Truing up for FY 2020-21,

**AND** 

Review of FY 2021-22,

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

And

Tariff Revision Proposal for FY 2022-23 Main Text & Formats (Volume I)

Submitted to:

Joint Electricity Regulatory Commission Gurgaon

By

DNH Power Distribution Corporation Ltd.



December 2021



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

Filing No	•
Case No	

IN THE MATTER OF:

Filing of Aggregate Revenue Requirement (ARR) for Multi Year Tariff determination for the Control Period FY 2022-23 to FY 2024-25 under Section 61, 62 and 64 of the Electricity Act, 2003

#### **AND**

IN THE MATTER OF

DNH Power Distribution Corporation Limited (hereinafter referred to as "DNHPDCL" or "The Petitioner" or "The Department")
........ Petitioner

The Applicant respectfully submits as under: -

- 1. DNH Power Distribution Corporation Limited (DNHPDCL) is Corporation engaged in the procurement of electricity and distribution in 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 Joint Electricity Regulatory Commission. Based on the provisions of Section 61, 62 and 64 of the Act, DNHPDCL is filing the current Petition, in order to meet its financial requirements.
- This is a Petition indicating the Truing up Petition for FY 2020-21, Review of FY 2021-22, Aggregate Revenue Requirement (ARR) for Multi Year Tariff Determination for the Control Period FY 2022-23 to FY 2024-25 and Tariff Proposal of DNHPDCL for the FY 2022-23 (Financial Year 2022-23).



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**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)



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



#### **Chapter 1: Introduction**

#### 1.1 DNHPDCL Profile

DNH Power Distribution Corporation Limited (DNHPDCL) has been incorporated from the erstwhile Electricity Department of Dadra & Nagar Haveli (ED-DNH) and started its operation from April 1, 2013. The Ministry of Power (MoP) had advised to corporatize the ED-DNH. The Ministry of Home Affairs vide letter no. U-3034/59/2010-CPD dated 29th September 2011 has conveyed approval to corporatize ED-DNH. Subsequently, the MoP vide letter no. 36/1/2010-R&R dated 29th February 2012 has conveyed its "No Objection" for the Corporatization of ED-DNH.

The Administrator of Dadra and Nagar Haveli after satisfying the necessity to Corporatize has incorporated the "DNH Power Distribution Corporation Limited" with the Registrar of Companies, Gujarat under the Companies Act, 1956 on 13th July 2012.

The Administrator of Dadra and Nagar Haveli in exercise of powers conferred vide Notification No. F No U-11030/2/2003-UTL dated 22nd June 2004, by Ministry of Home Affairs and under section 131,133 and 134 of the Electricity Act., 2003 has prepared the "Dadra & Nagar Haveli Electricity Reforms Transfer Scheme 2013" (hereinafter referred as the "Scheme"). This Scheme has provided the transfer of assets, liabilities, rights, functions, obligations, proceedings and personnel of distribution and associated divisions of ED-DNH to DNHPDCL. The functions and duties of DNHPDCL as mentioned in the Scheme document are as follows:

Laying and operating of such electric line, sub-station and electrical plant that is primarily maintained for the purpose of distributing electricity in the area of supply of DNHPDCL, notwithstanding that such line, sub-station or electrical plant are high pressure cables or overhead lines or associated with such high pressure cables or overhead lines; or used incidentally for the purpose of transmitting electricity for others, in accordance with Electricity Act. 2003 or the Rules framed there under.



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

The present distribution system of DNHPDCL consists of 36.88 circuit km of 220 kV double circuit (D/C) lines, 279.90 km of 66 kV D/C lines, 833.70 circuit km of 11 kV lines along with 1102 distribution transformers.

At present, Dadra & Nagar Haveli gets power from 400/220 kV Substation of PGCIL Vapi, 400/200 kV Kala Substation of PGCIL (DNH).

The power demand is primarily dependent on the HT and LT industrial consumers contributing approximately 97% of the total sales. Considering the present demand from HT and LT industrial consumers, the demand by the end of FY 2022-23 is likely to reach around 6800 MUs. In view of the power requirements, DNHPDCL had proposed a number of schemes to be implemented during the coming years for strengthening and augmentation of the transmission and distribution system in the territory.

DNHPDCL has total sub-transmission capacity of 1000 MVA, including 520 MVA in Kharadpada and 420 MVA Khadoli sub-stations. Total installed capacity at 66/11 kV sub-stations are 782 MVA. DNHPDCL is continuously striving for increasing its distribution capacity on account of increasing electricity demand from the HT/EHT consumers.

### 1.2 Multi Year Tariff Distribution Regulations, 2021

DNHPDCL's tariff determination is now governed by "Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation,



Transmission and Distribution Multi Year Tariff) Regulations, 2021, hereinafter referred to as "MYT Regulations". The MYT Regulations, 2021 provide a framework for calculating tariffs on a cost-plus basis initially for a period of three years and allow the licensee to recover operational expenses including depreciation, interest on working capital and debt, and return on equity amongst others. The MYT Regulations, 2021 segregate the items impacting tariffs into controllable and uncontrollable factors. Items that are uncontrollable are passed through to the consumers. Further, the MYT Regulations, 2021 identifies the uncontrollable and controllable parameters as follows:

#### 1.2.1 Uncontrollable Parameters include

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

#### 1.2.2 Controllable Parameters include



- 1 Variations in capitalisation on account of time and/or cost overruns/ efficiencies in the implementation of a capital expenditure project not attributable to an approved change in scope of such project, change in statutory levies or force majeure events;
- 2 Variation in Interest and Finance Charges, Return on Equity, and Depreciation on account of variation in capitalisation, as specified in clause (a) above;
- 3 Variations in technical and commercial losses of Distribution Licensee;
- 4 Availability of transmission system;
- 5 Variations in performance parameters;
- 6 Failure to meet the standards specified in the Joint Electricity Regulatory Commission for the State of Goa & UTs (Standard of Performance for Distribution Licensees) Regulation, 2015, as amended from time to time;
- 7 Variations in labour productivity;
- 8 Variation in O&M Expenses, except to the extent of inflation;
- 9 Bad debts written off;

#### 1.3 Contents of this Petition

This Petition covers the truing up of FY 2020-21, review for FY 2021-22 and the basis, assumptions and projections of individual elements constituting the determination of ARR for the Multi Year Tariff Determination for the Control Period FY 2022-23 to FY 2024-25 and Tariff Proposal for FY 2022-23. The Joint Electricity Regulatory Commission (JERC) for the State of Goa and Union Territories had issued the first Tariff Order for Electricity Department of Dadra & Nagar Haveli (DNHPDCL) for the FY 10-11 on 1st November, 2010 and subsequently the second and third Tariff Orders for FY 2011-12 and FY 2012-13 were issued on 13th September, 2011 and 31st July, 2012. The Hon'ble Commission had issued the fourth, fifth, sixth, seventh, eighth, ninth, tenth, eleventh and twelfth Tariff Orders on 25th March 2013, 5th May, 2014, 1st April, 2015, 7th April, 2016, 9th June, 2017, 30th January, 2018, 29th May, 2019, 18th May, 2020 and 23rd March, 2021 for the FY 2013-14, FY 2014-15, FY 2015-16, MYT Control Period FY 2016-17 to FY 2018-19, FY 2017-18, FY 2018-19, MYT Control Period FY 2019-20 to FY 2021-22, FY 2020-21 and FY 2021-22 respectively. The Commission in its last Tariff Order for the FY 2021-22 has approved the ARR for the FY 2021-22 based on the actual cost for FY 2019-20 and estimated expenses for FY 2020-21.

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

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

As per The Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Multi Year Distribution Tariff) Regulations, 2018, the Hon'ble Commission shall undertake the True Up of licensee for FY 2020-21 based on the comparison of the actual performance of the past year with the approved estimates for such year.

In line with the provisions of JERC MYT Regulations, DNHPDCL is filing for True Up for the year FY 2020-21. Information provided in the True Up for FY 2020-21 is based on the Annual Audited 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 18th May, 2020 and the revised parameters in the Tariff Order dated 23rd March, 2021 for the FY 2020-21.

Accordingly, revised Aggregate Revenue Requirement, revenue and gap for FY 2020-21 are given in the following sections of this chapter.

#### 2.2 Energy Sales for FY 2020-21

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

Table 1: Category wise sales for FY 2020-21

(MU) **Particulars** FY 2020-21 FY 2020-21 FY 2020-21 Approved Approved (23rd March, Actual (18th May, 2020) 2021)153.82 146.07 149.28 Domestic LIG/ Kutir Jyoti 0.00 0.00 7.28 39.23 Commercial 38.84 32.65



Particulars	FY 2020-21	FY 2020-21	FY 2020-21	
	Approved (18th May, 2020)	Approved (23rd March, 2021)	Actual	
Agriculture	7.14	6.21	4.85	
LT Industry	234.21	186.94	193.09	
HT/EHT Industry	6243.48	4753.10	4,898.91	
Public Lighting	3.09	3.26	2.45	
Public Water Works	5.69	5.18	5.15	
Temp. Supply	2.82	3.30	3.83	
Total Sales	6,689.48	5,142.90	5,297.50	

It can be observed that the actual sales for FY 2020-21 is lower than the sales approved by the Commission vide its Tariff order dated 18th May, 2020. The variation is mainly due to the lockdown restrictions imposed by the Government of India to contain the spread of COVID-19 pandemic during the period April-2020 to June-2020. The said imposition of lockdown restrictions by the Ministry of Home Affairs to control the spread of COVID-19 virus has been categorized as 'force majeure' (natural calamity) by Ministry of Finance. The variation in sales of electricity to the consumers is attributed as uncontrollable factor. Therefore, DNPDCL requests the Hon'ble Commission for the truing up of actual sales as shown in the Table above.

#### 2.3 Distribution Losses for FY 2020-21

DNHPDCL has been making all efforts to contain the distribution losses. Consequent to the efforts, the distribution losses in DNHPDCL area is one of the lowest in the country.

The Hon'ble Commission vide its Tariff Orders dated 23<sup>rd</sup> Match, 2021 had approved the distribution loss at 4.20%. Against that the actual distribution losses in FY 2020-21 were 3.62%. The following Table shows the comparison of actual distribution losses of the DNHPDCL against that approved by the Hon'ble Commission vide its Tariff Orders dated 18<sup>th</sup> May, 2020 and 23<sup>rd</sup> March, 2021.

Table 2: Distribution Loss for the FY 2020-21

			(%)
Particulars	FY 2020-21	FY 2020-21	FY 2020-21
	Approved (18th May, 2020)	Approved (23rd March, 2021)	Actual



Particulars	FY 2020-21	FY 2020-21	FY 2020-21
	Approved (18th May, 2020)	Approved (23rd March, 2021)	Actual
Distribution Loss	4.20%	4.20%	3.62%

The DNHPDCL requests the Hon'ble Commission to approve the actual T&D losses for FY 2020-21.

#### 2.4 Energy Requirement and Energy Balance

Based on the actual energy sales and the transmission & distribution loss units, the actual energy requirement for DNHPDCL has been furnished below. The energy requirement has been met through various sources as described in the subsequent section.

Table 3: Energy Requirement and Energy Balance for FY 2020-21

(MU)

Particulars	FY 2020-21	FY 2020-21	
	Approved (23rd March, 2021)	Actual	
Sales	5,142.90	5,297.50	
Open Access Sales	0.00	0.00	
Less: Energy Savings	0.00	0.00	
Total Sales	5,142.90	5,297.50	
Add: Losses	225.47	198.70	
T&D Losses	4.20%	3.62%	
Energy Required at Periphery	5368.37	5,496.20	
Add: Sales to common pool consumer	0.00	7.82	
Add: Sales through IEX	0.00	68.68	
Less: Own Generation	6.18	5.91	
Total energy requirement at state periphery	5362.19	5566.80	
Less: Energy Purchased through UI at			
Periphery	24.13	41.11	
Less: Purchase from Renewable Sources	28.25	0.00	
Less: Open Access Purchase	0.00	0.00	
Less: Purchase from Power Exchange	463.74	647.32	
Total Energy Required at Periphery	4,846.07	4,878.37	
Transmission loss	184.09	205.04	
Transmission loss (%)	3.66%	4.03%	
Total Energy to be purchased	5,030.16	5,083.36	
Total Energy requirement from tied up			
sources + UI at generator end +renewable			
sources	5,552.46	5,777.75	
Total Energy requirement in UT including			
Open Access	5,552.46	5,777.75	



The actual energy recorded at the periphery of DNHPDCL was 5496.20 MUs (including own generation) during FY 2020-21. Accordingly, the actual transmission losses stood at 205.04 MUs during the FY 2020-21.

#### 2.5 Power Purchase Cost

DNHPDCL sources power from Central Generating Stations like Korba, Vindyachal, Kahalgaon, Kawas, Sipat, Tarapur and Kakrapar atomic power stations of NPCIL etc. The power procured during FY 20-21 as against that approved by the Hon'ble Commission is provided in the table below.

Table 4: Power Purchase Cost for FY 2020-21

(Rs. Crore)

	MUs			ost
Particulars Particulars	FY 2020-21	FY 2020-21	FY 2020-21	FY 2020-21
	Approved	Actual	Approved	Actual
Power Purchase Cost as per Note	5,552.46	5,777.69	2,628.41	2,593.26
- 23				
Less: Sale through Exchange				19.43
Less: Sale through DSM				0.27
Less: Sale through SECD				4.26
Net Power Purchase Cost from				
outside market deducting sale				2,569.30
through Exchange / DSM/SECD				
Add: Cost towards Own				
Generation (Solar as tabled				4.02
below)				
Total Power Purchase Cost				2,573.32

#### Cost towards Own Generation of Solar Power Installed by DNHPDCL

The Hon'ble Commission in petition no. 43/2021 has determined the cost of generation for solar plants owned and operated by DNHPDCL. The units generated from these plants during the FY 2020-21 is 5.91 MUs and these units have been distributed to the consumers and accordingly, the cost of generation of these units has been claimed as power purchase cost as tabled below;

S.N	Plants details	Units	Rate (Rs.)	Power
		(MUs)	per kWh	Cost (Cr)
1.	Roof-top Solar PV – 485 kWh	0.3700	7.12	0.26
2.	Ground Mounted (Kala - 900 kWh	1.1566	7.12	0.82
3.	Ground Velugam & Athal - 3200	4.1041	6.82	2.80
	kWh			
4.	Ground Athal (Goldi) - 200 kWh	0.2763	4.98	0.14



S.N	Plants details	Units	Rate (Rs.)	Power
		(MUs)	per kWh	Cost (Cr)
	Total	5.91		4.02

The Hon'ble Commission had approved a power purchase cost of Rs. 2628.41 Crore in the last Tariff Order, whereas, the actual power purchase cost was Rs. 2573.32 Crore. The variation (i.e. decrease) in the power purchase cost as actual and approved is around Rs. 55.09 crore (i.e. Rs. 2,573.32 Crore less Rs. 2,628.41 Crore). The said variation is mainly on account of additional rebate of Rs. 41.40 crore offered by Central Power Generating and Transmission Company (CPSE) in terms of Ministry of Power OM no. 11/16/2020-TH-II dated 15/05/2020 for the lock down period, which was deducted from total power cost of FY 2020-21.

The DNHPDCL purchased 41.16 MU and 647.32 MU during FY 2020-21 through UI and Open Market respectively at the cost of Rs. 13.18 Crore and Rs. 206.35 Crore to meet the energy shortfall during the year. The cost of these procurement is Rs. 3.20 per unit (UI) and Rs. 3.19 per unit (Open Market). The DNHPDCL also requests the JERC to allow the UI and Open Market purchases during FY 2020-21 without any penalty as the DNHPDCL has already incurred the amount and these costs has been included in the power purchase cost for FY 2020-21.

In the Annual Audited Accounts submitted to the Hon'ble Commission the power purchase cost has been given as Rs. 2,593.26 Crore. During the FY 2020-21 the DNHPDCL's own generation of solar power was 5.91 MUs. Hence, an amount of Rs. 4.02 Crore has been added towards own generation of solar power based on the levelised tariff approved by the Hon'ble Commission for solar power. Further, the revenue earned through sale of power through exchange, deviation settlement mechanism and SCED income amounting to Rs. 23.96 Crore (note 21 of Annual Audited Accounts) has been deducted from the power purchase cost to arrive at the total power purchase cost for the FY 2020-21. Hence, the total power purchase cost is Rs. 2,573.32 Crore.



#### **RPO** Compliance

The details of RPO compliance during the FY 2020-21 is provided in the table given below:

Table 5: RPO Compliance during FY 2020-21

Particulars	Mus
Generation of Solar Power by DNHPDCL	5.91
Generation of Solar Power by Consumers	20.22
Solar Power Purchase	28.72
Total Solar RPO Compliances	54.85
Non-solar Power Purchase	26.28
Total RPO Compliances	81.13

Further, power purchase cost is approximately the same as approved by the Hon'ble Commission for FY 2020-21. There is no abnormal / material variation, which requires any justification / explanation. This clearly establishes that DNHPDCL is making its best efforts to procure power at best economical rate by scheduling the power from cheaper sources by reviewing the daily power requirement and making efforts to procure power through UI as per permissible norms instead of procuring costlier power from other sources.

The DNHPDCL, requests the Hon'ble Commission to approve the actual power purchase cost for FY 2020-21 without any deduction.

#### 2.6 Operation 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 systematic and planned maintenance, the day to day maintenance of the distribution network of the DNHPDCL and form an integral part of the company's efforts towards reliable and 24X7 power supply as also in the reduction of losses in the system. This further includes stores and spares used for maintenance activity and licensing fees paid to JERC.

Administration expenses mainly comprise of audit expenses, printing and stationery, advertisements, telephone and communication expenses, legal and professional charges, fees and subscription, conveyance and travelling allowances and other miscellaneous office expenses.

The Hon'ble Commission had approved the O&M cost at Rs. 31.28 Crore and Rs. 30.33 Crore respectively vide Tariff Order dated 18th May, 2020 and 23rd March, 2021 respectively. The actual and O&M expenses approved by the Hon'ble Commission are given in the table below:

Table 6: O&M Expenses for FY 2020-21

(Rs. Crore) FY 2020-21 FY 2020-21 FY 2020-21 **Particulars** Approved Approved (23rd March, Actual (18th May, 2020) 2021) 13.95 14.07 13.41 **Employee Cost** 11.53 9.76 21.82 R&M 6.34 6.62 4.24 A&G 30.33 40.13 31.28 **O&M** Expenses

During FY 2020-21, DNHPDCL incurred actual O&M expense of Rs. 40.13 Crore which included Employee cost of Rs. 14.07 Crore, Repair & Maintenance charges of Rs. 21.82 Crore and Administration & General Expenses of Rs. 4.24 Crore.

#### Analysis of O&M Expenses

The analysis of O&M expenses each head wise as tabled above incurred for FY 2020-21 along with variations, reasons and other factors are further analysed as under.

#### **Employee Cost**

The approved employee cost as per the tariff order dated 23/03/2021 is Rs. 13.95 Crore for the FY 2020-21, whereas, the actual expenditure is Rs. 14.07



Crore. The variation (i.e. increase) in the employee cost as actual and approved is Rs. 0.12 Crore (i.e. Rs. 14.07 Crore less Rs. 13.95 Crore). In the said matter the following may be seen;

The Department of Expenditure, Ministry of Finance vide Office Memorandum (OM) no. 12(2)/2020-EII(A) dated 12/10/2020 announced special cash package equivalent in lieu of Leave Travel Concession (LTC). The additional expenditure of Rs. 0.18 crore has been incurred during the FY 2020-21 on account of the said OM issued by Ministry of Finance (Reference Note – 25 of the Financial Statements FY 2020-21).

JERC MYT Regulation 2018 in clause 12 (k) related to uncontrollable factors provides that employees expenses limited to one time payment owing requirements of pay commission and terminal liability of employees should be treated as uncontrollable factor and should be additionally allowed. As, the said expenditure has been incurred on account of OM issued by Ministry of Finance being one time measure, hence, it is requested that the same should be additionally allowed by the Commission for the true up of FY 2020-21.

Keeping in view the above, it is requested that the Hon'ble Commission to approve the actual employees cost of Rs. 14.07 Crore for FY 2020-21 without any deduction.

#### Repair & Maintenance Expenses

The approved Repair & Maintenance Expenses as per the tariff order dated 23/03/2021 is Rs. 9.76 Crore for the FY 2020-21, whereas, the actual expenditure is Rs. 21.82 Crore. The variation (i.e. increase) in the employee cost as actual and approved is Rs. 12.06 Crore (i.e. Rs. 14.07 Crore less Rs. 13.95 Crore). In the said matter the following may be seen;

#### a. License Fees for Operation of Business

The Commission vide notification dated 11/09/2019 (5th Amendment)) issued under JERC Conduct of Business Regulation 2019 has increased the distribution licensee fees payable by the distribution licensee. The old and new provision related to payment of license fees is as under;



Fees as per Old Regulation - 0.10% (percent) of revenues (excluding taxes, and duties) from the sale of electricity,

Fees as per Old Regulation - 0.15% (percent) of revenues (excluding taxes, and duties) from the proposed sales (as proposed by the petitioner) and at existing tariff (approved by the Commission) of electricity for that respective year

The said changes in the payment of licensee fees not only resulted in the increase of percentage, but also the amount of revenue to be considered for the payment of license fees. The increase in the fees of distribution license has resulted in the following additional financial implication in FY 2020-21 to Corporation as compared to previous FY 2019-20 as tabled hereunder;

Table 7: Licence Fees

Particulars	FY 2020-21	FY 2019-20
License Fees	4.75	2.90

From the above table, it may be seen that the Corporation is required to pay in FY 2020-21 an additional amount of Rs 1.85 crore in addition to previous year license fee i.e. FY 2019-20 (Reference Note – 25 of the Financial Statements FY 2020-21).

As per the MYT Regulation 2018, any order, pronouncement or applicable regulation by the Commission is uncontrollable event. Moreover, the Commission vide letter no. JERCC/RA-3/VI/2020-21/40 dated 04/06/2020 also assured that the additional financial implication on account of change in the payment distribution license fees would be allowed while truing up the expenditure for FY 2020-21. Hence, it is being submitted that the said additional amount of Rs. 1.85 crore may be allowed as non-controllable expenses as resulting on account of changes in law.

#### b. Recoupment of Office expenditure for the office of Ombudsman

JERC vide letter no. JERC/AC-8/I/2021/613 dated 30/03/3021 has communicated a total expenditure of Rs. 1.13 crore for the period FY 2013-14 to FY 2020-21 as recoupment of the office expenditure for the office of Ombudsman. The recoupment claim has been raised in view of provisions



contained in JERC (CGRF and Ombudsman) Regulation 2019. The Clause 31 (4) of the said regulation further states that "All expenses of the Ombudsman including that of its office and supporting staff shall be borne by the Commission which in turn shall be recovered from the licensee and where there are more than one licensee such expenses shall be borne by them in proportion to their latest approved net Annual Revenue Requirement and <u>such</u> expenses shall be pass through in tariff."

Hence, the total expenditure incurred on the recoupment of office expenditure for the office of Ombudsman is to be passed on through the tariff. As, the said recoupment expenditure has never been claimed by DNHPDCL, hence, the total expenditure of Rs. 1.13 crore may be allowed to DNHPDCL.

The above two elements i.e. increase licensee fees and expenditure for the office of Ombudsman result into additional financial implication of Rs. 2.99 Crore (i.e. Rs. 1.86 Crore and Rs. 1.13 Crore). Whereas, the total variation in actual Repair & Maintenance Expenses (R&M) as compared with approved R&M Expenses is Rs. 12.06 Crore. If the financial implication of above two elements is excluded, the remaining variation is Rs. 9.07 Crore (i.e. Rs. 12.06 Crore less Rs. 2.99 Crore). In the matter of remaining variation, the following may be noticed;

# JUSTIFICATION FOR REPAIRS & MAINTENANCE COST INCRURED BY DNHPCL

A) The actual R&M expenditure of DNHPDCL is Rs. 21.82 crore for FY 2020-21. Whereas, the approved R&M expenses for FY 2020-21 is Rs. 9.76 Crore. When, the approved R&M expenditure is Rs. 9.76 crore. The licence fees of JERC as per old methodology was Rs. 2.90 crore (around 29.71% of the approved expenses). Due to change in regulation of payment of licence fees, the licence fee is increased to Rs. 4.76 Crore for FY 2020-21 and the resultant increase is around 64 percent. Hence, the methodology of increase in R&M expenses as per WPI is not representative of actual cost recovery as allowed under regulation. If the license fee and recovery of ombudsman office expenses is presumed to be 29.71% of new R&M expense. The R&M expenses should be Rs. 19.82



crore (Rs. 5.89 crore/29.71\*100). This is nearer to actual R&M expenses incurred by the DNHPDCL.

- B) Secondly, as per 9th Annual Integrated Rating of State Distribution Discoms published by Ministry of Power in July 2021, any Distribution Utility under 'Cost Efficiency' is allowed highest rating (A rating), if their ration of OM expenses excluding employee cost / revenue from sale of power is between 1% to 2%. For the FY 2020-21, the R&M and Admin expenses of DNHPDCL is Rs. 26.06 Crore (i.e. Rs. 21.82 Crore plus Rs. 4.24 Crore). Whereas, the revenue from sale of power is Rs. 2,902.66 Crore. Hence, the ratio of 'Cost Efficiency' for DNHDPCL worked out to be as 0.90% (i.e. Rs. 26.06 Crore / Rs. 2,902.66 Crore). This is even less than minimum threshold of 1% as prescribed by Ministry of Power for getting the excellent rating. Hence, any reduction in the said scale of R&M expenditure is not representing of recovery of actual Cost of R&M expenditure.
- C) Thirdly, the R&M expenditure approved for DNHPDCL in comparison with EDDD for FY 2020-21 is given in the table below:

Table 8: Analysis of O&M Expenses

Particulars	DNHPDCL	EDDD
Load Management (MU)	5600	2300
220 KV(CKM)	37.00	33.00
66 KV(CKM)	280.00	89.00
33 KV (CKM)	0.00	0.00
11 kV (CKM)	834.00	448.00
Total Line Length (CKM)	1151.00	570.00
Approved R&M Cost FY 2020-21 (Rs. Crore)	9.76	21.07

From the above table, it may be seen that the Power Load Management of the DNHPDCL is higher by 150% as compared to EDDD. Further, the line length maintained by the DNHPDCL is materially higher than as compared to EDDD. Accordingly, the R&M expenses should be higher for DNHPDCL as compared to EDDD. However, the Commission has approved abnormally lower (approx. 50%) R&M expense for



DNHPDCL. It is also worth to mention here that the distribution area of DNHPDCL is greater than EDDD. However, the methodology of approving the R&M expenditure under the tariff regulation is considering GFA (Gross Fixed Assets), K factor and WPI inflation, which is not a scientific methodology. This is on account of reason that the GFA value would be higher in case of modernisation, upgradation and use of new technology e.g. if GIS sub-stations along with underground cable works is undertaken in place of overhead lines. The value of GFA would be abnormally higher. However, the same would result into lower R&M cost due to state of the art facility, automation and lower maintenance cost. Whereas, under the regulation, the higher R&M would be allowed as per the applicable provision of regulation. In view of above, the present regulation results into a substantially lower R&M expenditure for the DNHPDCL.

Moreover, it may also be noticed that Section 61 of the Electricity Act 2003 inter-alia specifically requires that the terms and conditions of determination of tariff should invariably ensure the recovery of cost of electricity in a reasonable manner. In the caser of R&M expenses incurred by DNHPDCL, it may be noticed that the scale of expenditure incurred by DNHPDCL is reasonably less than the minimum threshold limit prescribed by Ministry of Power for grant of excellent grading. Hence, any further deduction / materially less allowance of expenditure on the basis of other parameters i.e. considering GFA, K factor and WPI inflation and without considering the area, number of consumers, line length, number of sub-stations and other factors remains arbitrary in nature. Hence, it is requested that the R&M expenses incurred by DNHPDCL during the FY 2020-21 may be allowed in the true up without any deduction.

#### 2.7 Capital Expenditure and Capitalization

The actual capitalization incurred by DNHPDCL during the FY 2020-21 was Rs. 163.92 Crore, as against Rs. 158.69 Crore approved by the Hon'ble Commission in its Tariff Order dated 23rd March, 2021. The capital expenditure incurred and capitalization for FY 2020-21 against that approved by the Hon'ble Commission is as shown below:



Table 9: Capital Expenditure and Capitalization for FY 2020-21

(Rs. Crore)

Particulars	FY 2020-21	FY 2020-21	FY 2020-21
	Approved (18th May, 2020)	Approved (23rd March, 2021)	Actual
Capital Expenditure	30.19	30.19	48.39
Capitalisation	182.69	158.69	163.92

During FY 2020-21, Fixed Assets (i.e. Property, Plant & Equipment) amounting to Rs. 163.92 Crore has been capitalized. The new assets mainly included GIS sub-station and Underground cabling works in the entire Municipality area of Silvassa with capitalization value of Rs. 142.91 Crore and Erection of Multicircuit lines from Vaghchippa to Amli with capitalization value of Rs. 9.81 Crore The DNHPDCL, therefore, requests the Hon'ble Commission to approve the capital expenditure and capitalization for FY 2020-21.

#### 2.8 Depreciation

The depreciation has been worked out after applying the Depreciation rates as per the JERC (Multi Year Distribution Tariff) Regulations, 2018.

For computation of depreciation, DNHPDCL has considered the opening balance of the GFA for FY 2020-21 and subsequently added the assets capitalized in FY 2020-21.

Accordingly, the depreciation so arrived and approved depreciation for FY 2020-21 are as shown below:

Table 10: Depreciation for FY 2020-21

(Rs. Crore) **Particulars** FY 2020-21 FY 2020-21 FY 2020-21 Approved Approved (23rd (18th May, Actual March, 2020) 2021) Opening GFA 458.06 466.84 466.84 Addition during the year 182.69 158.69 163.92 Closing GFA 640.75 625.53 630.76 Average GFA 549.41 546.19 548.80 Depreciation during the year 19.19 18.44 10.66



The opening GFA as per Annual Accounts FY 2018-19 is Rs. 497.25 Crore which also includes assets pertaining to solar plants amounting to Rs. 30.41 Crore. Accordingly, opening GFA of Rs. 466.84 Crore excluding the solar plants has been considered. The addition during the year is Rs. 163.92 Crore which include assets pertaining to undergrounding cabling with establishment of 66/11 KV substation in SMC area, Silvassa town amounting Rs. 159.64 Crore. Accordingly, the closing GFA considered above amounting to Rs. 630.76 crore is excluding the solar plant value of Rs. 30.41 Crore. The DNHPDCL, requests the Hon'ble Commission to approve the actual depreciation of Rs. 10.66 Crores excluding depreciation on solar plants for FY 2020-21 without any deduction.

#### 2.9 Interest and Finance Charges

For assessing interest on Loans in FY 2020-21, DNHPDCL has considered the Opening Balance of Loans for FY 2020-21 as approved by the Hon'ble Commission in its Tariff Order dated 23<sup>rd</sup> March, 2021 for the Review of the ARR for FY 2020-21. The normative loan addition in FY 2020-21 has been computed as 70% of the capitalization for FY 2020-21 which works out to Rs. 114.74 Crore. The capitalization for FY 2020-21 was Rs. 163.92 Crore as per the annual audited accounts for FY 2020-21.

The repayment of loans has been considered equal to the depreciation during the FY 2020-21. Further the rate of interest has been considered as equal to the SBI PLR as on 1st April, 2020 plus 100 basis points which is 8.75%.

The total Interest & Financial charges for FY 2020-21 computed by DNHPDCL as against approved by the Hon'ble Commission is as shown below:

**Table 11: Interest on Loan for FY 2020-21** 

(Rs. Crore)

Particulars	FY 2020-21	FY 2020-21	FY 2020-21
	Approved (18th May, 2020)	Approved (23rd March, 2021)	Actual
Opening Loan	14.34	20.11	20.11
Loan for additional Capex (70:30 debt-			
equity)	127.88	111.08	114.74
Loan Repayment	19.19	18.44	10.66
Closing Loan	123.03	112.75	124.19



Particulars	FY 2020-21	FY 2020-21	FY 2020-21
	Approved (18th May, 2020)	Approved (23rd March, 2021)	Actual
Interest Cost on Avg. Loans	6.08	5.81	6.31

The DNHPDCL, requests the Hon'ble Commission to approve the interest on loan computed for FY 2020-21.

#### 2.10 Interest on Working Capital

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

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

- a. O&M expense for one month
- b. Maintenance spares at 40% of R&M for one month
- c. Receivables for 2 months
- d. Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt

DNHPDCL has computed interest on working capital at 9.75% (SBI base rate as on 1st April, 2020 plus 200 basis points). The interest on working capital for FY 20-21 as per applicable regulation against approved by the Hon'ble Commission is as shown below:

Table 12: Interest on Working Capital for FY 2020-21

(Rs. Crore)

			(Rs. Crore)
Particulars Particulars	FY 2020-21	FY 2020-21	FY 2020-21
	Approved (18th May, 2020)	Approved (23rd March, 2021)	Actual
O&M expense for one month	2.73	2.53	3.34
Maintenance spares at 40% of R&M for			
one month	0.30	0.33	0.73
Receivables for 2 months	598.28	490.86	483.78
Total	601.31	493.72	487.85
Less consumer security deposit but			
excluding Bank Guarantee/Fixed	53.08	60.63	76.13



Particulars	FY 2020-21	FY 2020-21	FY 2020-21
	Approved (18th May, 2020)	Approved (23rd March, 2021)	Actual
Deposit Receipt			
Net Working Capital required after deduction of Security Deposit	548.23	433.09	411.72
Interest on Working Capital	57.84	42.23	40.14

The DNHPDCL, requests the Hon'ble Commission to approve the interested on working capital computed for FY 2020-21.

#### 2.11 Return on Equity

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

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

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

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

The DNHPDCL has segregated the approved average equity (average of opening and closing equity) into average equity for Distribution Wires Business and Retail Supply Business based on the Allocation Statement provided in the MYT Regulations, 2018 i.e. 90% allocation for the Distribution Wires Business and 10% allocation for the Retail Supply Business. The Commission has considered a rate of 15.50% for the Distribution Wires Business (as per the prevalent CERC Regulations) and a rate of 16% for the Retail Supply Business. The equity component has been determined in accordance with the Regulation 26 of the MYT Regulations, 2018. The following table provides the Return on Equity approved for the FY 2020-21.

Table 13: Return on Equity for FY 2020-21

Particulars FY 2020-21 FY 2020-21 FY 2020-21



	Approved (18th May, 2020)	Approved (23rd March, 2021)	Actual
Opening Equity	101.79	104.42	140.05
Additions on account of new			
capitalisation	54.81	47.61	49.17
Closing Equity	156.60	152.02	189.23
Average Equity	129.19	128.23	164.64
Equity for wire business (90%)	116.27	115.40	148.18
Equity for Retail Supply Business (10%)	12.92	12.82	16.46
Return on Equity for Wire Business (%)	15.50%	15.50%	15.50%
Return on Equity for Retail Supply			
Business (%)	16.00%	16.00%	16.00%
Return on Equity for Wire Business	18.02	17.89	22.97
Return on Equity for Retail Supply			
Business	2.07	2.05	2.63
Return on Capital Base	20.09	19.94	25.60

The DNHPDCL, requests the Hon'ble Commission to approve the return on equity computed for FY 2020-21.

#### Additional ROE for the FY 2019-20 and FY 2016-17, FY 2017-18 & FY 2018-19

The new concept for allowance of return on equity @ 16% of the 30% of capital base or actual equity, whichever is less, was introduced in MYT regulation 2014 (applicable from FY 2016-17). Regulation 27 of MYT Regulations, 2014 provide as follows:

"The Return on equity shall be computed on 30% of the capital base or actual equity, whichever is lower:

Provided that.....

The return on the equity invested in working capital shall be allowed from the date of start of commercial operation.

16% post-tax return on equity shall be considered irrespective of whether the Distribution Licensee has claimed return on equity in the ARR Petition"

The Opening Gross Fixed Assets as on 01/04/2016 of DNHPDCL was Rs. 385.27 Crore. Hence, as per the applicable regulation, the equity ought to be Rs. 115.58 Crore (i.e. 30% of the capital base / Gross Fixed Assets). Whereas, the Hon'ble Commission has been considered the Opening Equity (on 01/04/2016) as Rs. 80.00 Crore by taking the value of equity share capital in place of equity as provided in the regulation. In this regard, it is worth to submit that the actual opening equity as per the Financial Statement of FY 2016-17 of



DNHPDCL was Rs. 600.45 Crore, which was more than the normative equity of Rs. 115.60 crore normative equity as on 01/04/2016, hence Rs. 115.60 crore was required to be considered as per the Regulation. The less consideration of equity by Rs. 35.60 Crore (i.e. Rs. 115.60 Crore less Rs. 80.00 Crore) has resulted into lower allowance of return of equity by Rs. 5.70 Crore (16% on Rs. 115.60 Crore = Rs. 18.50 less Rs. 16% of Rs. 80.00 Crore = Rs. 12.80 Crore) for FY 2016-07 to FY 2018-19 (three MYT years). **The total financial implication for 3 years is Rs. 17.11 crore.** 

Further, the DNHPDCL has already filed an appeal before the Hon'ble APTEL against the allowance of the lower ROE in deviation with specific provision of JERC MYT Regulation, 2014 in true up tariff order of FY 2018-19 (DFR Number 309/2020). In the said appeal, the DNHPDCL has claimed an amount of Rs. 17.11 crore less allowance of return on equity for 3 financial years i.e. FY 2016-17 to FY 2018-19.

In this regard it is also worth mentioning that Regulation specifically states that ROE should be allowed irrespective of whether the Distribution Licensee has claimed return on equity in the ARR Petition. Hence, the DNHPDCL is claiming less allowance of ROE as additional ROE for FY 2016-17 to FY 2018-19.

The less allowance of Return of equity is also continued in true up petition for FY 2019-20 filed as per MYT Regulation, 2018. Regulation 27 of MYT Regulations, 2018 provide as follows:

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

As given above, the MYT Regulations allow the utility to claim ROE on 30% of the capital base or the actual equity whichever is lower. However the errors of less allowance of equity by computing lesser amount of equity that had crept in the previous financial years (i.e. FY 2016-17 to FY 2018-19) continued for the FY 2019-20 also under the new MYT regulation 2018. Hence, the DNHPDCL is claiming additional ROE for the FY 2019-20 as detailed in the table given below:

Table 14: Additional ROE for FY 2019-20



	(Rs. Crore)
Particulars	FY 19-20
Return on Equity claimed in the true up	
Petition of FY 2019-20	21.44
Return on Equity approved for FY 2019-20 in	
Tariff Order	15.90
Differential ROE claimed	5.54

The DNHPDCL, requests the Hon'ble Commission to approve the additional ROE amounting to Rs. 5.54 Crores for the FY 2019-20.

Further, the DNHPDCL has already filed an appeal before the Hon'ble APTEL against the allowance of the lower ROE in deviation with specific provision of JERC MYT Regulations for the FY 2016-17, FY 2017-18 and FY 2018-19 as claimed in the Tariff Petition filed for the FY 2021-22 amounting to Rs. 17.11 Crore.

In view of above it is submitted that the additional ROE of Rs. 22.65 Crore may please be allowed for the FY 2016-17 to FY 2019-20.

#### 2.12 **Income Tax**

The JERC (Multi Year Distribution Tariff) Regulations, 2018, has a provision for Income Tax on actual payment basis. The DNHPDCL paid Rs. 41.29 Crore as income tax during the FY 2020-21.

Table 15: Income Tax for FY 2020-21

Income Tax	0.00	15.00	41.29
	Approved (18th May, 2020)	Approved (23rd March, 2021)	Actual
Particulars	FY 2020-21	FY 2020-21	FY 2020-21
			(Rs. Crore)

In the said matter, it may be noticed that DNHDPCL has paid a total amount of Rs. 41.71 Crore as income tax liability for the FY 2020-21 (i.e. current income tax liability as per the Statement of Profit & Loss Account). However, considering the total income of Rs. 2,921.98 Crore and the scale of income which are not non-tariff income (i.e. interest income Rs. 13.03 Crore and delayed payment charges Rs. 16.46 Crore). The income tax recoverable from consumers comes to Rs. 41.29 Crore. The DNHPDCL requests the Hon'ble Commission to approve the Income Tax for FY 2020-21.



#### 2.13 Interest on Security Deposit

In terms of the section 47 (4) of the Electricity Act, 2003 'the distribution licensee is required to pay interest on security deposit collected from consumers equivalent to bank rate or more as may be specified by the Commission. The DNHPDCL paid the interest on security deposit of Rs. 3.20 Crore to its consumers during the FY 2020-21. The opening security deposit for the FY 2020-21 was Rs. 60.63 Crore and the closing security deposit was Rs. 76.13 Crore.

Table 16: Interest on Security Deposit for FY 2020-21

(Rs. Crore)

Particulars	FY 2020-21	FY 2020-21	FY 2020-21
	Approved (18th May, 2020)	Approved (23rd March, 2021)	Actual
Interest on Security Deposit	2,70	4.20	3.20

The DNHPDCL, requests the Hon'ble Commission to approve the interest on security deposit for FY 2020-21 as given in the table above.

#### 2.14 Non-Tariff Income

The actual Non-Tariff Income of DNHPDCL for FY 2020-21 was Rs. 16.77 Crore. The Hon'ble Commission had approved non-tariff income of Rs. 14.88 Crore and Rs. 12.06 Crore in the Tariff Orders dated 18<sup>th</sup> May, 2020 and 23<sup>rd</sup> March, 2021 respectively. The details are as shown in the Table below:

Table 17: Non-Tariff Income for FY 2020-21

(Rs. Crore)

Particulars Particulars	FY 2020-21	FY 2020-21	FY 2020-21
	Approved (18th May, 2020)	Approved (23rd March, 2021)	Actual
Non tariff Income	14.88	12.06	16.77
Tender Fees			0.01
Provision Written Back			10.90
Sale of Scrap			-
Miscellaneous Income			1.42
Other Operating Income			4.44

In the matter of non-tariff income, it is further submitted that the total other income as per Note – 22 of the Financial Statement of FY 2020-21 is Rs. 41.82 Crore. However, the said other income also included the elements like interest and and delayed payment charges amounting to Rs. 29.49 Crore, which are not



part of non-tariff income as per the applicable provisions of Regulation (i.e. Regulation – 34.2 and 64.2 of MYT Regulation 2018). Hence, the net other income to be considered as non-tariff income is Rs. 12.33 Crore (i.e. Rs. 41.82 Crore less Rs. 29.49 Crore). Moreover, there is other operating income of Rs. 4.44 crore as per Note – 21 of the Financial Statement of FY 2020-21. Hence, the total non-tariff income works out to be Rs. 16.77 Crore (i.e. Rs. 12.33 Crore less Rs. 4.44 Crore).

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

In the APR for FY 2020-21, the Commission had approved the T&D loss level of 4.20%. The DNHPDCL has achieved T&D loss of 3.62% against the approved loss level of 4.20%. The DNHPDCL, in accordance with Regulation 14.1 of the JERC MYT Regulations, 2018 (reproduced below) has determined the incentive towards the over-achievement of the target of Intra-State distribution loss for FY 2020-21 as follows:

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

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

The incentive has been considered at INR 4.86/kWh, which is the Average Power Purchase cost (APPC) of the Petitioner. The APPC has been derived at State/UT Periphery based on the Power Purchase cost approved in the true-up and the retail energy sales (5297.50 MU).

Table 18: Incentive due to over-achievement of Intra-State Distribution Loss target

Particulars	Approved	Actual
Retail Sales - MUs (a)	5297.50	5297.50
T%D Loss (%)	4.20%	3.62%
Power Purchase at State Periphery - MUs	5529.75	5496.20
Gain/Loss (MU)		33.55
Net Power Purchase Cost Table-4 (Crore) (B)		2,569.30
Average Power Purchase Cost (B/A)		4.86



Particulars	Approved	Actual
Gain/Loss (Rs. Crore)		16.30
Sharing of 50% of gain with Petitioner (Rs. Crore)		8.15

#### 2.16 Additional Expenses

Additional Cost on account of relief extended by Commission to consumers in view of national wide lockdown due to COVID 19.

The commission vide Suo Motu order in Petition No. JERC/LEGAL/SMP/27/2020 dated 10/04/2020 has extended the certain relief to the consumers of DNHPDCL with an aim to mitigate the hardship of Electricity Consumers and DISCOMs/ EDs in view of nation-wide lockdown due to COVID-19. In the said order, the following has also been directed;

"There will be other additional costs required to be incurred for continuing of operations in the present situation of crisis. Associated with this, there will be an additional working capital interest. The Commission will consider the additional expenses that are likely to be incurred by the Distribution Licensees on all these accounts while evaluating the APR of FY 2020-21."

Further, the Commission in the Petition No. 37/2020 dated 23/03/2021 related to APR of FY 2020-21 has directed the following (Page No. 66 of the said order);

"In order to mitigate the hardship of Electricity Consumers and DISCOMs/EDs in view of nationwide lockdown due to COVID-19, the Commission had issued SUO MOTU ORDER NO. JERC/LEGAL/SMP/27/2020 on 10th April, 2020 wherein the Commission provided relief to industrial and commercial consumers and acknowledged the need for additional working capital requirement by the Distribution Licensees. Further, the Commission viewed that the lockdown will also impact certain other parameters of ARR like sales / sales mix, power purchase quantum and cost and revenue. The Commission opined that it will consider all such additional costs and variations in parameters appropriately while evaluating the APR of FY 2020-21 and thereafter True-up of FY 2020-21. Accordingly, the Commission has considered the impact of lower sales, rebate received in power purchase cost and some other parameters due to COVID 19 as part of APR for FY 2020-21. Further, the Commission will consider the actual impact of COVID 19 on various parameters of ARR while carrying out the truing up for FY 2020-21."

In view of above directions of the Hon'ble Commission, the additional cost burden attributable on account of reliefs provided to the consumers of DNHPDCL with an aim to mitigate the hardship during the lockdown due to COVID-19 is claimed as under;

#### Relief extended and its additional cost implication

a) First kind of relief: A Moratorium on payment of Fixed Charges to all industrial and commercial consumers for the bills raised during the period from 24/3/2020 to 30/6/2020, which they can avail if they so desire. These deferred charges shall be recovered in an equated manner over next three bills to be raised after 30th June'2020. The said moratorium was offered to without levy of late payment surcharge as clarified in clarification dated 10/04/2020.

#### **Cost Implication**

The said relief has resulted deferment of payment of fixed charges by the consumer and further the consumer are also not supposed to pay any interest for the deferment availed by them. The shortfall in the collection on account of said deferment was funded by the Corporation from own resources. The consumers of DNHPDCL amounting to Rs. 38.94 crore (i.e. Rs. 12.98 crore realised in July-20 (1st instalment), Rs. 12.99 crore realised in August – 2020 (2nd instalment) and Rs. 12.97 crore realised in September-2020 (3rd instalment) Annexure - A) has availed the said deferment. In view of the said relaxation, it is submitted that an interest of Rs. 1.10 crore may be allowed to Corporation as additional cost as per the calculation furnished hereunder;

Energy	Billing	Realised	Amount	Days	Interest	Interest
Month	Month	Month	(Cr.)	_	Rate	(Cr.)
Mar-20	Apr-20	Jul-20	12.98	91.00	11.20%	0.36
Apr-20	May-20	Aug-20	12.99	92.00	11.20%	0.37
May-20	Jun-20	Sep-20	12.97	92.00	11.20%	0.37
			38.94			1.10

#### Notes:

- 1) As the deferment availed for the billing month April-2020 has been realised in the month of July-2020 and so on, hence, any deferment remains outstanding for a period of 91 / 92 days.
- 2) Presently, the Corporation has availed the LC / BG facility from Bank of Baroda. The agreed interest rate on overdraft facility is 11.20 percent (i.e. one year MCLR 8.25%, margin / spread 2.70% plus strategic premium 0.25%) as per agreement dated 19/02/2020. Hence, the same rate is considered for the calculation of additional cost Annexure B.
- b) **Second kind of relief:** DISCOMs shall extend the due date for payment of electricity bills (including those already raised), where the due dates fall between 24<sup>th</sup>



March,2020 and June 30,2020 by further two weeks without Late Payment Surcharge(LPSC).

# **Cost Implication**

The said relief has resulted delayed the monthly realisation by further period of two weeks without levy of any interest. The said relaxation has resulted delayed collection of energy charges against the bills raised in the month of April-2020, May-2020 and June-2020. The shortfall in cash inflow resulting from 14 days extension of due date was funded by the Corporation from own resources. In view of the said relaxation, it is submitted that an interest of Rs. 2.11 crore may be allowed to Corporation as additional cost as per the calculation furnished hereunder;

Energy	Billing	Bill Amount	Days	Interest	Interest (Cr.)
Month	Month	(Cr.)		Rate	
Mar-20	Apr-20	245.93	14	11.20%	1.06
Apr-20	May-20	85.62	14	11.20%	0.37
May-20	Jun-20	157.65	14	11.20%	0.68
					2.11

#### **Notes:**

- 1) The month wise billing summary for the month of March-2020 to May-2020 is attached herewith as Annexure C.
- 2) Presently, the Corporation has availed the LC / BG facility from Bank of Baroda. The agreed interest rate on overdraft facility is 11.20 percent (i.e. one year MCLR 8.25%, margin / spread 2.70% plus strategic premium 0.25%) as per agreement dated 19/02/2020. Hence, the same rate is considered for the calculation of additional cost Annexure B.
- 3) The bill amount represented above also includes the element of FPPCA as the said extension has resulted recovery of total dues.
- c) Third kind of relief: The Commission has powers to modify its tariff orders under Section 62 of Electricity Act 2003. In exercise of this power Commission has reduced LPSC @ 1% p.m. instead of 2% p.m. as provided in its tariff orders dated 20th May 2019. This relaxation is purely of temporary nature for the period starting from 24<sup>th</sup> March 2020 to 30<sup>th</sup> June 2020.

#### **Cost Implication**

Reference has been invited to note-22 'Other Income' of the Financial Statements of the Corporation for FY 2020-21. The Delayed Payment Charges (DPC) for the FY 2020-21 was Rs. 16.46 crore as against the 22.89 crore of the FY 2019-20. There was reduction in the DPC by an amount of Rs. 6.43 crore i.e. around 28.10%. The said reduction was mainly on account of reduction / relaxation in the LPSC (late payment surcharge) offered by the Commission by reducing the said rate as 1% p.m. instead of 2% p.m. for the period from



24th March 2020 to 30th June 2020. A reduction of Rs. 4.50 crore as calculated below is attributable to the reduction in the said rate. In view of the said relaxation, it is submitted that an amount of Rs. 4.50 crore may be allowed to Corporation as additional cost.

(Rs. Crore)

					(IXS. CIOIE)
Energy Month	Mar-20	Apr-20	May-20		
Billing Month	Apr-20	May-20	Jun-20		
Particulars	DPC @	DPC @	DPC @	Total DPC	DPC @
	1%	1%	1%	@ 1%	2%
High Tension	0.61	0.78	1.09	2.48	4.96
Low Tension	0.21	0.14	0.12	0.46	0.92
Commercial	-	0.13	0.12	0.25	0.51
Domestic	_	0.52	0.53	1.05	2.10
LIG	_	0.05	0.05	0.10	0.20
Public Lighting	-	0.02	0.02	0.05	0.09
Agriculture	-	0.02	0.02	0.04	0.07
Temporary	_	0.01	0.01	0.01	0.03
Public Water works	-	0.03	0.03	0.06	0.12
Total	0.81	1.69	2.00	4.50	9.00
Reduction in DPC du	e to reduction	in rate			4.50

#### **Notes:**

- 1) The month wise recovery of DPC for energy month of March-2020 to May-2020 (Billing month April-2020 to June-2020) is attached herewith as Annexure D.
- d) Other Financial Hardship / Stress (i.e. acute mismatch between revenue collection and power purchase costs.

The approved billing rate for FY 2020-21 and further the approved power purchase cost including the transmission charges are as tabled below;

Particulars	Average Billing	Average Purchase
	Rate	Cost
Net Export of Unit (MUs)	6,689.48	6,689.48
Revenue in Crore	3,589.67	3,340.99
Average Billing Rate (Rs.)	5.37	4.99
Monthly Revenue /	299.14	278.42
Purchase Cost (Crore)		

From the above table, it may be seen that Commission has approved ABR (Average Billing Rate) at approved tariff as Rs. 5.37 per unit (Table – 125 of the tariff order), whereas the approved power purchase cost



including the transmission charges is Rs. 4.99 per unit (Table 85 of the tariff order) for FY 2020-21 as per tariff order in petition no. 19/2019 dated 18/05/2020.

- More over as the demand load of DNHPDCL 94% from the industrial consumers, hence, the demand load of DNHPDCL remains very steady / stable in day, night and month to month basis. The power demand load in terms of MW remains in very stable around 720 MW to 800 MW on monthly basis. In view of above, it is expected that in every month of FY 2020-21, the revenue billing would be around Rs. 299 crore, whereas, the power purchase liability would be Rs. 278 crore. It has also been projected that the revenue would be higher than the cost of power purchase including transmission charges.

However, the complete lockdown measures enforced for the period 25/03/2020 to 30/06/2020 to restrict the spread of COVID-19 outbreak has impacted very severely the business operation of DNHPDCL. The billing from the consumers has gone below the monthly power purchase cost on account of said COVID lockdown restriction as tabled below;

Energy Month	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20
Billing Month	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20
Power Puchase							
Cost							
Fixed Cost of							
Power	163.52	100.94	106.55	107.73	102.49	110.47	105.37
Other Cost of							
Power	104.87	67.38	46.92	71.03	94.51	101.97	122.10
Total Power							
Cost	268.39	168.32	153.47	178.76	197.00	212.44	227.47
Less: Rebate	3.79	2.52	2.28	2.58	2.84	3.02	2.99
Total Cash					40446	200.42	204.40
Outflow	264.60	165.80	151.19	176.18	194.16	209.42	224.48
Revenue -							
Consumers							
Fixed Charges	46.80	44.39	44.28	47.02	46.29	46.28	47.23
Other Charges	157.68	32.39	87.49	145.37	178.77	194.40	221.60
Moratorum							
Recovered							
FPPCA Received							
over PY							
Provision	_			-	-	20.44	27.46
<b>Total Billing for</b>							***
month	204.48	76.77	131.76	192.39	225.06	261.12	296.29



Energy Month	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20
Billing Month	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20
						-	
Total Cash							
Inflow	204.48	76.77	131.76	192.39	225.06	261.12	296.29
Additional Cash							
out flow	60.12	89.03	19.43	-16.21	-30.90	-51.70	-71.81
Cumulative							
Cash-flow	60.12	149.15	168.57	152.36	121.46	69.76	-2.05

#### Notes:

- 1) The consumers amounting to Rs. 38.94 crore against the fixed charges of revenue, who availed the 3 equated instalment payment against the fixed charges of revenue has not been deducted from revenue. This is on account of fact that it may result into increase in additional cash outflow and the cost implication for the same has been claimed above.
- 2) Further, the FPPCA recovered for billing month May-2020 to August-2020 has been excluded / deducted from Revenue as the same represents the recovery of additional power purchase cost already incurred for FY 2019-20. In the annual accounts of FY 2019-20, an amount of Rs. 98.61 crore has been recognised as Unbilled FPPCA on accrual basis for Q4 of FY 2019-20 (Note 10 of Financial Statements, Previous Year Figure). The said unbilled FPPCA has been recovered during the billing period April-2020 to August-2020 and a month wise recovery of said FPPCA is attached as Annexure E.
- 3) The month wise power purchase cost and revenue for the billing month April-20 to October-20 is attached herewith as Annexure F.

The table presentable above inter-alia reveals the following;

- a) The fixed cost of power during the billing month April-2020 to June-2020 was approximately 2.5 to 3 times of the fixed charges to be recovered through revenue billing. The fixed cost of power for billing month May 2020 and June -2020 was lower on account of non-payment of GWEL (GMR Warora Energy Limited) energy invoice due to force majeure clause availed for the period energy month April 2020 to June 2020.
- b) As per approved tariff order, the monthly revenue billing was more that power purchase cost, whereas, on account of lockdown restriction of covid-19, the monthly power purchase cost is more the monthly billing. This is a complete reverse situation as compared to tariff order and put an additional obligation for deployment of additional cash resources from internal surplus of DNHPDCL. This is also on account of fixed cost mismatch as explained in para (a) above.

- c) The additional cash outflow deployed for billing month April-2020 was Rs. 60.12 crore, May-2020 Rs. 89.03 crore and June-2020 Rs. 19.43 crore. The cumulative additional fund deployed till June-2020 was Rs. 168.57 crore. The said scenario of additional cash deployed was reversed from billing month July-2020 after opening of economic activities and total additional said cash deployed was recovered back in the billing month October-2020.
- d) The said additional cash outflow deployed of Rs. 168.57 crore result into additional cost implication of Rs. 7.47 crore. In view of above, it is submitted that an interest of Rs. 7.47 crore may be allowed to Corporation as additional cost as per the calculation furnished hereunder;

Interest								
Calculation								
Power Bills	09-04-	09-05-	09-06-					
Settlement	2020	2020	2020					
Revenue Bill				25-07-	25-08-	25-09-	25-10-	
Realisation				2020	2020	2020	2020	
Ist Fund								
Deployment	60.12							60.12
Recovered				16.21	30.90	13.01		60.12
Date								
Outstanding				107.00	138.00	138.00		
Rate of Interest				11.20	11.20	11.20		
Additional								
Interest Cost - a				0.53	1.31	0.55		2.39
2nd Fund								
Deployment	_	89.03						89.03
Recovered						38.69	50.33	89.03
Date								
Outstanding						139.00	169.00	
Rate of Interest						11.20	11.20	
Additional								
Interest Cost - b						1.65	2.61	4.26
3rd Fund								
Deployment	-	-	19.43					19.43
Recovered							19.43	19.43
Date								
Outstanding							138.00	
Rate of Interest								

Interest Calculation		
	11.20	
Additional Interest Cost - c	0.82	0.82
Total Interest Cost (a to c)		7.47

#### **Notes:**

- 1) The power purchase bill settlement has been taken as 09th day (i.e. 4th date receipt of bills + 5 days for its settlement as per CERC Regulation). The revenue realisation date has been considered as 25th day (i.e. total 10 days for bill generation + 15 days for its settlement as per JERC supply code Regulation). It is the minimum period as bills is normally generate till the 15th to 20th day of the respective month.
- 2) Presently, the Corporation has availed the LC / BG facility from Bank of Baroda. The agreed interest rate on overdraft facility is 11.20 percent (i.e. one year MCLR 8.25%, margin / spread 2.70% plus strategic premium 0.25%) as per agreement dated 19/02/2020. Hence, the same rate is considered for the calculation of additional cost Annexure B.
- 3) Rs. 60.12 crore deployed for the billing month April-2020 is recovered in the month of July-20 to September-20 and total interest cost is Rs. 2.39 crore. In the same parlance the interest for second and third deployment has been calculated as Rs. 4.26 crore and Rs. 0.82 crore and total comes to Rs. 7.47 crore.

# **Summary of Cost Implication:**

The total cost implication as given above has been summarised in the following table:

ParticularsCostMoratorium on payment of fixed charges1.10Extension of due date of electricity bills2.11Reduction in DPC due to reduction in rate4.50Mismatch between revenue collection and PPC7.47Total15.18

Table 19: Summary of Additional Cost Implication

DNHPDCL requests the Hon'ble Commission to kindly approve the above additional costs as part of the truing up for the FY 2020-21.

# 2.17 Annual Revenue Requirement for the FY 2020-21

Based on above expenses, the Table below summarizes Aggregate Revenue Requirement for FY 2020-21 for DNHPDCL in comparison with values approved by the Hon'ble Commission in the last two Tariff Orders:



Table 20: Annual Revenue Requirement for FY 2020-21

(Rs. Crore)

Particulars	FY 2020-21	FY 2020-21	FY 2020-21
	Approved	Approved	
Grand Parks, rather to	(18th May,	(23rd March,	Actual
	2020)	2021)	
Power Purchase Cost	3,340.99	2,628.41	2,573.32
O&M Expense	31.28	30.33	40.13
Depreciation	19.19	18.44	10.66
Interest on Long-term Capital Loans	6.08	5.81	6.31
Interest on Working Capital Loans	57.84	42.23	40.14
Return on Equity	20.09	19.94	25.60
Additional ROE for previous year	0.00	0.00	22.65
Additional Expenses for COVID	0.00	0.00	15.18
Provision for Bad Debt	0.00	0.00	0.00
Interest on security deposit	2.70	4.20	3.20
Income Tax	0.00	15.00	41.29
Incentive on achievement of norms	0.00	0.00	8.15
Total	3,478.17	2,764.36	2,786.63
Less:			
Non-Tariff Income	14.88	12.06	16.77
Annual Revenue Requirement	3,463.29	2,752.30	2,769.87

DNHPDCL requests the Hon'ble Commission to kindly approve the ARR submitted hereinabove.

#### 2.18 Revenue for FY 2020-21

During the FY 20-21, DNHPDCL's actual revenue from retail sales amounted to Rs. 2902.66 Crore as against Rs. 3589.67 Crore and Rs. 2945.17 Crore as approved by the Hon'ble Commission vide its Tariff Order dated 18<sup>th</sup> May, 2020 23<sup>rd</sup> March, 2021 respectively.

Table 21: Revenue for FY 2020-21

(Rs. Crore)

			(INS. CIOIE)
Particulars Particulars	FY 2020-21	FY 2020-21	FY 2020-21
	Approved (18th May, 2020)	Approved (23rd March, 2021)	Actual
Revenue from sale of power	3,589.67	2,945.17	2902.66
Total revenue	3589.67	2945.17	2902.66

It may be seen that the total revenue from sale of power is Rs. 2,875.72 Crore as per the audited Annual Accounts for FY 2020-21. However, after adjusting the amount of sale of power from other sources (i.e. Exchange, DSM and SCED) as



adjustment to power purchase cost, the net revenue is Rs. 2,851.76 Crore. However, an amount of Rs. 50.90 pertaining to Contract Liability towards Consumers has been further added to the audited figure to derive the actual revenue from operations amounting to Rs. 2,902.66 Crore.

The Corporation is registered Company under the Company Act and also under the regulatory regime of JERC. The Corporation is mandatorily required to keep the books of accounts as per the accrual basis of accounting. The regulatory regime sometimes results into sales billing in excess of eligible revenue as per applicable regulations. In view of said circumstances, the accounting policy related to 'Revenue recognition from sale of power' provides that unearned and deferred revenue (Contract Liability) is recognised, when there is billing in excess of revenue as per applicable regulations. Hence, an amount of Rs. 50.90 crore been shown as 'Contract Liability towards consumer' for FY 2020-21. This is accrual entry and to be reversed in future on the basis of subsequent developments. In FY 2020-21, based on its recognition, the same has resulted in the reduction of revenue under accrual basis of accounting, whereas, it has been offered as part of revenue under the regulatory regime by adding into the revenue under accrual basis of accounting (Reference Note - 18 (iv) of the Financial Statements of FY 2020-21). In the future year, it would be added to revenue on its reversal under accrual basis of accounting, however, it need to be deducted from revenue under the regulatory regime.

# 2.19 Revenue (Gap)/Surplus for FY 2020-21

The Hon'ble Commission in Order dated 18<sup>th</sup> May, 2020 has approved a total Aggregate Revenue Requirement of Rs. 3463.29 Crore for FY 2020-21. Further, the Commission has computed the revised ARR in the Tariff Order dated 23<sup>rd</sup> March, 2021 of Rs. 2752.30 Crore. DNHPDCL has arrived at the trued-up Aggregate Revenue Requirement for FY 2020-21 of Rs. 2769.87 Crore.

This revised Aggregate Revenue Requirement is compared against the revised income under various heads including revenue with existing tariff of Rs. 2902.66 Crore. Accordingly, total revenue surplus of DNHPDCL for FY 2020-21 is computed at Rs. 132.79 Crore as depicted in the Table below:



Table 22: Revenue Gap/Surplus for FY 2020-21

(Rs. Crore)

		(113. 01010)
Particulars	FY 2020-21	FY 2020-21
	Approved (23rd March, 2021)	Actual
Annual Revenue Requirement	2,752.30	2769.87
Revenue from sale of power	2,945.17	2902.66
Revenue (Gap)/Surplus	192.88	132.79
Previous Years' (Gap)/Surplus Carried Over	(149.85)	(149.85)
Holding Cost	(4.67)	(7.30)
Net Revenue (Gap)/surplus	38.36	(24.36)

DNHPDCL requests the Hon'ble Commission to consider the revenue surplus of Rs. 132.79 Crore for FY 2020-21 arrived as part of truing up process.



# Chapter 3: Review of FY 2021-22

The review of aggregate revenue requirement for FY 2021-22 is based on quantum of energy sales, energy loss as well as various cost elements like power purchase cost, O&M expenses, interest cost and depreciation etc. This has been done based on actual data for six months and revised estimates for the remaining six months of FY 2021-22. DNHPDCL analysis in respect of items given below is discussed in the following paras:

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



# 3.1 Energy Sales

Based on the actual retail sales to various consumers, DNHPDCL has estimated the total retail energy sold for FY 2021-22 as shown in the Table below:

Table 23: Category wise sales for FY 2021-22 (Revised Estimate)

(MU)

Particulars	FY 2021-22 Approved	FY 2021-22 Approved	FY 2021-22
	(20th May, 2019)	(23rd March, 2021)	RE
Domestic	158.29	167.74	173.53
LIG/ Kutir Jyoti	0.00	0.00	7.33
Commercial	38.31	38.89	37.33
Agriculture	8.25	5.46	4.77
LT Industry	223.82	227.55	225.33
HT/EHT Industry	6273.63	6088.87	6128.60
Public Lighting	9.10	3.22	2.50
Public Water Works	10.95	5.26	5.04
Temp. Supply	3.39	3.79	4.36
Total Sales	6,725.74	6,540.78	6,588.80

As can be seen, DNHPDCL's overall energy sales are significantly dependent upon HT/EHT Industries to the extent of around 94%. The sales proposed by DNHPDCL is based upon the actual power sold by the Corporation during the first six months of FY 2021-22. The DNHPDCL requests the Hon'ble Commission to approve the category wise sales estimated for the FY 2021-22.

#### 3.2 Distribution loss for FY 2021-22

DNHPDCL has considered the distribution losses of 4.10% for FY 2021-22 as approved by the Hon'ble Commission in its last Tariff Order.

Table 24: Distribution losses for FY 2021-22

Particulars FY 2021-22 FY 2021-22 FY 2021-22

Approved Approved (20th May, (23rd March, RE 2019) 2021)

Distribution Loss 4.10% 4.10%

It is requested to please approve the distribution loss for the FY 2021-22 as submitted in the table given above.



# 3.3 Energy Requirement of the System

The following Table depicts the energy requirement of the DNHPDCL for FY 2021-22.

Table 25: Energy Requirement of the System

(MU)

		(MU)
Particulars	FY 2021-22	FY 2021-22
	Approved (23rd March, 2021)	RE
Sales	6,540.78	6,588.80
Open Access Sales	0.00	0.00
Less: Energy Savings	0.00	0.00
Total Sales	6,540.78	6,588.80
Add: Losses	279.64	281.69
T&D Losses	4.10%	4.10%
Energy Required at Periphery	6,820.42	6,870.49
Add: Sales to common pool consumer	0.00	0.17
Add: Sales through IEX	0.00	4.63
Less: Own Generation	6.18	5.91
Total energy requirement at state periphery	6,814.24	6,869.38
Less: Energy Purchased through UI at		
Periphery	0.00	28.99
Less: Purchase from Renewable Sources	175.20	0.00
Less: Open Access Purchase	0.00	0.00
Less: Purchase from Power Exchange	927.00	931.83
Total Energy Required at Periphery	5,712.04	5,908.57
Transmission loss	216.99	224.47
Transmission loss(%)	3.66%	3.66%
Total Energy to be purchased	5,929.03	6,133.04
Total Energy requirement from tied up sources		
& UI at generator end	7,037.41	7,099.76
Total Energy requirement in ut including Open		
Access	7,037.41	7,099.76

#### 3.4 Energy Availability and power purchase cost

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

The DNHPDCL for the purpose of estimation of the power availability during FY 2021-22 has considered the following sources of power:

NTPC Western Region Generating Stations



- NTPC Eastern Region Generating Stations
- NSPCL (NTPC-SAIL Power Company Ltd)
- Nuclear Power Corporation of India Limited
- Private Sector Power Generating Companies
- Renewable energy sources Solar and Non-Solar
- Other market sources

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

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

**Table 26: Energy Allocation from Central Generating Stations** 

(MW)

Name of the plant	Weighted average Infirm allocation	Weighted Average Firm allocation	Weighted average total allocation
KSTPP	54.32	0.00	54.32
KSTPS -3	20.48	2.20	22.68
VSTPP-I	38.41	5.00	43.41
VSTPP-II	29.52	4.00	33.52
VSTPP- III	29.52	6.00	35.52
VSTPP- IV	40.97	5.55	46.52
KAWAS	56.23	25.00	81.23
GGPP	56.74	2.00	58.74
Sipat – I	81.12	9.00	90.12
Sipat - II	28.11	4.00	32.11
KHSTPP – II	3.50	0.00	3.50
Mauda I (MSTPS)	0.00	0.00	0.00
VSTPP-V	20.48	5.55	26.03
Mauda II	54.08	8.60	62.68



Name of the plant	Weighted average Infirm allocation	Weighted Average Firm allocation	Weighted average total allocation
Solapur	54.08	21.57	75.65
Gadarwara	65.55	20.83	86.38
LARA	64.97	10.46	75.43
Kharagaon	54.08	16.83	70.91
NPCIL - KAPS	14.37	2.00	16.37
NPCIL - TAPP 3&4	35.22	7.00	42.22
Total	801.77	155.59	957.36
NSPCL Bhilai		100	100.00

Based on the actual power purchase cost of the first six months of FY 2021-22 and the remaining six months projection, the revised estimated power purchase cost for FY 2021-22 is presented in the following Table:

Table 27: Revised estimated Power Purchase cost for FY 2021-22

(Rs. Crore)

Source	Units Purchased	Fixed Charges	Variable Charges	Other Charges	Rebate	All Charges Total	Per Unit Cost
NTPC Stations							
KSTPS	400.54	25.79	61.28	2.47	0.00	89.54	2.24
KSTPS 3	169.11	21.90	25.23	(0.14)	0.00	47.00	2.78
VSTPP-I	307.55	25.35	53.20	2.28	0.00	80.83	2.63
VSTPP-II	224.82	14.69	37.06	0.19	0.00	51.94	2.31
VSTPP- III	237.95	23.07	38.72	(0.44)	0.00	61.34	2.58
VSTPP- IV	342.56	50.77	56.33	0.17	0.00	107.27	3.13
KGPP	143.58	49.33	22.82	2.68	0.00	74.83	5.21
GGPP	118.86	41.58	20.26	1.05	0.00	62.90	5.29
Sipat-I	644.64	81.96	105.13	(0.42)	0.00	186.67	2.90
Sipat-II	243.51	27.74	41.75	(0.10)	0.00	69.40	2.85
Mauda	0.00	0.00	0.00	0.55	0.00	0.55	1712.22
VSTPS-V	191.30	30.03	32.63	(0.19)	0.00	62.48	3.27
Mauda 2	288.56	63.82	93.68	2.11	0.00	159.61	5.53
Solapur	312.80	90.20	108.85	0.93	0.00	199.98	6.39
LARA	520.92	88.22	121.39	(0.17)	0.00	209.44	4.02
Gadarwara	502.96	124.84	147.08	(0.23)	0.00	271.69	5.40
Kharagaon	375.64	79.41	109.67	(0.62)	0.00	188.46	0.00
KHSTPP-II	21.67	2.28	5.00	(0.01)	0.00	7.27	3.36
Subtotal - NTPC	5047.00	840.99	1080.09	10.11	-0.08	1931.27	3.83
NSPCL - Bhilai	709.28	115.38	186.55	1.01	0.00	302.93	4.27
NPCIL							
KAPS	84.23	0.00	19.64	0.00	0.00	19.64	2.33
TAPS	292.53	0.00	99.58	3.51	0.00	103.09	3.52



Source	Units Purchased	Fixed Charges	Variable Charges	Other Charges	Rebate	All Charges Total	Per Unit Cost
Subtotal	376.76	0.00	119.23	3.51	0.00	122.74	3.26
Power purchase from Other							
Sources							
Indian E.							
Exchange/Bilateral	931.83	0.00	409.23	0.00	0.00	409.23	4.39
UI	28.99	0.00	10.97	0.00	0.00	10.97	3.78
Solar	5.91	0.00	0.00	0.00	0.00	0.00	0.00
Non Solar	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar REC	0.00	0.00	23.76	0.00	0.00	23.76	0.00
Non Solar REC	0.00	0.00	32.51	0.00	0.00	32.51	0.00
Subtotal	966.72	0.00	476.47	0.00	0.00	476.47	4.93
Rebate							
<b>Total Power Purchase</b>	7099.76	956.36	1862.34	14.62	-0.08	2833.40	3.99
External Losses							
Availability at ED-DNH							-1-10
Periphery	7099.76	956.36	1862.34	14.62	-0.08	2833.40	3.99
PGCIL CHARGES						459.56	
POSOCO						0.97	
WRPC						0.00	
Reactive charges						0.00	
MSTCL						0.00	
Intra-state transmission							
charges						51.73	
<b>Grand Total of Charges</b>	7099.76	956.36	1862.34	14.62	TY HES	3345.66	4.71

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

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

The Government of India, Ministry of Power has allocated 2% (38 MW) power to DNHPDCL on a long term basis from RGPPL. The DNHPDCL had also executed PPA with RGPPL. RGPPL had previously shut down the generating station on account of minimum technical load requirement as the main beneficiary i.e. Maharashtra was not scheduling the power. Accordingly, DNHPDCL has not considered any power purchase from RGPPL.

As per the revised RPO targets the DNHPDCL has to purchase 527.10 MUs of solar energy and 592.99 MUs of non-solar energy during the FY 2021-22. The



DNHPDCL will fulfil the RPO target through procurement of 325.77 MUs of solar energy including generation of 5.91 MUs of solar power during the FY 2021-22. Further, the DNHPDCL will purchase 317.49 MUs of non-solar energy. Rest of the RPO shall be fulfilled by purchase of Renewable energy certificates.

## 3.5 Operation & Maintenance Costs

The approved and revised estimated O&M cost for FY 2021-22 is shown in the following Table:

Table 28: O&M Expense for FY 2021-22

(Rs. Cr.)

Particulars	FY 2021-22	FY 2021-22	FY 2021-22
	Approved (20th May, 2019)	Approved (23rd March, 2021)	RE
Employee Cost	18.95	14.73	14.93
R&M	12.64	13.07	28.04
A&G	7.57	6.96	4.50
O&M Expenses	39.16	34.76	47.47

The DNHPDCL has computed the employee cost and the A&G expenses as per the methodology given in the MYT Regulations, 2018 for the FY 2021-22. However, the R&M expenses have been estimated by considering the actual R&M expenses incurred during the FY 2020-21 and also taking into consideration the increase in the Annual License Fees of the utilities. The R&M expenses has witnessed substantial increase because of regulatory provisions and other factors. Further, the present the scale of R&M expenses, which is being incurred by the Corporation is quite optimal keeping in view other nearby distribution utility and the cost efficiency rating parameter. This has been explained in for claiming the actual R&M expenses for FY 2020-21. However, the present methodology of allowing R&M expenses is resulting in lower R&M expenses for any year.

The DNHPDCL requests the Hon'ble Commission to approve the O&M expenses as submitted above for the FY 2021-22.



## 3.6 Capital Expenditure Plan

DNHPDCL has considered the capital expenditure and capitalization as per the ongoing works in the UT and based on the estimated expenditure to be incurred during the FY 2021-22. The DNHPDCL requests the Hon'ble Commission to approve the capital expenditure against the scheme as submitted herewith.

A summary of the capital expenditure and capitalization for FY 2021-22 vis-à-vis approved by the Commission is summarized in Table below:

Table 29: Capital Expenditure & Capitalization for FY 2021-22

			(Rs. Cr.)
Particulars	FY 2021-22	FY 2021-22	FY 2021-22
	Approved (20th May, 2019)	Approved (23rd March, 2021)	RE
Capital Expenditure	18.00	18.00	10.00
Capitalisation	48.00	48.00	8.26

#### 3.7 Gross Fixed Assets

The Commission in its last Tariff Order has approved the opening GFA, addition of assets and closing GFA for FY 21-22 at Rs. 625.53 Crore, Rs. 48.00 Crore and Rs. 673.53 Crore respectively.

DNHPDCL had Opening Gross Fixed Assets (GFA) of Rs. 466.84 Crore in FY 2020-21. DNHPDCL has further added assets worth Rs. 163.92 Crore during FY 2020-21. The closing GFA by the end of FY 2020-21 stands at Rs. 630.76 Crore.

Based on the capital expenditure and capitalization estimated above, assets amounting to Rs. 8.26 Crore have been estimated to be capitalized during FY 2021-22.

A summary of the Opening and Closing GFA and capitalization for FY 2021-22 vis-à-vis approved by the Commission has been summarized in Table below:



Table 30: Opening and Closing GFA for FY 2021-22

(Rs. Cr.)

Particulars	Opening GFA	Additions during the Year	Closing GFA	
FY 2021-22 (Approved)	625.53	48.00	673.53	
FY 2021-22 (RE)	630.76	8.26	639.02	

## 3.8 Depreciation

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

DNHPDCL has applied the following depreciation rates as specified in the MYT regulations, 2018.

Table 31: Depreciation rate

Asset Category	Depreciation Rate %
Plant & Machinery	3.60%
Buildings	1.80%
Vehicles	9.50%
Furniture & Fixtures	6.00%
Computers & Others	6.00%
Land	0.00%
Software-Intangible Assets	16.00%

Depreciation for the FY 2021-22 is determined by applying aforesaid category-wise assets depreciation rates on the opening balance of Gross Fixed assets and average of the addition during the year projected for FY 2021-22. The Table below summarizes the asset-wise depreciation vis-à-vis approved by the Commission and computed by DNHPDCL:



Table 32: Depreciation for FY 2021-22

(Rs. Cr.)

Particulars	FY 2021-22	FY 2021-22	FY 2021-22
	Approved (20th May, 2019)	Approved (23rd March, 2021)	RE
Opening GFA	621.34	625.53	630.76
Addition during the year	48.00	48.00	8.26
Closing GFA	669.34	673.53	639.02
Average GFA	645.34	649.53	634.89
Depreciation during the year	24.98	21.34	22.80

#### 3.9 Interest & Financial Costs

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

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

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

Table 33: Interest on Long-term/Capital Loans for FY 2021-22

(Rs. Cr.)

			(Ks. Cr.)
Particulars	FY 2021-22	FY 2021-22	FY 2021-22
	Approved (20th May, 2019)	Approved (23rd March, 2021)	RE
Opening Loan	107.37	112.75	124.19
Loan for additional Capex (70:30 debt-			
equity)	33.60	33.60	5.78
Loan Repayment	24.98	21.34	22.80
Closing Loan	115.99	125.01	107.18
Interest Cost on Avg. Loans	10.67	9.51	9.25

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



## 3.9.2 Interest on Working Capital Borrowings

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

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

- a. O&M expense for one month
- b. Maintenance spares at 40% of R&M for one month
- c. Receivables for 2 months
- d. Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt

A rate of interest of 9.00% has been considered on the working capital requirement, being the 1 year SBI MCLR plus 200 basis points. This is in line with the JERC (Multi Year Distribution Tariff) Regulations, 2018 which states that "The rate of interest on working capital shall be equal one (1) Year State Bank of India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1) Year period, as may be applicable as on 1st April of the Financial Year in which the Petition is filed plus 200 basis points."

The normative interest on working capital for FY 2021-22 considering the above methodology is summarized in the Table below:

Table 34: Interest on Working Capital for FY 2021-22

(Rs. Cr.) FY 2021-22 **Particulars** FY 2021-22 FY 2021-22 Approved Approved (20th May, (23rd March, RE 2019) 2021) O&M expense for one month 3.26 2.90 3.96 Maintenance spares at 40% of R&M for 0.93 one month 0.420.44566.67 573.95 Receivables for 2 months 556.68 570.35 578.84 **Total** 560.02 Less consumer security deposit but excluding Bank Guarantee/Fixed 39.19 60.63 76.13



Particulars	FY 2021-22	FY 2021-22	FY 2021-22
	Approved (20th May, 2019)	Approved (23rd March, 2021)	RE
Deposit Receipt			
Net Working Capital required after deduction of Security Deposit	531.16	499.39	502.71
Interest on Working Capital	53.91	48.69	45.24

## 3.10 Return on Equity

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

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

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

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

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



Table 35: Return on Equity for FY 2021-22

(Re Cr

			(Rs. Cr.)
Particulars	FY 2021-22	FY 2021-22	FY 2021-22
	Approved (20th May, 2019)	Approved (23rd March, 2021)	RE
Opening Equity	150.78	152.03	189.23
Additions on account of new	150.70	102.00	109,20
capitalisation	14.4	14.4	2.48
Closing Equity	165.18	166.43	191.70
Average Equity	157.98	159.23	190.47
Equity for wire business (90%)	142.18	143.31	171.42
Equity for Retail Supply Business (10%)	15.8	15.92	19.05
Return on Equity for Wire Business (%)	15.50%	15.50%	15.50%
Return on Equity for Retail Supply			
Business (%)	16.00%	16.00%	16.00%
Return on Equity for Wire Business	22.04	22.21	26.57
Return on Equity for Retail Supply			
Business	2.53	2.55	3.05
Return on Equity	24.57	24.76	29.62

The DNHPDCL, requests the Hon'ble Commission to approve the return on equity computed for FY 2021-22.

# 3.11 Interest on consumer security deposit

The Hon'ble Commission in its last Tariff Order has approved Rs. 4.20 Crore as interest payable on consumer security deposits. DNHPDCL has made a provision to pay Rs. 3.20 Crore as interest on consumer security deposits in FY 2021-22. The details of the same have been given in the table below:

**Table 36: Interest on Consumer Security Deposit for FY 2021-22** 

			(Rs. Cr.)
Particulars	FY 2021-22	FY 2021-22	FY 2021-22
	Approved (20th May, 2019)	Approved (23rd March, 2021)	RE
Interest on Security Deposit	2.45	4.20	3.20

The DNHPDCL, requests the Hon'ble Commission to approve the interest on consumer deposit computed for FY 2021-22.



#### 3.12 Income Tax

The MYT Regulations, 2018 provide for the provision of income tax. DNHPDCL has made a provision of Rs. 20.00 Crore towards tax on income for the FY 2021-22. Details of the actual income tax which will be paid by DNHPDCL during the FY 2021-22 shall be submitted to the Hon'ble Commission at the time of truing up.

Table 37: Income Tax for FY 2021-22

(Rs. Cr.) FY 2021-22 FY 2021-22 FY 2021-22 **Particulars** Approved Approved (23rd March, RE (20th May, 2021) 2019) 15.00 20.00 0.00 **Income Tax** 

#### 3.13 Non-Tariff & Other Income

The non-tariff income for FY 2021-22 has been estimated by considering elements like sale of scrap, reactive income, STOA application fees, supervision charges etc. However, one time income like provision written back has not been considered to estimate the non-tariff income for FY 2021-22. Details of the non-tariff income is provided in table below:

Table 38: Non-tariff Income for FY 2021-22

(Rs. Cr.) FY 2021-22 FY 2021-22 FY 2021-22 **Particulars** Approved Approved RE (20th May, (23rd March, 2021) 2019) 5.87 12.66 49.60 Non tariff Income

Under the applicable MYT Regulations, the interest earned on equity or ROE which remains in the business as other investment should not be considered as non-tariff income. Further, the delayed payment charges should not be considered as non-tariff income. Hence, the non-tariff income for FY 2021-22 has been estimated on the line of requirement of applicable MYT Regulation on the basis of Annual Audited Account of FY 2020-21.



The DNHPDCL requests the Hon'ble Commission to approve the non-tariff income as submitted for the FY 2021-22.

# 3.14 Aggregate Revenue Requirement

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

Table 39: Aggregate Revenue Requirement for FY 2021-22

(Rs. Cr.)

Particulars Particulars	FY 2021-22	FY 2021-22	FY 2021-22
	Approved (20th May, 2019)	Approved (23rd March, 2021)	RE
Power Purchase Cost	3,293.91	3,234.13	3,345.66
O&M Expense	39.16	34.76	47.47
Depreciation	24.98	21.34	22.80
Interest Cost on Long-term Capital Loans	10.67	9.51	9.25
Interest on Working Capital Loans	53.91	48.69	45.24
Return on Equity	24.57	24.76	29.62
Provision for Bad Debt	0.00	0.00	0.00
Interest on security deposit	2.45	4.20	3.20
Income Tax	0.00	15.00	20.00
Total	3,449.65	3,392.39	3,523.24
Less:			
Non-Tariff Income	49.60	12.66	5.87
Annual Revenue Requirement	3,400.05	3,379.73	3,517.37

#### 3.15 Revenue from Existing Tariff

Revenue from sale of power for FY 2021-22 is determined based on the energy sales estimated and category wise tariff prevalent in the UT of Dadra & Nagar Haveli.

Revenue from sale of power at existing tariff is estimated to be Rs. 3277.07 Crore in FY 2021-22, as shown in the following Table. The estimated revenue for FY 2021-22 is based on the six month actual revenue at the exiting tariff. The revenue for remaining six months of FY 2021-22 has been computed based on the retail tariff notified by the Commission in the Tariff Order for the FY 2021-22 dated 23<sup>rd</sup> March, 2021. The total revenue estimated for the FY 2021-22

includes the actual FPPCA billed during the first six months and the estimated FPPCA for the remaining six months.

The Table below summarizes the revenue from sale of power at existing tariff for FY 2021-22:

Table 40: Revenue from Sale of Power at Existing Tariff for FY 2021-22

(Rs. Cr.) FY 2021-22 FY 2021-22 **Particulars** Approved (23rd March, RE 2021) 3,277.07 3,535.69 Revenue from sale of power 0.00 6.87 Revenue from Surplus Power Sale 159.78 Revenue from FPPCA 0.00 3443.72 3535.69 Total revenue

# 3.16 Coverage of Revenue Gap

Revenue from sale of power within DNHPDCL is determined in the previous Table. The following Table summarizes the revenue gap at existing tariff at Rs.73.65 Crore for FY 2021-22.

Table 41: Revenue Gap/Surplus for FY 2021-22

(Rs. Cr.) FY 2021-22 FY 2021-22 **Particulars** Approved RE (23rd March, 2021) 3517.37 3379.73 Annual Revenue Requirement 3277.07 3535.69 Revenue from sale of power 0.00 6.87 Revenue from Surplus Power Sale 159.78 Revenue from FPPCA 0.00 155.96 (73.65)Revenue (Gap)/surplus Previous Years' (Gap)/Surplus Carried 38.35 (24.36)Over (5.57)(4.89)Holding Cost Net Revenue (Gap)/surplus 188.74 (102.90)

The total revenue gap at the end of FY 2021-22 by taking into account the revenue gap arrived at after truing up of FY 2020-21 is Rs. 102.90 Crore. The Hon'ble Commission is requested to approve the same as part of the review of FY 2021-22.



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

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

The following sections explain in detail the basis and forecasts of the following -elements for the FY 2022-23 to FY 2024-25:

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



f. Tariff revision proposal for FY 2022-23 to meet the Revenue Gap.

#### 4.1 Load Growth

The Table given below summarizes the growth in sanctioned load over the past 6 years.

Table 42: Past Years' Load Growth

(kVA)

					1	*
Consumer Category	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
	Actual	Actual	Actual	Actual	Actual	Actual
Domestic	93,886.64	96,077.52	1,01,282.64	105192.00	94309.00	106754.00
LIG/ Kutir Jyoti	1,343.30	1,477.10	1,486.25	1585.00	1389.00	1547.00
Commercial	24,488.24	25,751.93	26,690.54	27865.00	21347.00	34238.00
Agriculture	5,479.20	5,590.32	5,778.89	5935.00	6593.00	7411.00
LT Industry	1,09,910.05	1,13,066.56	1,15,920.90	119051.00	134784.00	140224.00
HT/EHT Industry	11,46,822.00	11,43,066.00	11,57,756.00	1177554.00	1185935.00	1167507.00
Public Lighting	2,346.00	2,536.05	2,706.48	2886.00	2046.00	2568.00
Public Water Works	2,257.12	2,443.62	2,885.62	3272.00	4790.00	4860.00
Temp. Supply	2,358.59	2,358.78	2,536.66	2537.00	1690.00	2727.00
Total	13,88,891.14	13,92,367.88	14,17,043.98	1445877.00	1452883.00	1467836.00

The projected load for the FY 2021-22 and the MYT Control period FY 2022-23 to FY 2024-25 has been given in the table below:

Table 43: Projected load growth for FY 2021-22 and the MYT Control Period

(kVA)

Consumer Category	FY 21-22	FY 22-23	FY 23-24	FY 24-25
	RE	Projected	Projected	Projected
Domestic	109531.80	112381.88	115306.12	118306.46
LIGH	1547.00	1547.00	1547.00	1547.00
Commercial	36611.59	39149.72	41863.82	44766.08
Agriculture	7872.43	8362.59	8883.26	9436.36
LT Industry	149408.70	159195.00	169622.30	180732.60
HT/EHT Industry	1171688.56	1171688.56	1171688.56	1171688.56
Public Lighting	2576.05	2584.13	2592.23	2600.35
Public Water Works	5103.00	5358.15	5626.06	5907.36
Temp. Supply	2727.00	2727.00	2727.00	2727.00
Total	1487066.12	1502994.03	1519856.36	1537711.76

The Hon'ble Commission is requested to approve the connected load submitted for the FY 2021-22 and MYT Control Period.



#### 4.2 Consumer Growth

The Table 44 below summarizes the category wise growth in consumers over the past 6 years.

Table 44: Past Years' Consumer Growth

Consumer Category	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
	Actual	Actual	Actual	Actual	Actual	Actual
Domestic	40773	42835	45205	47402	52072	54371
LIG	13443	14603	14879	15089	17232	17419
Commercial	7306	7586	7809	7980	8061	8163
Agriculture	1211	1263	1313	1366	1286	1319
LT Industry	2038	2063	2064	2077	2191	2254
HT/EHT Industry	889	895	918	930	916	915
Public Lighting	324	350	374	398	411	421
Public Water Works	340	358	398	434	460	464
Temp. Supply	334	347	379	379	334	391
Total	66,658	70,300	73,339	76,055	82,963	85,717

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

Table 45: Projected consumer growth during FY 2021-22 and the MYT

Control Period

Consumer Category	FY 21-22	FY 22-23	FY 23-24	FY 24-25
	RE	Projected	Projected	Projected
Domestic	57593	61005	64620	68448
LIGH	17419	17419	17419	17419
Commercial	8346	8533	8725	8920
Agriculture	1342	1365	1388	1412
LT Industry	2300	2347	2394	2443
HT/EHT Industry	920	926	931	936
Public Lighting	444	467	493	519
Public Water Works	488	514	541	569
Temp. Supply	391	391	391	391
Total	89,243	92,967	96,902	1,01,059

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

# 4.3 Energy Sales

The following table summarizes category wise actual energy sales from FY 2015-16 to FY 2020-21 for all the consumer segments. As can be seen,

DNHPDCL's overall energy sales are significantly dependent upon HT/EHT Industries to the extent of around 94%.

Table 46: Category wise sales from FY 2015-16 to FY 2020-21

					(MU)		
Consumer Category	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	
	Actual	Actual	Actual	Actual	Actual	Actual	
Domestic	101.52	104.46	116.91	128.60	143.57	149.28	
LIG/Kutir Jyoti	0.00	0.00	0.00	0.00	10.45	7.28	
Commercial	28.78	30.36	32.72	34.20	36.60	32.65	
Agriculture	5.77	6.20	6.50	7.23	5.25	4.85	
LT Industry	200.86	211.70	208.24	216.07	219.44	193.09	
HT/EHT Industry	4,421.50	3,384.17	5,295.13	5,670.85	5,860.85	4898.91	
Public Lighting	7.46	8.27	7.97	5.80	3.06	2.45	
Public Water Works	3.56	4.55	5.45	6.24	5.01	5.15	
Temp. Supply	2.95	3.20	3.39	3.43	3.75	3.83	
Total Sales	4,772.40	3,752.91	5,676.30	6,072.42	6,288.00	5,297.50	

<sup>\*</sup> The LIG sales for the FY 2015-16 to FY 2018-19 is included in the Domestic Category

The DNHPDCL is of the view that the factors affecting the actual consumption of electricity are numerous and often beyond the control of the utility including factors such as Government Policy, economic climate, weather conditions and force majeure events like natural disasters, etc. DNHPDCL, therefore for projecting the category-wise consumption for the FY 2021-22 and the MYT Control Period has considered the past growth trends in each of the consumer category including growth trend in number of consumers and connected load.

The energy sales for the FY 2021-22 and the MYT Control Period have been determined based on CAGR for past years and actual energy sales in various consumer categories. Since the energy sales in each category depends upon a number of factors like growth in economy, climate, Government policies, etc, normalization in sales has been undertaken in order to remove any wide fluctuations.

The following Table summarizes category wise projected energy sales for the FY 2021-22 and MYT Control Period for DNHPDCL. As can be observed, the overall energy sales in UT of Dadra & Nagar Haveli are significantly dependent upon LT and HT/EHT industrial consumption.

The DHPDCL submits to the Hon'ble Commission to approve the energy sales forecasted herein.

Table 47: Projected Category wise Energy Sales for FY 2021-22 and MYT

Control Period

				(MU)
Consumer Category	FY 21-22	FY 22-23	FY 23-24	FY 24-25
	RE	Projected	Projected	Projected
Domestic	173.53	189.22	206.33	224.99
LIGH	7.33	7.85	8.40	8.98
Commercial	37.33	39.66	42.14	44.76
Agriculture	4.77	4.97	5.17	5.38
LT Industry	225.33	233.65	242.28	251.23
HT/EHT Industry	6128.60	6321.68	6520.85	6726.29
Public Lighting	2.50	2.62	2.75	2.89
Public Water Works	5.04	5.29	5.55	5.83
Temp. Supply	4.36	4.40	4.45	4.49
Total	6,588.80	6,809.35	7,037.92	7,274.84

It is requested to approve the energy sales projected for the FY 2021-22 and MYT Control Period.

#### 4.4 Distribution Loss Reduction

The DNHPDCL has achieved a significant reduction in transmission & distribution losses. The DNHPDCL would like to submit that the system improvement works executed every year under the plan schemes as well as planned maintenance activities of systems has resulted in the reduction of T & D losses.

DNHPDCL has achieved Distribution loss level of 3.62% for the FY 2020-21 as against the target of 4.20% given by the Hon'ble Commission in the Tariff Order for the FY 2020-21. Further, the Hon'ble Commission had set a T&D loss level target of 4.10% for the FY 2021-22 in the Tariff Order dated 23<sup>rd</sup> March, 2021. The DNHPDCL has kept the T&D losses at the same level as approved by the Hon'ble Commission for FY 2021-22. Reduction of Distribution loss will involve significant amount of capital expenditure and it is DNHPDCL's endeavour to bring the Distribution loss level further down in the subsequent

years. The projected distribution loss for the FY 2012-22 and the MYT Control Period is as given in the table below:

**Table 48: Proposed Distribution Losses** 

Particulars	FY 21-22	FY 22-23	FY 23-24	FY 24-25
	RE	Projected	Projected	Projected
Distribution Loss	4.10%	4.06%	4.02%	4.00%

The DNHPDCL requests the Hon'ble Commission to approve the Distribution loss as projected for the FY 2021-22 and the MYT Control Period.

# 4.5 Energy Requirement of the System

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

Table 49: Energy Requirement of the System during the FY 2021-22 and MYT

Control Period

(MU)

Particulars	FY 21-22	FY 22-23	FY 23-24	FY 24-25
	RE	Proj.	Proj.	Proj.
Sales	6588.80	6809.35	7037.92	7274.84
Open Access Sales	0.00	0.00	0.00	0.00
Less: Energy Savings	0.00	0.00	0.00	0.00
Total Sales	6588.80	6809.35	7037.92	7274.84
Add: Losses	281.69	288.16	294.77	303.12
T&D Losses	4.10%	4.06%	4.02%	4.00%
Energy Required at Periphery	6870.49	7097.51	7332.69	7577.96
Add: Sales to common pool				
consumer	0.17	0.94	0.75	0.48
Add: Sales through IEX	4.63	0.00	0.00	0.00
Less: Own Generation	5.91	5.91	5.91	5.91
Total energy requirement at state				
periphery	6869.38	7092.54	7327.54	7572.54
Less: Energy Purchased through				
UI at Periphery	28.99	0.00	0.00	0.00
Less: Purchase from Renewable				
Sources	0.00	0.00	0.00	0.00
Less: Open Access Purchase	0.00	0.00	0.00	0.00
Less: Purchased through IEX	931.83	841.00	1076.00	1321.00
Total Energy Required at				
Periphery	5908.57	6251.54	6251.54	6251.54



Particulars	FY 21-22	FY 22-23	FY 23-24	FY 24-25
	RE	Proj.	Proj.	Proj.
Transmission loss	224.47	237.50	237.50	237.50
Transmission loss(%)	3.66%	3.66%	3.66%	3.66%
Total Energy to be purchased	6133.04	6489.04	6489.04	6489.04
Total Energy requirement from				
tied up sources + UI at generator				
end +renewable sources	7099.76	7335.94	7570.94	7815.94
Total Energy requirement in UT				
including Open Access	7099.76	7335.94	7570.94	7815.94

## 4.6 Energy Availability

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

The DNHPDCL for the purpose of estimation of the power availability during the MYT Control Period has considered the following sources of power:

- NTPC Western Region Generating Stations
- NTPC Eastern Region Generating Stations
- NSPCL (NTPC-SAIL Power Company Ltd)
- Nuclear Power Corporation of India Limited
- Private Sector Power Generating Companies
- Renewable energy sources Solar and Non-Solar
- Other market sources

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

For projecting of the energy availability for the FY 2021-22 and MYT Control Period, energy availability, firm and infirm allocation from various generating stations has been considered. Detailed methodology for projecting the power availability to the Petitioner from various sources is summarized below.

#### 4.7 Power Purchase

Dadra & Nagar Haveli has firm and infirm allocated share in Central Sector Generating Stations (CSGS) of NTPC, Nuclear Power Corporation of India Ltd (NPCIL), and NTPC Sail Power Company Ltd (NSPCL).

The power availability for the FY 2021-22 and the MYT Control period has been estimated based on the revised allocation issued by the Western Region Power Committee (WRPC) vide no's. WRPC/Comml-I/6/Alloc/2021/1048 dated 29.10.2021. The energy allocation from various generating stations is summarized in table below:

Table 50: Energy Allocation from Central Generating Stations

(MW)

		(MW)	
	Weighted average	Weighted	Weighted
Name of the plant	Infirm allocation	Average Firm	average total
The second second		allocation	allocation
KSTPP	54.32	0.00	54.32
KSTPS -3	20.48	2.20	22.68
VSTPP-I	38.41	5.00	43.41
VSTPP-II	29.52	4.00	33.52
VSTPP- III	29.52	6.00	35.52
VSTPP- IV	40.97	5.55	46.52
KAWAS	56.23	25.00	81.23
GGPP	56.74	2.00	58.74
Sipat – I	81.12	9.00	90.12
Sipat - II	28.11	4.00	32.11
KHSTPP - II	3.50	0.00	3.50
Mauda I (MSTPS)	0.00	0.00	0.00
VSTPP-V	20.48	5.55	26.03
Mauda II	54.08	8.60	62.68
Solapur	54.08	21.57	75.65
Gadarwara	65.55	20.83	86.38
LARA	64.97	10.46	75.43
Kharagaon	54.08	16.83	70.91
NPCIL - KAPS	14.37	2.00	16.37
NPCIL - TAPP 3&4	35.22	7.00	42.22
Total	801.77	155.59	957.36
NSPCL Bhilai		100	100.00

It is expected that DNHPDCL will not be getting any power from Ratnagiri during the FY 2021-22 and the MYT Control period and therefore no power purchase from the plant has been considered.

Power purchase quantum from the NTPC stations for the FY 2021-22 and the MYT Control Period has been calculated based on the installed capacity of each plant and by applying the PLF approved by the Hon'ble Commission vide. Order for the Business Plan dated 5th November, 2018.

Auxiliary consumption of 7.75% and 2.5% has been considered for coal and gas based generating stations, respectively.

DNHPDCL has already installed 4.585 MW of solar plants in its territory for generation of solar energy out of which 4.1 MW is ground mounted and 485 KW is solar rooftop. A summary of the RPO obligation to be met by the DNHPDCL during the FY 2021-22 and the MYT Control period has been given in the table below:

Table 51: Summary of RPO for the FY 2021-22 and MYT Control Period

Description	FY 2021- 22	FY 2022- 23	FY 2023- 24	FY 2024- 25
Sales within State (MU)	6,588.80	6,809.35	7,037.92	7,274.84
RPO obligation (%)	17.00%	17.00%	17.00%	17.00%
Solar	8.00%	8.00%	8.00%	8.00%
Non-Solar	9.00%	9.00%	9.00%	9.00%
RPO obligation for the year (MU)	1120.10	1157.59	1196.45	1236.72
Solar	527.10	544.75	563.03	581.99
Non-Solar	592.99	317.49	633.41	654.74
RPO Compliance (Procurement and				
own generation)	643.26	643.26	800.00	800.00
Solar	325.77	325.77	400.00	400.00
Non-Solar	317.49	317.49	400.00	400.00
RPO Compliance (REC certificate				
purchase)	476.84	514.33	396.45	436.72
Solar	201.34	218.98	163.03	181.99
Non-Solar	275.50	295.35	233.41	254.74

For computing the power availability at the periphery, 3.66% external transmission losses have been applied on the gross power purchase for the FY 2021-22 and the MYT Control Period.

Table 52 below depicts the station wise power purchase for FY 2021-22 and the MYT Control Period.



Table 52: Power Purchase for the FY 2021-22 and MYT Control period

(MU)

				(MU)
Source	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
NTPC Stations			The State of the S	
KSTPS	400.54	390.64	390.64	390.64
KSTPS 3	169.11	164.98	164.98	164.98
VSTPP-I	307.55	301.71	301.71	301.71
VSTPP-II	224.82	230.26	230.26	230.26
VSTPP- III	237.95	246.87	246.87	246.87
VSTPP- IV	342.56	323.28	323.28	323.28
KGPP	143.58	277.51	277.51	277.51
GGPP	118.86	210.72	210.72	210.72
Sipat-I	644.64	655.42	655.42	655.42
Sipat-II	243.51	233.52	233.52	233.52
Mauda	0.00	0.01	0.01	0.01
VSTPS-V	191.30	180.93	180.93	180.93
Mauda 2	288.56	243.14	243.14	243.14
Solapur	312.80	366.82	366.82	366.82
LARA	520.92	511.07	511.07	511.07
Gadarwara	502.96	585.30	585.30	585.30
Kharagaon	375.64	480.50	480.50	480.50
KHSTPP-II	21.67	22.06	22.06	22.06
Subtotal - NTPC	5047.00	5424.73	5424.73	5424.73
NSPCL - Bhilai	709.28	703.06	703.06	703.06
NPCIL				
KAPS	84.23	93.46	93.46	93.46
TAPS	292.53	267.79	267.79	267.79
Subtotal	376.76	361.25	361.25	361.25
Power purchase from Other				
Sources				
Indian E. Exchange/Bilateral	931.83	841.00	1076.00	1321.00
UI	28.99	0.00	0.00	0.00
Solar	5.91	5.91	5.91	5.91
Non Solar	0.00	0.00	0.00	0.00
Solar REC	0.00	0.00	0.00	0.00
Non Solar REC	0.00	0.00	0.00	0.00
Subtotal	966.72	846.91	1081.91	1326.91
Rebate				
Total Power Purchase	7099.76	7335.94	7570.94	7815.94
External Losses				
Availability at ED-DNH Periphery	7099.76	7335.94	7570.94	7815.94



The Petitioner requests the Commission to approve the Power Purchase quantum estimated in the Table above.

# 4.8 Energy Requirement & Availability

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

Table 53: Energy Balance

(MU)

Particulars	FY 21-22	FY 22-23	FY 23-24	FY 24-25
	RE	Proj.	Proj.	Proj.
Sales	6588.80	6809.35	7037.92	7274.84
Open Access Sales	0.00	0.00	0.00	0.00
Less: Energy Savings	0.00	0.00	0.00	0.00
Total Sales	6588.80	6809.35	7037.92	7274.84
Add: Losses	281.69	288.16	294.77	303.12
T&D Losses	4.10%	4.06%	4.02%	4.00%
Energy Required at Periphery	6870.49	7097.51	7332.69	7577.96
Add: Sales to common pool consumer	0.17	0.94	0.75	0.48
Add: Sales through IEX	4.63	0.00	0.00	0.00
Less: Own Generation	5.91	5.91	5.91	5.91
Total energy requirement at state periphery	6869.38	7092.54	7327.54	7572.54
Less: Energy Purchased through UI at Periphery	28.99	0.00	0.00	0.00
Less: Purchase from Renewable				
Sources	0.00	0.00	0.00	0.00
Less: Open Access Purchase	0.00	0.00	0.00	0.00
Less: Purchased through IEX	931.83	841.00	1076.00	1321.00
Total Energy Required at Periphery	5908.57	6251.54	6251.54	6251.54
Transmission loss	224.47	237.50	237.50	237.50
Transmission loss(%)	3.66%	3.66%	3.66%	3.66%
Total Energy to be purchased	6133.04	6489.04	6489.04	6489.04
Total Energy requirement from tied up sources + UI at generator end	7000 77	<b>5005</b> 04	HT10.04	T045 04
+renewable sources	7099.76	7335.94	7570.94	7815.94
Total Energy requirement in UT including Open Access	7099.76	7335.94	7570.94	7815.94



## 4.9 Power Purchase Cost

The cost of purchase from the central generating stations for the MYT Control period is estimated based on the following assumptions:

- 1. Fixed cost for the MYT Control Period has been projected by considering the fixed cost estimated for the various stations for the FY 2021-22.
- 2. Variable cost for each NTPC generating stations for the MYT Control Period has been projected by the actual variable cost incurred during the first six months of FY 2021-22 for various stations.
- 3. For nuclear plants i.e. KAPP and TAPP single part tariff, the actual average variable cost per unit incurred for the first six months of FY 2020-21 has been considered for projecting the cost for the MYT Control Period.
- 4. For NTPC-SAIL Bhilai unit 1 & 2, the fixed has been projected by considering the fixed cost estimated for the FY 2021-22 and for projecting the variable cost the actual average variable cost per unit incurred for the first six months of FY 2021-22 has been considered.
- 5. For power purchase from renewable energy sources, for the MYT Control Period, the DNHPDCL has outsourced the maintenance cost of the solar plants to BHEL. The Total Power Purchase cost from various sources for the FY 2021-22 is summarized in Table below:

Table 54: Projected Power Purchase Cost for the FY 2021-22 and the MYT **Control Period** 

De Consol

(Rs. Cro				
Source	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
NTPC Stations				
KSTPS	89.54	85.56	85.56	85.56
KSTPS 3	47.00	46.52	46.52	46.52
VSTPP-I	80.83	77.54	77.54	77.54
VSTPP-II	51.94	52.64	52.64	52.64

Source	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
VSTPP- III	61.34	63.24	63.24	63.24
VSTPP- IV	107.27	103.93	103.93	103.93
KGPP	74.83	93.43	93.43	93.43
GGPP	62.90	77.50	77.50	77.50
Sipat-I	186.67	188.85	188.85	188.85
Sipat-II	69.40	67.79	67.79	67.79
Mauda	0.55	0.00	0.00	0.00
VSTPS-V	62.48	60.90	60.90	60.90
Mauda 2	159.61	142.75	142.75	142.75
Solapur	199.98	217.85	217.85	217.85
LARA	209.44	207.31	207.31	207.31
Gadarwara	271.69	296.00	296.00	296.00
Kharagaon	188.46	219.69	219.69	219.69
KHSTPP-II	7.27	7.37	7.37	7.37
Subtotal - NTPC	1931.27	2008.87	2008.87	2008.87
NSPCL - Bhilai	302.93	300.29	300.29	300.29
NPCIL		* * * * * * * * * * * * * * * * *		
KAPS	19.64	21.80	21.80	21.80
TAPS	103.09	91.16	91.16	91.16
Subtotal	122.74	112.96	112.96	112.96
Power purchase from Other Sources				
Indian E.				
Exchange/Bilateral	409.23	393.59	450.24	552.76
UI	10.97	0.00	0.00	0.00
Solar	0.00	0.00	0.00	0.00
Non Solar	0.00	0.00	0.00	0.00
Solar REC	23.76	25.84	19.24	21.47
Non Solar REC	32.51	34.85	27.54	30.06
Subtotal	476.47	454.28	497.02	604.29
Rebate				
<b>Total Power Purchase</b>	2833.40	2876.39	2919.13	3026.40
External Losses				
Availability at ED- DNH Periphery	2833.40	2876.39	2919.13	3026.40

# 4.10 Transmission and Other Charges

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

charges. For the FY 2021-22 and the MYT Control Period the transmission charges payable to the ED-DNH (Transmission Division) have also been considered by the DNHPDCL.

PGCIL transmission charges for the FY 2021-22 and the MYT Control Period have been projected by considering the average monthly bill being received from PGCIL.

The transmission charges along with the total power purchase cost for the FY 2021-22 and the MYT Control Period has been given in the table below:

Table 55: Total Power Purchase Cost for the FY 2021-22 and the MYT Control
Period

	1			(Rs. Crore)
Source	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Availability at ED-DNH Periphery	2833.40	2876.39	2919.13	3026.40
PGCIL CHARGES	459.56	482.53	506.66	531.99
POSOCO	0.97	0.97	0.97	0.97
WRPC	0.00	0.00	0.00	0.00
Reactive charges	0.00	0.00	0.00	0.00
MSTCL	0.00	0.00	0.00	0.00
Intra-state transmission				
charges	51.73	40.00	36.00	36.00
<b>Grand Total of Charges</b>	3345.66	3399.90	3462.76	3595.37

#### 4.11 Operation & Maintenance Costs

Operation and Maintenance expenses comprise of the following heads:

- Employees Expenses which includes the salaries, dearness allowances, dearness pay, other allowances, incentives and retirement and other benefits paid to the employees;
- Repair and Maintenance (R&M) Expenses, which include all expenditure incurred on the maintenance and upkeep of transmission, distribution and other assets and regulatory purposes, and



• Administrative and General Expenses, which include all expenditure incurred in operating a business such as telephone charges, vehicle and other hiring charges, legal expenses, consultancy fees, audit fees, conveyance and travel expenses, water charges and other expenses.

Summary of the past five year operation and maintenance expense is summarized in table below:

Table 56: Operation & Maintenance Expense

	(Rs. Crore)
Year	O&M Expense
	Actual
FY 2016-17	23.68
FY 2017-18	32.89
FY 2018-19	32.92
FY 2019-20	39.76
FY 2020-21	40.13

The total O&M expense for FY 20-21 was Rs. 40.13 Crore as compared with FY 19-20, wherein the total O&M expense were Rs. 39.76 Crore.

The methodology adopted by DNHPDCL for projecting the values of each component of the O&M expense for the MYT Control Period has been explained in following section.

## 4.11.1 Employee Expense

The Employee expense estimated by the Petitioner comprise of all costs related to employees like basic salary, dearness allowances, performance incentive, medical cost, leave travel allowances etc.

As per the MYT Regulations, 2021, the employees' expenses have been calculated as per the following formulae:

EMPn =  $(EMPn-1) \times (1+Gn) \times (CPIinflation)$  where:



EMPn - Employee expenses of the Distribution Licensee for the nth Year;

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

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

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

Table 57: Projected Employee Expense for the MYT Control Period

			(Rs. Crore)
Particulars	FY 2022-23	FY 2023-24	FY 2024-25
	Projected	Projected	Projected
Employee Cost	15.84	16.81	17.84

DNHPDCL 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. Therefore, DNHPDCL requests the Hon'ble Commission to approve the employee costs as projected in the foregoing table.

# 4.11.2 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 20-21 for DNHPDCL was Rs. 21.82 Crore. For FY 2021-22, DNHPDCL has considered the R&M expense of Rs. 28.04 Crore.

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

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



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

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

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

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

Inflation Index is CPI: WPI:: 60:40

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

For projecting the R&M expense for the FY 2021-22, the DNHPDCL has considered the WPI inflation as 2.42%. Total repair & maintenance cost of DNHPDCL for the MYT Control Period is summarized in the table below:

**Table 58: Repairs & Maintenance Expense** 

(Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
	Projected	Projected	Projected
R&M Cost	28.41	29.22	34.60

DNHPDCL 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, quality of supply and reduction in T&D losses in the region in order to ensure consumer satisfaction.

### 4.11.3 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 20-21 was Rs. 4.24 Crore. Further, DNHPDCL has estimated the A&G expense of Rs. 4.50 Crore for FY 21-22.

For projecting the A&G expenses for the MYT Control Period the following formula has been used as given in the MYT Regulations:

 $A&Gn = (A&Gn-1) \times (CPIinflation)$ 

where:

A&Gn - Administrative and General expenses of the Distribution Licensee for the nth Year:

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

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

Table 59: A&G Expense

Particulars FY 2022-23 FY 2023-24 FY 2024-25
Projected Projected Projected
A&G Expenditure 4.77 5.06 5.37

The Regulatory & Consultancy expenses for the MYT Control Period has been projected as per the existing agreements, contracts with the consultants and the best estimates for the future regulatory and consultancy works.

DNHPDCL, therefore, requests the Hon'ble Commission to approve the A&G expenses projected for the MYT Control Period.

## 4.11.4 Total Operation and Maintenance Expense

Based on the employee, R&M and A&G expenses projected above, the total O&M expenditure for the MYT Control Period is summarized in table below. The Hon'ble Commission is requested to approve the total O&M expense as projected by DNHPDCL.



Table 60: Total O&M Expense for the MYT Control Period

		(R	(Rs. Crore)		
Particulars	FY 2022-23 FY 2023-24 FY 2024				
No. of the second secon	Projected	Projected	Projected		
Employee Cost	15.84	16.81	17.84		
R&M Cost	28.41	29.22	34.60		
A&G Expenditure	4.77	5.06	5.37		
Total O&M Exp	49.02	51.09	57.81		

#### 4.12 Capital Expenditure Plan

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

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

Table 61: Capital Expenditure for the MYT Control Period

(Rs. Crore)

				(Ito. Crorc)	
S.N.	Name of Scheme	Total estimated amount for MYT Control		sed Expend	
		Period	2022-23	2023-24	2024-25
1	Erection of various capacity of new distribution transformer, extension of HT/LT line, releasing of new service connection under normal development scheme	3.00	1.00	1.00	1.00
2	Conversion of 66/11 KV (15X3+20X2=85 MVA) substation in to GIS substation at Amli	40.00	-	20.00	20.00
3	Augmentation of 66/11 Waghdara Substation from 2X20 MVA to 3x20 MVA	10.00	10.00	-	-
4	Establishment of 66/11 GIS substation at Dadra (2X20 MVA)	25.00	-	10.00	15.00



S.N. Name of Scheme		Total estimated	Proposed Expenditure		
5.N.	Name of Scheme	amount for MYT Control Period	2022-23	2023-24	2024-25
5	Augmentation of 66/11 Piparia Substation from 2X20 MVA to 3x20 MVA	15.00	-	15.00	-
6	66 KV line from Wagchipa to Sayali (10 KM)	25.00	-	25.00	-
7	66 KV line from Wagchipa to Masat (15 KM)	40.00	-	15.00	25.00
8	66 KV line from Wagchipa to Dadra (10 KM)	25.00	-	25.00	_
9	Establishment of new 66/11 kV , 2x20 MVA substation at Sayali	40.00	-	10.00	30.00
10	Establishment of new 66/11 kV, 2x20 MVA substation at Silli	25.00	-	25.00	-
11	Conversion of double circuit 66 KV line from 220 kV Kharadpada to Masat substation from Panther to TACSR	2.70	2.70	-	-
12	Conversion of double circuit 66 KV line from 220 kV Kharadpada to Rakholi substation from panther to TACSR	2.65	2.65	-	-
13	Conversion of double circuit 66 KV line from 220 KV Khadoli substation to Rakholi substation	2.75	2.75	-	-
14	Renovation of Central room building and replacement of 66 KV breakers, isolator, CTs, PTs etc. at 66/11 KV substation Kharadpada	4.00	1.00	3.00	-
15	Other office assets, office automation and other equipment etc.	5.00	1.00	2.00	2.00
16	Strengthening of old HT line (11 kV Mandoni Rural feeder) by new insulated ACSR HT conductor from Khanvel Substation to village Khedpa / Bedpa Vadpada	14.94	-	14.94	-
17	Construction of new control room building at Dadra substation	5.00	-	5.00	-
	Total	285.04	21.10	170.94	93.00

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



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

Table 62: Capital Expenditure & Capitalization for the MYT Control Period

Proposed Capitalization **Total Estimated** Sr.No. Name of Scheme amount 2022-23 2023-24 2024-25 285.04 1 Capital Expenditure 21.10 170.94 93.00 2 285.04 Capitalization 18.35 120.94 145.75

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

#### 4.13 Gross Fixed Assets

DNHPDCL had Rs. 630.76 Crore of Opening Gross Fixed Assets (GFA) in FY 20-21. Assets amounting to Rs. 163.92 Crore have been added to the GFA during the FY 2020-21.

Assets amounting to Rs. 8.26 Crore have been estimated to be added in the GFA during FY 20-21.

Similarly, based on the capital expenditure plan as detailed above, Rs. 18.35 Crore, Rs. 120.94 Crore and Rs. 145.75 Crore is proposed to be capitalized during the FY 2022-23, FY 2023-24 and FY 2024-25 respectively.

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

Table 63: Opening and Closing GFA for the MYT Control Period

(Rs. Crore) Additions Opening Closing **Particulars** during the **GFA GFA** Year FY 2022-23 639.02 657.37 18.35 FY 2023-24 657.37 120.94 778.31 FY 2024-25 778.31 189.75 924.06



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

# 4.14 Depreciation

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

DNHPDCL has applied the depreciation rates as specified in the MYT Regulations, 2021.

Depreciation for the MYT Control Period is determined by applying aforesaid category-wise assets depreciation rates on the opening balance of Gross Fixed assets and average of the addition during the MYT Control Period. The DNHPDCL would like to submit to the Hon'ble Commission that it has computed the depreciation based on the closing value of GFA for FY 2021-22 and the estimated capitalization for the MYT Control Period.

**Table 64: Depreciation** 

(Rs. Crore) FY 2022-23 **Particulars** FY 2023-24 FY 2024-25 Projected Projected Projected Opening GFA 639.02 657.37 778.31 Addition during the year 18.35 120.94 237.00 Closing GFA 657.37 778.31 924.06 Average GFA 648.19 717.84 851.18 Depreciation during the year 23.28 25.78 30.58

#### 4.15 Interest & Financial Costs

## 4.15.1 Interest on Long-term / Capital Loans

Assets capitalized during the MYT Control Period have been considered based on normative debt-equity ratio of 70:30 as per the as per the MYT Regulations, 2021.

Interest rate of 8.00% has been considered for computation of interest cost for long-term loans which is similar to the prevailing 1 year SBI MCLR plus 100



basis points. Details of the loan amounts and interest cost computed for the MYT Control Period is summarized in Table below:

Table 65: Total Interest on Long-term Loans

(Rs. Crore) FY 2023-24 FY 2024-25 FY 2022-23 Interest on Debt Projected Projected Projected 96.75 155.62 107.18 **Opening Loan** Loan for additional Capex (70:30 102.03 12.85 84.66 debt-equity) 23.28 25.78 30.58 Loan Repayment 227.07 96.75 155.62 Closing Loan 10.09 15.31 Interest Cost on Avg. Loans 8.16

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

# 4.15.2 Interest on Working Capital Borrowings

DNHPDCL has computed the Interest on Working Capital for the MYT Control Period based on normative basis as per the MYT Regulations, 2018.

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

- a. O&M Expenses for one (1) month; plus
- b. Maintenance spares at 40% of repair and maintenance expenses for one (1) month; plus
- Receivables equivalent to two (2) months of the expected revenue from Consumers at the prevailing tariff;
   Less
- d. Power Purchase cost for one (1) month; plus
- e. Amount, if any, held as security deposits under clause (b) of subsection (1) of Section 47 of the Act from Consumers except the security deposits held in the form of Bank Guarantees:

A rate of interest of 9.00% has been considered on the working capital requirement, being the 1 year SBI MCLR plus 200 basis points as on 1st April of the year. This is in line with the MYT Regulations, 2021 which states that "The rate of interest on working capital shall be equal one (1) Year State Bank of

India (SBI) MCLR / any replacement thereof as notified by RBI for the time being in effect applicable for one (1) Year period, as may be applicable as on 1st April of the Financial Year in which the Petition is filed plus 200 basis points." The normative interest on working capital for the MYT Control Period considering the above methodology is summarized in the Table below:

Table 66: Interest on Working Capital for the MYT Control Period

(Rs. Crore) **Particulars** FY 2022-23 FY 2023-24 FY 2024-25 Projected Projected Projected Woking Capital O&M expense for one month 4.08 4.26 4.82 Maintenance spares at 40% of R&M for one month 0.95 0.97 1.15 573.47 Receivables for 2 months 583.27 602.90 578.51 588.50 608.87 Less Power Purchase Cost of 1 month 283.32 288,56 299.61 Less consumer security deposit but excluding Bank Guarantee/Fixed Deposit Receipt 76.13 76.13 76.13 Net Working Capital required after deduction of Security Deposit 219.06 223.81 233.14 Interest on Working Capital 19.71 20.14 20.98

Therefore, DNHPDCL requests the Hon'ble Commission to approve the interest cost on working capital as projected above.

# 4.16 Return on Equity

As per the MYT Regulations, 2018 DNHPDCL is entitled for a Return on Equity (RoE).

The Regulation 28.2 and 28.3 of the MYT Regulations, 2021 stipulates the following:

"28.2 The return on equity for the Distribution Wires Business shall be allowed on the equity capital determined in accordance with Regulation 27 for the



assets put to use at post-tax rate of return on equity specified in the prevalent CERC Tariff Regulations for transmission system.

28.3 The return on equity for the Retail Supply Business shall be allowed on the equity capital determined in accordance with Regulation 27 for the assets put to use, at the rate of sixteen (16) per cent per annum."

The DNHPDCL has segregated the approved average equity (average of opening and closing equity) into average equity for Distribution Wires Business and Retail Supply Business based on the Allocation Statement provided in the MYT Regulations, 2021 i.e. 90% allocation for the Distribution Wires Business and 10% allocation for the Retail Supply Business. The Commission has considered a rate of 15.50% for the Distribution Wires Business (as per the prevalent CERC Regulations) and a rate of 16% for the Retail Supply Business. The equity component has been determined in accordance with Regulation 27 of the MYT Regulations. The following table provides the Return on Equity approved for the MYT Control Period:

Table 67: Return on Equity for the MYT Control Period

(Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
	Projected	Projected	Projected
Opening Equity	191.70	197.21	233.49
Additions on account of new			
capitalisation	5.51	36.28	43.73
Closing Equity	197.21	233.49	277.22
Average Equity	194.46	215.35	255.35
Equity for wire business (90%)	175.01	193.82	229.82
Equity for Retail Supply Business			
(10%)	19.45	21.54	25.54
Return on Equity for Wire Business			
(%)	15.50%	15.50%	15.50%
Return on Equity for Retail Supply			
Business (%)	16.00%	16.00%	16.00%
Return on Equity for Wire Business	27.13	30.04	35.62
Return on Equity for Retail Supply			
Business	3.11	3.45	4.09
Return on Equity	30.24	33.49	39.71

Therefore, DNHPDCL requests the Hon'ble Commission to approve the return on equity capital as projected above.



# 4.17 Interest on consumer security deposits

DNHPDCL has made a provision to pay Rs. 3.20 Crore as interest on consumer security deposits during the MYT Control Period. The details of interest on consumer security deposit is given in the table below:

Table 68: Interest on Consumer Security Deposit for the MYT Control Period

(Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
	Projected	Projected	Projected
Interest on security deposit	3.20	3.20	3.20

Therefore, DNHPDCL requests the Hon'ble Commission to approve the interest on consumer security deposit as projected above.

#### 4.18 Income Tax

The MYT Regulations, 2021 provide for the provision of income tax. DNHPDCL has made a provision of Rs. 20.00 Crore towards tax on income for the MYT Control Period. Details of actual income tax which will be paid by DNHPDCL during the MYT Control Period shall be submitted to the Hon'ble Commission at the time of truing up.

Table 69: Income Tax for the MYT Control Period

(Rs. Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
	Projected	Projected	Projected
Income Tax	20.00	20.00	20.00

## 4.19 Non-Tariff & Other Income

Non-tariff income includes meter rent/service line rentals, recovery for theft of power/malpractices, miscellaneous charges from consumers. Other income includes Interest on Staff loans & advances, Interest on advances to suppliers/contractors, and Miscellaneous receipts.

The non-tariff income for the MYT Control Period has been estimated at the same level as determined for the FY 2021-22 by considering elements like sale



of scrap, reactive income, STOA application fees, supervision charges etc. Details of the non-tariff income is provided in table below:

Table 70: Non-tariff Income for the MYT Control Period

			(Rs. Crore)
PArticulars	FY 2022-23	FY 2023-24	FY 2024-25
<b>建设在国际政治,其以为特别</b>	Projected	Projected	Projected
Non-Tariff Income	5.87	5.87	5.87

# 4.20 Aggregate Revenue Requirement

The following Table summarizes DNHPDCL's Aggregate Revenue Requirement for the MYT Control Period.

Table 71: Aggregate Revenue Requirement for the MYT Control Period

(Rs. Crore) **Annual Revenue Requirement** FY 2022-23 FY 2023-24 FY 2024-25 Projected Projected Projected Power Purchase Cost 3399.90 3,462.76 3595.37 O&M Expense 49.02 51.09 57.81 Depreciation 23.28 25.78 30.58 Interest Cost on Long-term 8.16 10.09 15.31 Capital Loans Interest on Working Capital 19.71 20.14 20.98 Loans Return on Equity 30.24 33.49 39.71 Interest on Security Deposit 3.20 3.20 3.20 Income Tax 20.00 20.00 20.00 Less: Non-Tariff Income 5.87 5.87 5.87 **Annual Revenue Requirement** 3,547.63 3,620.70 3,777.09

## 4.21 Revenue at Existing Tariff

Revenue from sale of power for the FY 2022-23 is determined based on the energy sales estimated and category wise tariff prevalent in the territory of Dadra & Nagar Haveli as per the tariff notified by the Hon'ble Commission in the Tariff Order for the FY 2020-21 dated 23<sup>rd</sup> March, 2021.

The table below summarizes the revenue from sale of power at existing tariff for the FY 2022-23:

Table 72: Revenue from Sale of Power at Existing Tariff for the FY 2022-23

(Rs. Crore) FY 22-23 **Revenue** @ Existing Tariff Projected 47.23 Domestic LIG 1.23 15.90 Commercial Agriculture 0.73 LT Industry 113.60 HT/EHT Industry 3256.72 Public Lighting 1.09 2.96 Public Water Works 2.60 Temp. Supply 3,440.84 **Total** Revenue from Open Access 0.00 0.00 Revenue from surplus power **Total Revenue** 3,440.84

# 4.22 Coverage of Revenue Gap

Revenue from sale of power with-in the UT (category-wise) is determined in Table 72.

Table 73 summarizes the ARR for DNHPDCL for FY 2020-21, FY 2021-22 and FY 2022-23 along with the revenue and the resulting revenue (gap)/surplus. The cumulative gap for the three years is Rs. 222.91 Crore as given in the table below.

Table 73: Revenue Gap for FY 2022-23

				(Rs. Crore)
C	Particulars	2020-21	2021-22	2022-23
Sr. No.		Actual	Revised Estimates	Projected
1	Total ARR	2,769.87	3,517.37	3,547.63
2	Revenue @ Existing Tariff	2,902.66	3,436.85	3,440.84
3	Revenue from Surplus Power Sale	0.00	6.87	0.00
4	Total Revenue(2+3)	2,902.66	3,443.72	3,440.84
5	Revenue (Gap)/Surplus(4-1)	132.79	(73.65)	(106.80)
	Covered By			



Sr.	Particulars	2020-21	2021-22	2022-23
No.		Actual	Revised Estimates	Projected
6	Previous Years' (Gap)/Surplus Carried Over	(149.85)	(24.36)	(102.91)
7	Total (Gap)/Surplus (5+6)	(17.06)	(98.01)	(209.70)
8	Holding Cost	(7.30)	(4.89)	(13.21)
9	Net(Gap)/Surplus (7+8)	(24.36)	(102.91)	(222.91)
10	Additional Revenue @Proposed Tariff	0.00	0.00	201.50
11	Net (Gap)/Surplus (9-10)	(24.36)	(102.91)	(21.41)

# 4.23 Average Cost of Supply

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

Table 74: Average Cost of Supply & Revenue Realization

Average Realization & Cost of Supply	2020-21	2021-22	2022-23
(Rs/Unit)	Actual	Revised Estimates	Projected
Average Cost of Supply of DNHPDCL	5.15	5.33	5.21
Average Realization	5.40	5.22	5.05
Revenue (Gap)/surplus at Existing Tariff	0.25	(0.11)	(0.16)
Net Revenue (Gap)/Surplus (Includes gap of previous year)	(0.03)	(0.15)	(0.31)
Reduction in surplus @ Proposed Tariff	-	-	0.30
Net Revenue (Gap)/Surplus	(0.03)	(0.15)	(0.01)



# 4.24 Tariff Proposal for FY 2022-23

As there is a cumulative gap of Rs. 222.91 Crore for FY 2020-21, FY 2021-22 and FY 2022-23 the DNHPDCL proposes to cover the revenue gap through increase in tariff for the FY 2022-23.

Table below summarizes the existing and proposed tariff structure for various consumer categories for FY 2022-23.

Table 75: Proposed Tariff Structure for FY 2022-23

3	A STATE OF THE STA	Existing FY 2021-22		Propo	osed FY 2022-23
S.N o.	Category/Consumption Slab	Energy Charges (Rs/Kwh)	Fixed Charges	Energy Charges (Rs/Kwh)	Fixed Charges
1	LT-D/Domestic				
	Ist 50 Units	1.40	10.00 Rs./Con/Month	-	_
	51 to 200 Units	2.10	10.00 Rs./Con/Month	-	_
	201 to 400 Units	2.60	10.00 Rs./Con/Month	-	-
	Beyond 401 Units	3.20	10.00 Rs./Con/Month	-	-
	Ist 100 Units	-	-	1.60	10.00 Rs./Con/Month
	101 to 300 Units	-	-	2.30	10.00 Rs./Con/Month
	301 to 500 Units	-	-	2.80	10.00 Rs./Con/Month
	Beyond 501 Units	-	-	3.40	10.00 Rs./Con/Month
	LIGH		20.00 Rs./conn/month		Rs./conn/month
2	LT-C/Commercial				
	1st 100 Units	3.10	20.00 Rs./Con/Month	3.30	20.00 Rs./Con/Month
	Beyond 100 Units	4.10	20.00 Rs./Con/Month	4.30	20.00 Rs./Con/Month
3	LT- Ag/ Agriculture				
	Upto 10 HP per unit Beyond 10 HP per	0.75		0.95	
	unit	1.10		1.30	
4	LTP Industrial				
	Upto 20 HP Connected Load	3.50	20.00Rs./HP/mont h	3.80/kVA H	20.00Rs./HP/mont h
	Above 20 HP Connected Load	3.70	80.00 Rs./HP/month	4.00/kVAh	80.00 Rs./HP/month
5	LT-PL/Public Lighting				
	Public Lighting	4.05		4.25	
6	LT Public Water Works				
	Upto 20 HP Connected Load	4.60	50.00 Rs./HP/month	4.80	50.00 Rs./HP/month

		Existi	Existing FY 2021-22		sed FY 2022-23
S.N o.	Category/Consumption Slab	Energy Charges (Rs/Kwh)	Fixed Charges	Energy Charges (Rs/Kwh)	Fixed Charges
	Above 20 HP Connected Load	4.60	100.00 Rs./HP/month	4.80	100.00 Rs./HP/month
7	НТ				
	HT Category				
		Rs.4.10/kV	400.00	Rs.4.40/kV	400.00
	11 kV	Ah	Rs./kVA/month	Ah	Rs./kVA/month
		Rs.4.05/kV	525.00	Rs.4.35/kV	525.00
	66 kV	AH	Rs./kVA/month	Ah	Rs./kVA/month
		Rs.4.00/kV	575.00	Rs.4.30/kV	575.00
	220 kV	Ah	Rs./kVA/month	Ah	Rs./kVA/month
8	Hoardings/Advertiseme nts				
			100.00		100.00
	For all units	7.30	Rs./kVA/month	7.50	Rs./kVA/month
9	Charging Stations for e-rickshaw/e-vehicle on	4.50		4.00	
	single point delivery	4.70	-	4.90	-

DNHPDCL, requests the Hon'ble Commission to approve the fuel purchase adjustment formula including the "k" factor for FY 2022-23 as well, which can take care of any variation in the ARR over and above the approved level by the Commission for FY 2022-23.



# Chapter 5: Determination of Open Access Charges

#### 5.1 Allocation Matrix

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

Table 76: Allocation of ARR between Wheeling and Retail Supply

Annual Revenue Requirement	Allocatio	Allocation (%)		FY 2022-23
Rs. Crs	Wheeling	Supply	Wheeling	Supply
Fuel Cost	0%	100%	0.00	0.00
Power Purchase Cost	0%	100%	-	3,399.90
Employee	40%	60%	6.34	9.50
R&M	90%	10%	25.57	2.84
A&G	50%	50%	2.39	2.39
Depreciation	90%	10%	20.95	2.33
Interest Cost on Long-term	90%	10%	7.34	0.82
Capital Loans				
Interest on Working Capital	10%	90%	1.97	17.74
Loans				
Interest on Security Deposit	10%	90%	0.32	2.88
Return on Equity	90%	10%	27.21	3.02
Income Tax	90%	10%	18.00	2.00
Provision for Bad & Doubtful	0%	100%		
Debt	0 /0	100 %		_
Annual Revenue Requirement			110.08	3443.42
Less: Non-Tariff Income	10%	90%	0.59	5.28
Less: Income from other	50%	50%		
business	30 /0	JU /0		
Net Revenue Requirement			109.50	3438.14

## 5.2 Voltage wise Wheeling Charges

The DNHPDCL has considered the voltage wise losses for FY 2022-23 as considered by the Hon'ble Commission in its Tariff Order for the FY 2021-22. In order to determine the wheeling charges prudently, the wheeling costs has been allocated on the basis of voltage levels. The wheeling charges are levied for the distribution network utilized by Open Access consumers and primarily comprise of O&M Expenses and other costs as provided in the table above. The criteria for allocation of wheeling costs is elaborated as follows:



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

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

Table 77: Parameters assumed for voltage wise allocation of wheeling charges

Category	Consumers	Sales (MU)	Asset Allocation (%)	Voltage wise losses (%)	Energy Input
Below 11 kV-LT	92041	487.66	40%	22.50%	629.21
11 kV	892	2,742.98	30%	3.80%	2851.33
66 kV	32	1,813.06	20%	1.50%	1840.67
220 kV	2	1,765.64	10%	0.60%	1776.30
Total	92967	6809.35	100%	4.06%	7097.51

Accordingly, the wheeling charge so arrived has been shown in the table below.

Table 78: Wheeling charges proposed for FY 2022-23

Category	O&M	Others	Total	Wheeling Charges (Rs./kWh)
Below 11 kV-LT	33.95	30.08	64.03	1.02
11 kV	0.33	22.56	22.89	0.08
66 kV	0.01	15.04	15.05	0.08
220 kV	0.00	7.52	7.52	0.04
Total	34.29	75.21	109.50	

# 5.3 Cross Subsidy Surcharge

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



The cross-subsidy surcharge has been computed with respect to voltage wise cost of supply. The following approach has been adopted to determine the voltage wise cost of supply:

Voltage Wise losses at each voltage level are assumed for 11 kV, 66 kV and 220 kV voltage levels. The remaining losses are adjusted in the LT voltage level in order to maintain the Intra-State distribution losses at 4.06%, as proposed in the ARR for FY 2021-22. Voltage wise losses assumed at each level has been shown in the table below:

Table 79: Voltage wise losses assumed

Category	Voltage wise losses (%)	Cumulative Voltage wise losses (%)
Below 11 kV-LT	22.50%	22.50%
11 kV	3.80%	5.90%
66 kV	1.50%	2.10%
220 kV	0.60%	0.60%
Total	4.06%	4.06%

Using these losses the energy input at each voltage level is determined based on the energy sales. The table below shows the energy input at each voltage level:

Table 80: Energy Input at each voltage level (MU)

Category	Energy Sales	Losses (%)	Energy Input (MU)
Below 11 kV-LT	487.66	22.50%	629.21
11 kV	2742.98	5.90%	2851.33
66 kV	1813.06	2.10%	1840.67
220 kV	1765.64	0.60%	1776.30
Total	6809.35	4.06%	7097.51

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

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

The fixed cost of power purchase is allocated to each voltage level on the basis of energy input at respective voltage levels.



- o The O&M expenses is allocated on the basis of number of consumers
- o All remaining fixed cost is allocated on the basis of voltage wise asset allocation assumed earlier.

Table 81: Parameters utilized for allocation of fixed costs

Category	Energy Input (MU)	Asset Allocation (%)	Consumers
Below 11 kV-LT	629.21	40.00%	92041
11 kV	2851.33	30.00%	892
66 kV	1840.67	20.00%	32
220 kV	1776.30	10.00%	2
Total	7097.51	100.00%	92967

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

The Voltage wise cost of supply (VCoS) is then determined in the basis of energy sales of respective categories.

Accordingly, the Voltage wise cost of supply for each category is determined as shown in the table below:

Table 82: Voltage wise Cost of Supply (VCoS)

Category	Allocated Fixed Cost (Rs. Crore)	Allocated Variable Cost (Rs. Crore)	Total Cost (Rs. Crore)	Energy Sales (MU)	VCoS (Rs./kWh)
Below 11 kV-LT	219.21	170.21	389.43	487.66	7.99
11 kV	624.60	771.35	1395.95	2,742.98	5.09
66 kV	403.55	497.94	901.49	1,813.06	4.97
220 kV	380.24	480.53	860.77	1,765.64	4.88
Total	1627.61	1920.03	3547.63	6809.35	

The Voltage Wise Cost of Supply as derived is used to determine the crosssubsidy surcharge:



Table 83: Cross-Subsidy Surcharge

Category	VCoS (Rs./kWh)	ABR (Rs./kWh)	Cross- Subsidy (Rs./kWh)
Below 11 kV-LT	7.99	3.80	-4.18
11 kV	5.09	5.30	0.21
66 kV	4.97	5.08	0.11
220 kV	4.88	5.15	0.27

# 5.4 Additional Surcharge

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

Table 84: Additional Surcharge for FY 2022-23

Particulars	FY 2022-23
Total Power Purchase cost	3,399.90
Fixed Cost component in Power Purchase	
Cost	1479.87
Energy Sales (MU)	6,809.35
Additional Surcharge (Rs/kWh)	2.17

The fixed cost component in power purchase cost has been derived including the fixed charges for all the generating stations and further the transmission charges of PGCIL. The transmission charges of PGCIL is also of the nature of fixed charges as LTOA has been obtained from the PGCIL and transmission charges is required to be paid to PGCIL on a monthly basis on basis of LTOA.

# 5.5 Application and Agreement Fees

The application and agreement fees are proposed as Rs 5000/- and Rs 50,000/- respectively.



# **Chapter 6: Compliance of Directives**

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

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.

## A. Directives continued in this Tariff Order

# 1. Directive 1: Capital Expenditure:

The petitioner is directed to submit the detailed statement of capital expenditure incurred and capitalization for every quarter, within 15 days in the subsequent quarter.

Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2013-14:

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

It is submitted that the status of capital expenditure incurred during the first 2 quarters for the current financial year i.e. April, May, June – 2012 and July, August, September – 2012 has been prepared and is being enclosed along with the petition as Annexure III.

#### **Commission's Comments**

The submission of the Petitioner is noted. The timeline stipulated for the submission as per the direction should be adhered to and quarterly submissions should be made for the remaining quarters of FY 2012-13 and going forward for the coming years.



Compliance/Action taken mentioned in ARR and tariff Petition for FY 2014-15:

#### Petitioner's Submission:

The DNHPDCL would like to submit to the Hon'ble Commission that the actual capital expenditure for FY 12-13 has already been submitted along with the true-up petition. The proposed capital expenditure for FY 13-14 and FY 14-15 has also been submitted in the ARR petition for FY 2014-15. Further, the DNHPDCL will submit the quarterly progress report of capital expenditure as directed by the Hon'ble Commission.

#### **Commission's Comments**

The submission of the Petitioner is noted. The timeline stipulated for the submission as per the direction should be adhered to and quarterly submissions should be made for the remaining quarters of FY 2013-14 and going forward for the coming years.

Compliance/Action taken mentioned in ARR and tariff Petition for FY 2015-16:

#### Petitioner's Submission:

The DNHPDCL would like to submit to the Hon'ble Commissionthat the progress Report of Quarterly Capital Expenditure will be submitted to the Hon'ble Commission shortly.

#### **Commission's Comments**

Compliance is noted. The quarterly reports on capital expenditure and capitalization shall be reported regularly.

Compliance/Action taken mentioned in ARR and Tariff Petition for MYT Control Period FY 2016-17 to FY 2018-19:

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



No Response Submitted

## **Commission's Comments**

The quarterly reports on capital expenditure and capitalization shall be reported regularly.

Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2017-18:

#### Petitioner's Submission:

The DNHPDCL shall submit the quarterly report on capital expenditure as directed by the Commission.

#### Commission's Comments

The Commission has noted with concern that Petitioner is yet to submit the details as sought by the Commission. The Commission now directs the Petitioner to ensure compliance of this directive and submit the desired reports on quarterly basis, failing which the Commission will be constrained to take appropriate action against the Petitioner.

Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2018-19:

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

The DNHPDCL shall submit the quarterly report on capital expenditure as directed by the Commission.

# **Commission's Comments**

The Commission has noted with concern that Petitioner is yet to submit the details as sought by the Commission. The Commission now directs the Petitioner to ensure compliance of this directive and submit the desired reports on quarterly basis, failing which the Commission will be constrained to take appropriate action against the Petitioner. Further, it is observed that the

Petitioner has been able to submit capitalisation of only Rs.7.22 cr. in FY 2017-18 and nil in FY 2018-19. The Commission directs the Petitioner to increase its efforts towards capex activities necessary to enhance reliability and quality of supply to consumers.

Compliance/Action taken mentioned in ARR for MYT Control Period FY 2019-20 to FY 2021-22:

# Petitioner's Submission:

The DNHPDCL would like to submit that the Quarterly report will be submitted to the Hon'ble Commission shortly.

#### **Commission's Comments**

The Commission has noted with concern that Petitioner is yet to submit the details as sought by the Commission. The Commission now directs the Petitioner to ensure compliance of this directive and submit the desired reports on quarterly basis, failing which the Commission will be constrained to take appropriate action against the Petitioner.

## Petitioner's Submission:

The DNHPDCL would like to submit that the Quarterly report will be submitted to the Hon'ble Commission shortly.

## **Commission's Comments**

The Commission has noted with concern that Petitioner is yet to submit the details as sought by the Commission. The Commission now directs the Petitioner to ensure compliance of this directive within three months from the date of issuance of this order and submit the desired reports regularly on quarterly basis, failing which the Commission will be constrained to take appropriate action against the Petitioner.

## Petitioner's Submission:

The DNHPDCL would like to submit that the Quarterly report will be submitted to the Hon'ble Commission shortly.



## **Commission's Comments**

The Commission has noted with concern that Petitioner is yet to submit the details as sought by the Commission. The Commission now directs the Petitioner to ensure compliance of this directive within three months from the date of issuance of this order and submit the desired reports regularly on quarterly basis, failing which the Commission will be constrained to take appropriate action against the Petitioner.

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

The DNHPDCL would like to submit that the Quarterly report will be submitted to the Hon'ble Commission shortly.

# 2. Directive 2: Implementation of Smart Grid

The Petitioner is directed to submit a detailed action plan by 30<sup>th</sup> September 2016 for roll out of smart grid in DNH within this MYT Control Period.

Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2017-18:

## Petitioner's Submission:

The work of preparation of the project report has been given to PGCIL. The PGCIL shall submit the report by March, 2017.

#### **Commission's Comments**

The Commission notes the submission of the Petitioner and directs it to submit the monthly status report on the implementation of smart grid.

Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2018-19:

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



The DNHPDCL would like to submit that the matter is under consideration of the DNHPDCL and possibility is being explored for the implementation of smart grid in the UT of Dadra and Nagar Haveli.

#### Commission's Comments

The Commission notes the submission of the Petitioner and directs it to submit the quarterly status report on the implementation of smart grid.

Compliance/Action taken mentioned in ARR for MYT Control Period FY 2019-20 to FY 2021-22:

#### Petitioner's Submission:

The DNHPDCL would like to submit that the possibility of implementation of Smart Grid in UT of DNH will be explored in due course.

#### Commission's Comments

The Commission notes the submission of the Petitioner with concern and directs it to submit a detailed action plan by 30th September 2019 for roll out of smart grid in DNH within this MYT Control Period.

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

The DNHPDCL would like to submit that the possibility of implementation of Smart Grid in UT of DNH will be explored in due course.

#### **Commission's Comments**

The Commission notes the submission of the Petitioner with concern and directs it to submit a detailed action plan by 30th September 2020 for rolling out of the smart grid in DNH within this MYT Control Period.

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

The DNHPDCL would like to submit the Silvassa town is declared as a Smart City. Accordingly, measures will be taken up for implementation of Smart Grid projects.



The Commission notes the submission of the Petitioner with concern and directs it to submit a detailed action plan by 30th September 2021 for rolling out of the smart grid in DNH district within this MYT Control Period.

#### Petitioner's Submission:

The DNHPDCL would like to submit that the detailed action plan shall be submitted to the Hon'ble Commission shortly.

3. Directive 3: Information for determination of Voltage-wise Wheeling Charges

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

Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2017-18:

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

The details of voltage wise assets and expenses along with the allocation methodology shall be submitted to the Commission shortly.

## Commission's Comments

The Commission observes that the Petitioner is yet to submit the requisite details. The Commission now directs the Petitioner to submit the desired information before 31st August, 2017.

Compliance/Action taken mentioned in ARR and Tariff Petition for FY 2018-19:

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

The details of voltage wise assets and expenses along with the allocation methodology shall be submitted to the Commission shortly.



The Commission observes that the Petitioner is yet to submit the requisite details. The Commission now directs the Petitioner to submit the desired information before 31st August 2018.

Compliance/Action taken mentioned in ARR for MYT Control Period FY 2019-20 to FY 2021-22:

#### Petitioner's Submission:

The DNHPDCL would like to submit that the Information is already submitted to the Hon'ble Commission in the Business plan as well ARR petition filed for FY 2018-19.

## **Commission's Comments**

The Commission notes the compliance by the Petitioner. However, the Petitioner has shown no allocation at EHT level though a few consumers are being supplied at 220 kV. The Commission directs the Petitioner to carry out allocation in scientific manner and submit revised allocation along with Tariff Petition for FY 2020-21.

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

The DNHPDCL would like to submit that the details for the EHT consumers shall be submitted to the Hon'ble Commission shortly.

#### **Commission's Comments**

The Commission notes the submission of the Petitioner with concern and directs it to submit details of voltage wise assets and expenses along with the allocation methodology including allocation at EHT level along with next Tariff Petition.

## Petitioner's Submission:

The DNHPDCL would like to submit that the details for the EHT consumers shall be submitted to the Hon'ble Commission shortly.



The Commission notes the submission of the Petitioner with concern and directs it to submit details of voltage wise assets and expenses along with the allocation methodology including allocation at EHT level along with next Tariff Petition.

#### Petitioner's Submission:

The DNHPDCL would like to submit that the details for the EHT consumers shall be submitted to the Hon'ble Commission shortly.

# **Directive 4: Timely Submission of Reports**

The Commission has observed that the Petitioner do not submit the quarterly or any other report within time as specified by the Commission in previous Orders. Accordingly, the Petitioner is directed to comply with the timelines decided by the Commission for all such reports.

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

The DNHPDCL would like to submit that the reports pertaining to RPO, metering, FPPCA, SAIFI, SAIDI are submitted to the Hon'ble Commission on a regular basis.

## **Commission's Comments**

The Commission has noted the compliance to the above directive and noticed that the petitioner has not submitted the report related to SAIFI/SAIDI in past on regular basis. Accordingly, the Commission directs the petitioner to submit the aforementioned reports regularly in future.

#### Petitioner's Submission:

The DNHPDCL would like to submit that the report related to SAIFI/SAIDI shall be submitted to the Hon'ble Commission on a regular basis.

# 5. Directive 5: Quarterly details of Stranded Power (Open Access)

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

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

The DNHPDCL would like to submit that at present there is no open access consumer and therefore there is no stranded power.



# 6162/2021/Legal Section

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The Commission has noted the compliance to the above directive and directs the petitioner to submit the aforementioned report in future if the power is availed by the consumers through open access.

## Petitioner's Submission:

The DNHPDCL would like to submit that as per the direction given by the Hon'ble Commission, the Corporation shall comply with the same.



## Tariff Schedule

## **General Terms and Conditions:**

- 1. The tariffs are exclusive of electricity duty, taxes and other charges levied by the Government or other competent authority from time to time which are payable by the consumers in addition to the charges levied as per the tariffs.
- 2. Unless otherwise agreed to, these tariffs for power supply are applicable for supply at one point only.
- 3. Supply to consumers having contracted load between 100 KVA to 5000 KVA (including licensee common feeders and express feeders/dedicated feeders) shall generally be at 11 KV and for more than 5000 KVA up to 25000 KVA at 66 KV. For the consumer who requires load more than 25000 KVA, the supply voltage shall be at 220 KV level.
- 4. If energy supplied for a specific purpose under a particular tariff is used for a different purpose not contemplated in the contract for supply and/or for which a higher tariff is applicable, it will be deemed as unauthorized use of electricity and shall be dealt with for assessment under the provisions of Section 126 of the Electricity Act, 2003 & Supply Code Regulation notified by JERC.
- 5. If connected load of a domestic category is found to be at variance with the sanctioned/contracted load as a result of replacement of appliances such as lamps, fans, fuses, switches, low voltage domestic appliances, fittings, it shall not fall under Section 126 and Section 135 of the EA 2003.
- 6. Power Factor Charges LT Commercial and Agriculture Connection running without proper capacitors installed so as to maintain Power Factor of 0.85 as per the JERC Supply Code Regulations,2018 and subsequent amendment thereof shall be charged extra 2.5% of units consumed as additional power factor charges. Payment of the power factor charge won't exempt the consumer from his responsibility to maintain the power factor. The conditions for disconnection of a consumer supply in case of non-achievement of minimum level of power factor as prescribed in the Supply Code Regulations notified by JERC, shall apply. DNHPDCL may install a suitable capacitor at its own cost and recover the cost thereof as arrears of energy charges. In case the monthly average power factor is less than 0.70 lagging, the installation is liable for disconnection after due notice.



- 7. If the consumer fails to pay the energy bill presented to him by the due date, the Department shall have the right to disconnect the supply after giving 15 days' notice as per the provisions of the Act and the Supply Code Regulations.
- 8. Fixed charges, wherever applicable, will be charged on pro-rata basis from the date of release of connection. Fixed charges, wherever applicable, will be double as and when bi-monthly billing is carried out. Similarly, slabs of energy consumption will also be considered accordingly in case of bi-monthly billing.
- 9. The billing in case of HT/EHT shall be on the maximum demand recorded during the month or 85% of contracted demand, whichever is higher. If in any month, the recorded maximum demand of the consumer exceeds its contracted demand, that portion of the demand in excess of the contracted demand shall be billed at double the normal rate. Similarly, energy consumption corresponding to excess demand shall also be billed at double the normal rate. The definition of the maximum demand would be in accordance with the provisions of the JERC Supply Code Regulations. If such over-drawal is more than 20% of the contract demand, then the connections shall be disconnected immediately.

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

- 10. Unless specifically stated to the contrary, the figures of energy charges relate to paisa per unit (kWh) charge for the energy consumed during the month.
- 11. Delayed payment surcharge shall be applicable to all categories of consumers. Delayed payment surcharge of 2% per month or part thereof shall be levied on all arrears of bills. Such surcharge shall be rounded off to the nearest multiple of one rupee. Amount less than 50 paisa shall be ignored and amount of 50 paisa or more shall be rounded off to the next



rupee. In case of permanent disconnection, delayed payment surcharge shall be charged only up to the month of permanent disconnection.

- 12. Advance Payment Rebate: If payment is made in advance well before commencement of the consumption period for which the bill is prepared, a rebate @ 1% per month shall be given on the amount (excluding security deposit) which remains with the licensee at the end of the month. Such rebate, after adjusting any amount payable to the licensee, shall be credited to the account of the consumer.
- 13. Prompt Payment Rebate: If payment is made at least 7 days in advance of the due date of payment, a rebate for prompt payment @ 0.25 % of the bill amount shall be given. Those consumers having arrears shall not be entitled for such rebate.
- 14. The adjustment on account of Fuel and Power Purchase Cost variation shall be calculated in accordance with the FPPCA formula notified in Chapter 8 of this Order. Such charges shall be recovered/refunded in accordance with the terms and conditions specified in the FPPCA formula.
- 15. The values of the 'K' factor applicable for the different consumer categories for use in the FPPCA formula shall be as specified in this Tariff Order for the FY 2020-21.

The detailed tariff Schedule is outlined as under:

#### **DETAILED TARIFF SCHEDULE**

## I. (A) Domestic Category

This schedule shall apply to private houses, hospitals run on Noncommercial lines, Government Schools (including Government Schools Hostels), Charitable Religious Institutions for Light, Fans, Radios, Domestic Heating and other household appliances including water pumps up to 2 HP.

## 1. Energy Charges

Usage(Units/Month)	Energy Charge (Ps./Unit)
0-100 units	160



Usage(Units/Month)	Energy Charge (Ps./Unit)
101-300 units	230
301-500 units	280
501 and above	340

## 2. Fixed Charges

Usage(Rs./Con/Month)	Fixed Charge
0-100 units	10.00 Rs./Con/Month
101-300 units	10.00 Rs./Con/Month
301-500 units	10.00 Rs./Con/Month
501 and above	10.00 Rs./Con/Month

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

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

#### II. Non-Domestic Category/Commercial

This schedule shall apply to Shops, Offices, Restaurants, Bus Stations, Schools (other than Govt. schools & their hostels), Photo Studios, Laundries, Cinema Theatres, Industrial Lighting, clubs and other Commercial installations.

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

## 1. Energy Charges

Usage(Units/Month)	Energy Charge (Ps./Unit)
1-100 units	330
101 units and above	430



## 2. Fixed Charges

Usage(Rs./Con/Month)	Fixed Charge
1-100 units	20.00 Rs./Con/Month
101 units and above	20.00 Rs./Con/Month

## III. LT Category

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

#### A. LTP Motive Power

## 1. Energy Charges

Usage(Units/month)	Energy Charge (Ps./kVAh)-
Up to 20 HP	380
Above 20 HP	400

## 2. Fixed Charges

	Fixed charge (Rs./HP/month) or part thereof
Up to 20 HP	20.00 Rs./HP/Month
Above 20 HP	80.00 Rs./HP/Month

## **B. LT Public Water Works**

## 3. Energy Charges

Usage(Units/month)	Energy Charge (Ps./Unit)-
Up to 20 HP	480
Above 20 HP	480



## 4. Fixed Charges

	Fixed charge (Rs./HP/month) or part thereof
Up to 20 HP	50.00 Rs./HP/Month
Above 20 HP	100.00 Rs./HP/Month

## IV. HT/EHT Category

## A. HT 11 kV supply

This schedule shall apply to all Industrial/Motive power/ Ferro Metallurgical / Steel Melting / Steel Rerolling / Power Intensive consumers drawing through 11 kV systems.

## 1. Fixed Charges(Demand Charges)

For Billing Demand	Charges (Rs./KVA/month) or part thereof
Up to Contract Demand	Rs. 400/-
In Excess of Contract Demand	Rs 800/-

## 2. Energy Charges

Usage(Units/Month)	Tariff (Ps./kVAh)
All units	440

## B. HT 66 kV supply

This schedule shall apply to all Industrial/Motive power/ Ferro Metallurgical / Steel Melting / Steel Rerolling / Power Intensive consumers drawing through 66 kV systems.

## 1. Fixed Charges(Demand Charges)



For Billing Demand	Charges (Rs./KVA/month) or part thereof
Up to Contract Demand	Rs. 525/-
In Excess of Contract Demand	Rs 1050/-

## 2. Energy Charges

Usage(Units/Month)	Tariff (Ps./kVAh)
All units	435

## C. HT 220 kV supply

This schedule shall apply to all Industrial/Motive power/ Ferro Metallurgical / Steel Melting / Steel Rerolling / Power Intensive consumers drawing through 220 kV systems.

## 1. Fixed Charges(Demand Charges)

For Billing Demand	Charges (Rs./KVA/month) or part thereof
Up to Contract Demand	Rs. 575/-
In Excess of Contract Demand	Rs 1150/-

## 2. Energy Charges

Usage(Units/Month)	Tariff (Ps./kVAh)
All units	430

## V. Agriculture and Poultry

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



## 1. Energy Charges

Usage	Tariff (Ps./Unit)
For connected load upto 10 HP	95
Beyond 10 HP	130

## VI. Public Lighting

#### 1. Energy Charges

Usage	Tariff (Ps./Unit)
For all units	425

## VII. HOARDINGS/SIGNBOARDS

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

Energy Charges (Paise/kWh)	Fixed Charge
750	Rs. 100 per kVA per month or part thereof

#### VIII. Electric Charging Station

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



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

Energy Charges (Paise/kWh)	Fixed Charge
490	-

## **Temporary Supply:**

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

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

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

#### IX. Schedule of Other Charges

a. Monthly Meter Rental Charges (as per provisions of Regulation 7.3 (1) of JERC (Electricity Supply Code) Regulations 2010)

S.No.	Meter type	Tariff (in Rs.)/Month or part thereof
1	Single Phase	Rs 10
2	Three Phase	Rs 25
3	LT Meter with MD indicator	Rs 200
4	Tri- vector Meter	Rs 500

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

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

S.No.	Connection type	Tariff (in Rs.)/Month or part thereof
1	Single Phase	Rs 50
2	Three Phase	Rs 100
3	НТ	Rs 1000

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

c. Testing Fee for Various Metering Equipments (as per provisions of Regulation 7.4 of JERC (Electricity Supply Code) Regulations 2010

S.No.	Connection Type	Fee per unit (in Rs.)
1	Single Phase	100
2	Three Phase	300
3	Three Phase Tri-vector Meter (0.5 Class) Industrial LT Consumer	500
4	Three Phase Tri-vector Meter (0.5 Class) 11 KV HT Consumer	500
5	Three Phase Tri-vector Meter (0.2 Class) 66KV EHT Consumers	1000
6	Combined CTPT Unit for 11 KV Consumer	500
7	66 KV CT / PT Unit	500
8	Three Phase CT Block	300
9	CT Coil	100

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

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



S.No.	Connection type	Tariff (in Rs.)/Month or part thereof
4	HT (Beyond 500 KVA)	Rs 1000 per 100 KVA or part thereof
5.	Extra Length - Single Phase	Rs. 25/- per meter
6.	Extra Length - Three Phase	Rs. 50/- per meter

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

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

# e. Fees (Non-refundable) for submission of Test Report of wiring Completion

S.No.	Types of Connection	Fee per test report (in Rs.)
1	Single Phase Lighting / Domestic	10
2	Three Phase Lighting /Domestic	25
3	Single Phase Lighting / Non Domestic	50
4	Three Phase Lighting / Non Domestic	100
5	Three Phase LT Industries	250
6	Single Phase / Three phase Agriculture / Streetlight / Public Lighting & others	50
7	HT Industries upto 500 KVA	1000
8	HT Industries upto 2500 KVA	5000
9	HT Industries above 2500 KVA	10000



# f. Registration for Change of Name

S.No	Connection Type.	Fee per unit (in Rs.)
1.	1 Q Domestic / commercial	100
2.	3 Q Domestic / commercial	200
3.	LT Industries	500
4.	HT Industries	1000
5.	EHV Industries	2000

## g. Shifting of meter

S.No	Connection Type.	Fee per unit (in Rs.)
1.	1 Q Domestic / commercial	100
2.	3 Q Domestic / commercial	200
3.	LT Industries	500



## **Prayer**

- 1. DNHPDCL prays the Honorable Commission to:
  - Admit and approve the Aggregate Revenue Requirement (ARR) for the MYT Control Period FY 2022-23 to FY 2024-25 as submitted herewith.
  - Admit and approve the Trued up ARR for FY 2020-21.
  - Admit and approve the Revised Estimates for the FY 2021-22 as submitted herewith.
  - 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.
  - Allow to submit necessary additional information required by the Commission during the processing of this petition.
  - And pass such other orders and further orders as are deemed fit and proper in the facts and circumstances of the case.

BY THE APPLICANT THROUGH

**PETITIONER** 

(sseuman

DNH Power Distribution Corporation Ltd.

Silvassa

Dated: -

Chief Engineer

DNH Power Distribution Corporation Ltd.
U.T. of Dadra & Nagar Haveli, Silvassa