL has provided audited accounts to validate their O&M costs, the Petitioner is yet to submit the audited accounts for their licensed business. The Commission directs the Petitioner to submit the audited accounts for the previous years along with the next tariff filing. In case of further non-compliance, the Commission will be constrained to take appropriate action against the Petitioner.

**Petitioner's Submission:**

The audited accounts for the previous years are being submitted along with this petition as **Annexure I**.

**Directive 5: D N & H Transmission Infrastructure data.**

The Petitioner is directed to submit the number of transformers with ratings, transmission bays, transformation capacity (MVA) and transmission circuit-Km details with the ARR Tariff Petition of FY 2017-18.

**Petitioner's Submission:**

The key assets of ED-DNH include the transmission lines and sub-stations. There are 29 numbers of total bays. The total length of the transmission lines as on 31<sup>st</sup> March, 2016 was 36.88 DC Kilo meters (DC Kms). The transformation



III of the CERC (Terms and Conditions of Tariff) Regulations, 2014 from this year onwards and submit the monthly computations for the information of the Commission. The Petitioner shall also make the updated information available on their website.

**Petitioner's Submission:**

The report on transmission system availability is being submitted along with this petition as **Annexure V**.

*R. Lij.*

**Prayer**

1. ED-DNH requests the Honorable Commission to:

- Admit and approve the Aggregate Revenue Requirement of FY 18-19 and revised estimates for the FY 2017-18 as submitted herewith.
- Admit and approve the True up for the FY 2014-15, FY 2015-16 and FY 2016-17 as submitted herewith.
- Make the proposed Transmission Tariffs applicable from April 1, 2018.
- 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**

**Executive Engineer**  
**Electricity Department**  
**Dadra & Nagar Haveli**

**SILVASSA**

**PETITIONER**

**Electricity Department, Transmission Division**  
**UT of Dadra and Nagar Haveli**

**Silvassa**

**Dated: 15-12-2017**

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Investment Plan (Year-wise)

Name of scheme	Year of Start	Project Details				Total capital expenditure approved by JERC (Rs. Cr.)	SOURCE OF FINANCING FOR SCHEME				Actual Expenditure
		Nature of Project (Select appropriate code from below)	Approved by the Commission* (YES/NO)	Project Start Date (DD-MM-YY)	Project Completion date (DD-MMYY)		Equity component		Subsidies / grants component	Consumer Contribution	
1	2	3	4	5	6	7	8	9	10	11	12
<b>NOT APPLICABLE</b>											

**Notes:**

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

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

Codes for selecting Nature of work

- a. EHV Schemes
- b. Distribution schemes
- I. System augmentation
- II. System improvement
- III. Schemes for loss reduction
- c. Metering schemes
- d. Capacitor
- e. SCADA / DMS etc
- f. Miscellaneous

*Rajy.*

**Electricity Department of Dadra & Nagar Haveli**  
**ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19**  
**Capital Base and Return**

*(all figures in Crore)*

Sr.No.	Category of Consumer	Energy Sale (MUs)				
		FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	Gross block at beginning of the year	123.17	177.90	214.52	229.72	233.72
2	Less accumulated depreciation	49.99	61.00	72.39	84.30	96.84
3	Net block at beginning of the year	73.18	116.91	142.13	145.42	136.88
4	Less accumulated consumer contribution	0.00	0.00	0.00	0.00	0.00
5	Net fixed assets at beginning of the year	73.18	116.91	142.13	145.42	136.88
6	Reasonable return @3% of NFA	2.20	3.51	4.26	4.36	4.11

*Ruliy*

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Original Cost of Fixed Assets

Sr.No.	Particulars Name of the Assets	Value of assets at the beginning of previous year	Addition during the FY2014-15	Closing balance at the end of FY 2014-15	Addition during the FY2015-16	Closing balance at the end of FY 2015-16	Addition during FY 2016-17	Closing balance at the end of FY 2016-17	Addition during FY 2017-18	Closing balance at the end of FY 2017-18	Addition during 2018-19	Closing balance at the end of FY 2018-19
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Plant & Machinery	115.52	54.71	170.24	36.58	206.81	15.20	222.02	4.00	226.02	19.85	245.87
2	Buildings	2.42	0.00	2.42	0.00	2.42	0.00	2.42	0.00	2.42	0.00	2.42
3	Vehicles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Furniture & Fixtures	0.02	0.02	0.04	0.04	0.08	0.00	0.08	0.00	0.08	0.00	0.08
5	Computers & Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Land	5.21	0.00	5.21	0.00	5.21	0.00	5.21	0.00	5.21	0.00	5.21
7	<b>Total</b>	<b>123.17</b>	<b>54.73</b>	<b>177.90</b>	<b>36.61</b>	<b>214.52</b>	<b>15.20</b>	<b>229.72</b>	<b>4.00</b>	<b>233.72</b>	<b>19.85</b>	<b>253.57</b>

*Handwritten signature*

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Works-in-Progress

(Rs. in crores)

Sr.No.	Particulars	FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	Opening balance					
2	Add: New investments					
3	<b>Total</b>					
4	Less investment capitalized					
5	Closing balance					

NA

Total

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Interest Capitalized

Format -9

(Rs. in crores)

Sr.No.	Particulars	FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	WIP*	NA				
2	GFA* at the end of the year					
3	WIP+GFA at the end of the year					
4	Interest(excluding interest on WCL*)					
5	Interest Capitalized					

Rulip

**Electricity Department of Dadra & Nagar Haveli**  
**ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19**  
**Details of loans for the year**

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

N/A

Rup



Format -11

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Information regarding restructuring of outstanding loans during the year

(Rs. Crores)

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

N/A

*July*

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Value of Assets and Depreciation Charges

Sr.No.	Particulars Name of the Assets	Rate of depreciation on*	Previous Year			Current Year			Ensuing Year			
			Assets value at the beginning of FY2014-15	Depreciation charges	Assets value at the beginning of FY2015-16	Depreciation charges	Assets value at the beginning of FY2017-18	Depreciation charges	Assets value at the beginning of FY2018-19	Depreciation charges		
1	Plant & Machinery	5.28%	115.52	7.82	170.24	10.92	206.81	11.30	222.02	11.83	226.02	12.46
2	Buildings	3.34%	2.42	0.08	2.42	0.08	2.42	0.08	2.42	0.08	2.42	0.08
3	Vehicles	9.50%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	Furniture & Fixtures	6.33%	0.02	0.00	0.04	0.01	0.08	0.01	0.08	0.01	0.08	0.01
5	Computers & Others	6.33%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Land	0.00%	5.21	0.00	5.21	0.00	5.21	0.00	5.21	0.00	5.21	0.00
7	Total		123.17	7.90	177.90	11.01	214.52	11.39	229.72	11.91	233.72	12.54

*Relip*

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Calculation of Advance Against Depreciation

(Rs. in crores)

Sr.No.	Particulars	FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	1/10th of the Loan(s)					
2	Repayment of the Loan(s) as considered for working out Interest on Loan				NA	
3	Minimum of the Above					
4	Less: Depreciation during the year					
	A					
5	Cumulative Repayment of the Loan(s) as considered for working out Interest on Loan					
6	Less: Cumulative Depreciation					
	B					
7	Advance Against Depreciation (minimum of A or B)					

*Reply.*

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Repair and Maintenance Expenses

(Rs. in crores)

Sr.No.	Particulars	FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	Plant & machinery					
	-Plant & Apparatus					
	-EHV substations					
	- 33kV substation					
	- 11kV substation					
	- Switchgear and cable connections					
	- Others					
	<b>Total</b>					
2	Building					
3	Hydraulic works & civil works					
4	Line cable & network					
	-EHV Lines					
	- 33kV lines					
	- 11kV lines					
	- LT Lines					
	- Meters and metering equipment					
	- Others					
	<b>Total</b>					
5	Vehicles					
6	Furniture & fixtures					
7	Office equipments					
8	Operating expenses					
9	<b>Total</b>					
10	Add/Deduct share of others (To be specified)					
11	<b>Total expenses</b>					
12	Less capitalized					
13	<b>Net expenses</b>					
14	Add prior period *					
15	<b>Total expenses charged to revenue as R&amp;M expenses</b>	<b>3.21</b>	<b>2.14</b>	<b>1.91</b>	<b>3.77</b>	<b>3.83</b>

Ruly

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Total Number of Employees

(Rs. in crores)

Sr.No.	Particulars	FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	Number of employees as on 1st April	29	29	29	29	29
2	Employees on deputation/ foreign service as on 1st April	0	0	0	0	0
3	Total number of employees (1+2)	29	29	29	29	29
4	Number of employees retired/retiring during the year	0	0	0	0	0
5	Number of employees added	0		0	0	0
6	Number of employees at the end of the year (4-5)	29	29	29	29	29

*help.*

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Employee Cost

(Rs. in crores)

Sr.No.	Particulars	FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	Basic Pay					
2	Bonus					
3	Children Education Allowances					
4	Dearness Allowances					
5	Grade Pay					
6	HELPER ALLOWANCE					
7	House Rent Allowances					
8	Leave Encashment					
9	Medical Expenses					
10	Retirement Benefits					
11	Transport Allowance					
12	Travelling Exp (Employees)					
13	Tution Fees					
14	Washing Allowances					
15	<b>Total</b>	<b>1.99</b>	<b>2.72</b>	<b>2.28</b>	<b>2.30</b>	<b>2.32</b>

*Relip*

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Administration and General Expenses

Format -17

(Rs. in crores)

Sr.No.	Particulars	FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	Advertisement Expenses					
2	Annual License fee					
3	Books & Periodicals					
4	BSNL Lease Lines					
5	Car Hire Charges					
6	Collection & Meter Reading Expenses					
7	Digital Signature & Online Tendering Expenses					
8	Inspection Expenses					
9	Lighting Decoration					
10	Membership Fees					
11	Miscellaneous Expenses			NA		
12	News Paper Expenses					
13	Postage Expenses					
14	Professional Charges					
15	Stationery & Printing					
16	Telephone Expenses					
17	Tonner Refilling & Repair					
18	Transporation & Loading					
19	Wearing Apparells					
20	Xerox Charges					
21	<b>Grand Total</b>	<b>0.50</b>	<b>0.41</b>	<b>0.27</b>	<b>0.27</b>	<b>0.28</b>

*Relip*

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Information regarding Bad and Doubtful Debts

Sr.No.	Particulars	FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	Provision made for debts in ARR	0.00	0.00	0.00	0.00	0.00

*Atty.*



**Electricity Department of Dadra & Nagar Haveli**  
**ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19**  
**Information regarding Working Capital for the current and ensuing year**

Sr.No.	Particulars	Amount (in Crores Rs.)				
		FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	Receivables equivalent to two months of fixed cost	3.04	4.41	4.67	5.04	5.16
2	Maintenance spares @15% of operation and maintenance expenses	0.86	0.79	0.67	0.95	0.96
3	Operation and maintenance expenses for one month	0.48	0.44	0.37	0.53	0.54
4	<b>Total working Capital requirement</b>	<b>4.37</b>	<b>5.63</b>	<b>5.71</b>	<b>6.52</b>	<b>6.67</b>

*uly*

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Information regarding Foreign Exchange Rate Variation (FERV)

(Rs. in crores)

Sr.No.	Particulars	FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	Amount of liability provided					
2	Amount recovered					
3	Amount adjusted					
				N/A		

*help*

**Electricity Department of Dadra & Nagar Haveli**  
**ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19**  
**Non Tariff Income**

(Rs. in crores)

Sr.No.	Particulars	FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	House Rent Recovery	0.00	0.00	0.00	0.00	0.00
2	Interest Income	0.00	0.00	0.00	0.00	0.00
3	Discount received	0.00	0.00	0.00	0.00	0.00
4	Tender Fees	0.00	0.00	0.00	0.00	0.00
5	O&M of PGCIL assets	0.00	0.00	0.00	0.05	0.05
6	<b>Total non tariff income</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.05</b>	<b>0.05</b>

*Relly.*

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Information regarding Revenue from Other Business

(Rs. in crores)

Sr.No.	Particulars	FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	Total revenue from other business					
2	Income from other business to be considered for licensed business as per regulations				<i>Not Applicable</i>	

*Reliy.*

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 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
Not Applicable						

*Olif*

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19  
Information regarding amount of equity and loan

(Rs. in crores)

Sr.No.	Period	Amount of equity (Rs. in crore)	Amount of loan (Rs. in crore)	Ratio of equity & loan
1	2	3	4	5
1	As on March 31 of FY 2015 (Actual)	1.06	2.34	0.45
2	As on March 31 of FY 2016 (Actual)	17.48	32.75	0.53
3	As on March 31 of FY 2017 (Actual)	28.46	47.37	0.60
4	As on March 31 of FY 2018 (RE)	33.02	46.63	0.71
5	As on March 31 of FY 2019 (Projected)	34.22	37.51	0.91

*File*

Electricity Department of Dadra & Nagar Haveli  
**ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 18-19**  
 Cash flow statement for the ensuing year (projections)

(Rs. in crores)

Sr.No.	Month	Sources of receipt	Amount	Particulars of payment	Amount
1	2	3	4	5	6
1	Apr				
2	May				
3	Jun				
4	Jul				
5	Aug				
6	Sep				
7	Oct				
8	Nov				
9	Dec				
10	Jan				
11	Feb				
12	Mar				
13	Total				

Elip

Electricity Department of Dadra & Nagar Haveli  
ANNUAL REVENUE REQUIREMENT FOR THE YEAR FY 2018-19

(Rs. in crores)

Sr.No.	Particular	FY 2014-15 (Actual)	FY 2015-16 (Actual)	Previous Year FY 2016-17 (Actual)	Current Year FY 2017-18 (RE)	Ensuing Year FY 2018-19 (Projections)
1	2	3	4	5	6	7
1	Cost of fuel	0.00	0.00	0.00	0.00	0.00
2	Cost of power purchase	0.00	0.00	0.00	0.00	0.00
3	Employee costs	1.99	2.72	2.28	2.30	2.32
4	R&M expenses	3.21	2.14	1.91	3.77	3.83
5	Administration and General expenses	0.50	0.41	0.27	0.27	0.28
6	Depreciation	7.90	11.01	11.39	11.91	12.54
7	Interest charges	2.54	5.79	6.60	5.91	5.37
8	Interest on Working Capital Loans	0.63	0.81	0.80	0.92	0.94
9	Return on NFA / Equity	1.44	3.56	4.76	5.21	5.77
10	<b>Total revenue requirement</b>	<b>18.21</b>	<b>26.44</b>	<b>28.02</b>	<b>30.29</b>	<b>31.04</b>
11	Less: non tariff income	0.00	0.00	0.00	0.05	0.05
12	<b>Net revenue requirement (10-11)</b>	<b>18.21</b>	<b>26.44</b>	<b>28.02</b>	<b>30.24</b>	<b>30.99</b>

*Relip*