

# TARIFF ORDER

True-up of FY 2020-21, Annual Performance Review of FY 2021-22, Aggregate Revenue Requirements (ARR) for 3<sup>rd</sup> MYT Control Period (FY2022-23 to FY 2024-25) and Determination of Transmission Tariff for FY 2022-23

Petition No. 61/2021

For

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

31st March, 2022

### JOINT ELECTRICITY REGULATORY COMMISSION

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# Table of Contents

1. Chapter 1: Introduction	10
1.1. About Joint Electricity Regulatory Commission (JERC) (for the State of Goa & UTs)	10
1.2. About Dadra and Nagar Haveli	10
1.3. Electricity Department, Transmission Division, UT of Dadra and Nagar Haveli	11
1.4. JERC (Terms and Conditions for Determination of Tariff) Regulations	12
1.5. Multi Year Tariff Regulations, 2021	12
1.6. Approval of Business Plan for $3^{\rm rd}$ MYT Control Period	12
1.7. Filing and Admission of the Present Petition	12
1.8. Interaction with the Petitioner	12
1.9. Notice for Public Hearing	13
1.10. Public Hearing	14
2. Chapter 2: True-up for FY 2020-21	15
2.1. Background	15
2.2. Approach for the True-Up of FY 2020-21	15
2.3. Gross Fixed Assets and Capitalization	15
2.4. Depreciation	16
2.5. Interest on Loan	17
2.6. Return on Equity (RoE)	19
2.7. Operation & Maintenance Expenses	20
2.7.1. Employee Expenses	20
2.7.2. Administrative and General (A&G) Expenses	20
2.7.3. Repair & Maintenance Expenses (R&M)	21
2.7.4. Total Operation and Maintenance Expenses (O&M)	21
2.8. Interest on Working Capital	22
2.9. Non-Tariff Income (NTI)	24
2.10. Aggregate Revenue Requirement (ARR)	25
2.11. Revenue at existing Transmission Tariff and Standalone Gap/Surplus	25
3. Chapter 3: Annual Performance Review for FY 2021-22	<b>2</b> 7
3.1. Background	27
3.2. Approach for the Review of FY 2021-22	27
3.3. Gross Fixed Assets (GFA) and Capitalisation	28
3.4. Depreciation	28
3.5. Interest on Loan	30
3.6. Return on Equity (RoE)	31
3.7. Operation & Maintenance Expenses	32
3.7.1. Employee Expenses	33

3.7.2. Administrative and General (A&G) Expenses	34
3.7.3. Repair & Maintenance Expenses (R&M)	35
3.7.4. Total Operation and Maintenance Expenses (O&M)	36
3.8. Interest on Working Capital	36
3.9. Non-Tariff Income	38
3.10. Aggregate Revenue Requirement (ARR) for FY 2021-22	38
3.11. Standalone Gap/(Surplus) for FY 2021-22	39
3.12. Gap/Surplus to be carried forward to FY 2022-23	39
4. Chapter 4: Determination of Aggregate Revenue Requirement for FY 2022-23, and FY 2024-25 (3 <sup>rd</sup> MYT Control Period)	FY 2023-24 40
4.1. Background	40
4.2. Approach for determination of ARR for each year of the 3rd MYT Control period	40
4.3. Gross Fixed Assets (GFA) and Capitalisation	40
4.4. Depreciation	41
4.5. Interest on Loan	42
4.6. Return on Equity (RoE)	45
4.7. Operation & Maintenance Expenses	46
4.7.1. Employee Expenses	47
4.7.2. Administrative and General (A&G) Expenses	48
4.7.3. Repair & Maintenance Expenses (R&M)	49
4.7.4. Total Operation and Maintenance Expenses (O&M)	51
4.8. Interest on Working Capital	51
4.9. Non-Tariff Income	53
4.10. Aggregate Revenue Requirement (ARR)	54
5. Chapter 5: Transmission Tariff for FY 2022-23	56
5.1. Transmission capacity of system	56
5.2. Tariff Determination	56
6. Chapter 6: Directives	58
Annexures	60

# **List of Tables**

Table 1: Cumulative Revenue gap/ (Surplus) at end of FY 2021-22 (INR Crore)	
Table 2: Revenue gap distribution in FY 2022-23 (INR Crore)	8
Table 3: Aggregate Revenue Requirement for FY 2022-23 (INR Crore)	8
TABLE 4: TRANSMISSION TARIFF FOR FY 2022-23	8
Table 5: Transmission System of ED-DNH	
TABLE 6: LIST OF INTERACTIONS WITH THE PETITIONER	13
TABLE 7: DETAILS OF PUBLIC NOTICES PUBLISHED BY THE PETITIONER	13
TABLE 8: DETAILS OF PUBLIC NOTICES PUBLISHED BY THE COMMISSION	
Table 9: Gross Fixed Assets and Capitalisation details submitted by Petitioner (INR Crore)	15
TABLE 10: GROSS FIXED ASSETS AND CAPITALISATION APPROVED BY THE COMMISSION (INR CRORE)	
TABLE 11: DEPRECIATION DETAILS SUBMITTED BY PETITIONER (INR CRORE)	16
TABLE 12: DEPRECIATION APPROVED BY COMMISSION (INR CRORE)	
TABLE 13: INTEREST AND FINANCE CHARGES SUBMITTED BY PETITIONER (INR CRORE)	
TABLE 14: INTEREST ON LOAN APPROVED BY COMMISSION (INR CRORE)	,
TABLE 15: RETURN ON EQUITY SUBMITTED BY PETITIONER (INR CRORE)	
TABLE 16: RETURN ON EQUITY APPROVED BY COMMISSION (INR CRORE)	
TABLE 17: EMPLOYEE EXPENSES APPROVED BY COMMISSION (INR CRORE)	20
TABLE 18: A&G EXPENSES APPROVED BY COMMISSION (INR CRORE)	
TABLE 19: R&M EXPENSES APPROVED BY COMMISSION (INR CRORE)	
TABLE 20: O&M EXPENSES APPROVED BY COMMISSION (INR CRORE)	
TABLE 21: INTEREST ON WORKING CAPITAL SUBMITTED BY PETITIONER (INR CRORE)	
TABLE 22: INTEREST ON WORKING CAPITAL APPROVED BY COMMISSION (INR CRORE)	
TABLE 23: NON- TARIFF INCOME APPROVED BY COMMISSION (INR CRORE)	
TABLE 24: AGGREGATE REVENUE REQUIREMENT APPROVED BY COMMISSION FOR FY 2020-21 (INR CRORE)	
TABLE 25: REVENUE GAP/(SURPLUS) FOR FY 2020-21 AS SUBMITTED BY PETITIONER (INR CRORE)	
TABLE 26: APPROVED STANDALONE REVENUE GAP/(SURPLUS) FOR FY 2020-21 (INR CRORE)	
TABLE 27: GROSS FIXED ASSETS AND CAPITALISATION DETAILS SUBMITTED BY PETITIONER (INR CRORE)	
TABLE 28: GROSS FIXED ASSETS AND CAPITALIZATION APPROVED BY THE COMMISSION (INR CRORE)	
TABLE 29: DEPRECIATION DETAILS SUBMITTED BY PETITIONER (INR CRORE)	
TABLE 30: DEPRECIATION APPROVED BY COMMISSION (INR CRORE)	
TABLE 31: INTEREST AND FINANCE CHARGES SUBMITTED BY PETITIONER (INR CRORE)	
TABLE 32: INTEREST ON LOAN APPROVED BY COMMISSION (INR CRORE)	
TABLE 33: RETURN ON EQUITY SUBMITTED BY PETITIONER (INR CRORE)	
TABLE 34: RETURN ON EQUITY APPROVED BY COMMISSION (INR CRORE)	
TABLE 35: COMPUTATION OF CPI INFLATION (%)	
TABLE 36: EMPLOYEE EXPENSES APPROVED BY COMMISSION (INR CRORE)	94
TABLE 37: A&G EXPENSES APPROVED BY COMMISSION (INR CRORE)	25
TABLE 38: COMPUTATION OF WPI INFLATION (%)	
TABLE 39: R&M EXPENSES APPROVED BY COMMISSION (INR CRORE)	
TABLE 40: O&M EXPENSES APPROVED BY COMMISSION (INR CRORE)	
TABLE 41: INTEREST ON WORKING CAPITAL SUBMITTED BY PETITIONER (INR CRORE)	
TABLE 42: INTEREST ON WORKING CAPITAL APPROVED BY COMMISSION (INR CRORE)	
TABLE 43: NON-TARIFF INCOME APPROVED BY COMMISSION (INR CRORE)	
TABLE 44: AGGREGATE REVENUE REQUIREMENT APPROVED BY THE COMMISSION FOR FY 2021-22 (INR CRORE)	ენ 8e
TABLE 45: STANDALONE REVENUE GAP/(SURPLUS) FOR FY 2021-22 (INR CRORE)	
TABLE 46: CUMULATIVE REVENUE GAP/(SURPLUS) AT THE END FY 2021-22 (INR CRORE)	
TABLE 47: GROSS FIXED ASSETS AND CAPITALISATION PROPOSED BY THE PETITIONER (INR CRORE)	
TABLE 48: REVISED CAPITALISATION SUBMITTED BY THE PETITIONER (INR CRORE)	
TABLE 49: GROSS FIXED ASSETS AND CAPITALISATION APPROVED BY THE COMMISSION (INR CRORE)	41
TABLE 50: DEPRECIATION DETAILS SUBMITTED BY PETITIONER (INR CRORE)	
TABLE 51: DEPRECIATION APPROVED BY COMMISSION (INR CRORE)	
TABLE 51: DEPRECIATION APPROVED BY COMMISSION (TINK CRORE)	
TABLE 53: INTEREST ON LOAN APPROVED BY COMMISSION (INR CRORE)	
TABLE 54: ROE PROPOSED BY THE PETITIONER (INR CRORE)	
TABLE 54: ROE PROPOSED BY THE PETITIONER (INR CRORE)	
TABLE 55: ROE APPROVED BY COMMISSION (INR CRORE)	
TABLE 57: COMPUTATION OF CPI INFLATION (%)	
TABLE 58: EMPLOYEE EXPENSES APPROVED BY COMMISSION (INR CRORE)	48

TABLE 59: A&G SUBMITTED BY PETITIONER (INR CRORE)	49
TABLE 60: A&G EXPENSES APPROVED BY COMMISSION (INR CRORE)	49
TABLE 61: R&M EXPENSES SUBMITTED BY PETITIONER (INR CRORE)	49
TABLE 62: COMPUTATION OF 'K' FACTOR FOR THE MYT CONTROL PERIOD (INR CRORE)	50
TABLE 63: COMPUTATION OF WPI INFLATION (%)	50
TABLE 64: R&M EXPENSES APPROVED BY COMMISSION (INR CRORE)	50
TABLE 65: O&M EXPENSES APPROVED BY COMMISSION (INR CRORE)	51
TABLE 66: INTEREST ON WORKING CAPITAL SUBMITTED BY PETITIONER (INR CRORE)	51
TABLE 67: INTEREST ON WORKING CAPITAL APPROVED BY COMMISSION (INR CRORE)	52
TABLE 68: NON-TARIFF INCOME SUBMITTED BY THE PETITIONER (INR CRORE)	53
TABLE 69: NON-TARIFF INCOME APPROVED BY COMMISSION (INR CRORE)	54
Table 70: Aggregate Revenue Requirement (ARR) submitted by the Petitioner (INR Crore)	54
TABLE 71: AGGREGATE REVENUE REQUIREMENT APPROVED BY COMMISSION (INR CRORE)	54
TABLE 72: TRANSMISSION CAPACITY APPROVED BY COMMISSION (MW)	56
TABLE 73: TRANSMISSION TARIFF PROPOSED BY PETITIONER	56
TABLE 74: TRANSMISSION TARIFF FOR FY 2022-23	57
TABLE 75: LIST OF PARTICIPANTS IN PUBLIC HEARING	60

List of Abbreviations

Abbreviation	Full Form	
A&G	Administrative and General	
APR	Annual Performance Review	
ARR	Aggregate Revenue Requirement	
CERC	Central Electricity Regulatory Commission	
Cr	Crores	
ED,DNH	Electricity Department, UT of Dadra and Nagar Haveli	
FY	Financial Year	
GFA	Gross Fixed Assets	
нт	High Tension	
JERC	Joint Electricity Regulatory Commission for the state of Goa and Union Territories	
LT	Low Tension	
МҮТ	Multi Year Tariff	
O&M	Operation and Maintenance	
PGCIL	Power Grid Corporation of India Limited	
PLR	Prime Lending Rate	
R&M	Repair and Maintenance	
RoE	Return on Equity	
SBI PLR	State Bank of India Prime Lending Rate	
SLDC	State Load Despatch Centre	
STOA	Short Term Open Access	
TVS	Technical Validation Session	
UT	Union Territory	

# Before the Joint Electricity Regulatory Commission For the State of Goa and Union Territories, Gurugram

**CORAM** 

Smt. Jyoti Prasad, Member (Law)

Petition No. 61/2021

#### In the matter of

Approval for the True-up of FY 2020-21, Annual Performance Review for FY 2021-22, Aggregate Revenue Requirements (ARR) for MYT Control Period from FY 2022-23 to FY 2024-25 & Transmission Tariff for FY 2022-23.

#### And in the matter of

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

### **ORDER**

Dated: 31st March 2022

- 1. This Order is passed in respect of Petition filed by the Electricity Department, Transmission Division, Dadra and Nagar Haveli (herein after referred to as "The Petitioner" or "Electricity Department, Transmission Division, Dadra and Nagar Haveli" or "The Licensee") for approval of True-up of FY 2020-21, Annual Performance Review for FY 2021-22, Aggregate Revenue Requirements (ARR) for MYT Control Period from FY 2022-23 to FY 2024-25 and Transmission Tariff for FY 2022-23 before the Joint Electricity Regulatory Commission (herein after referred to as "The Commission" or "JERC").
- 2. The Commission scrutinised the said Petition and generally found it in order. The Commission admitted the Petition on 23<sup>rd</sup> December, 2021. The Commission thereafter requisitioned further information/clarifications on the data gaps observed to take a prudent view of the said Petition. The Commission also held a Technical Validation Session to determine sufficiency of data and the veracity of the information submitted. Further, suggestions/comments were invited from the public/stakeholders. Due to the COVID-19 pandemic that had adversely impacted the movement of people as per the guidelines of GoI which had suggested avoiding of travel and gathering of people as far as possible, the Commission had decided to conduct the Public Hearing virtually. The virtual Public Hearing was held on 02<sup>nd</sup> February 2022, to enable the stakeholders to raise issues, if any, related to the Petition filed by the Petitioner.
- 3. The Commission, based on the Petitioner's submission, relevant MYT Regulations, facts of the matter and after proper due diligence has approved the True-up of FY 2020-21, APR of FY 2021-22 and proposed ARR for the 3<sup>rd</sup> Control Period from FY 2022-23 to FY 2024-25 along with the Transmission Tariff for FY 2022-23.
- 4. A Summary has been provided as follows:
- (i) The Commission while truing up of FY 2019-20 in Tariff Order dated 23<sup>rd</sup> March, 2021 had determined the cumulative revenue gap of INR 23.85 Cr at the end of FY 2019-20.
- (ii) Now, the Commission in this Order has trued up for FY 2020-21 and has approved Annual Revenue Requirement of INR 36.31 Cr vis-à-vis actual revenue of INR 41.25 Cr, resulting in standalone revenue surplus of INR 4.94 Cr for FY 2020-21.

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(iii) Further, for FY 2021-22, the Commission has approved revised Annual Revenue Requirement of INR 33.95 Cr and projected revenue of INR 51.73 Cr at existing tariff, which has resulted in standalone revenue surplus of INR 17.78 Cr. Thus, the cumulative revenue gap/surplus remaining at the end of FY 2021-22 is shown in the following table:

Table 1: Cumulative Revenue gap/ (Surplus) at end of FY 2021-22 (INR Crore)

Sr. No	Particular	Formula	FY 2020-21	FY 2021-22
A	Opening gap		23.85	20.79
В	Addition		(4.94)	(17.78)
C	Closing gap	C = A + B	18.92	3.01
D	Average gap	D = (A+C)/2	21.39	11.90
E	Interest rate		8.75%	8.00%
F	Carrying Cost	F = (D*E)/100	1.87	0.95
G	Total gap/(Surplus) including carrying cost	G = C + F	20.79	3.96

(iv) The cumulative revenue gap of INR 3.96 Cr at the end of FY 2021-22 has been amortised by the Commission in FY 2022-23, which is cumulative opening gap for FY 2022-23. The opening and closing gap approved by the Commission for FY 2022-23 is as follows:

Table 2: Revenue aap distribution in FY 2022-23 (INR Crore)

Sr. No.	Particular	Formula	FY 2022-23
A	Opening gap		3.96
В	Addition		(3.96)
С	Closing gap	C = A + B	Nil

(v) The Aggregate Revenue Requirement as submitted by the Petitioner and approved by the Commission for FY 2022-23 is as follows:

Table 3: Aggregate Revenue Requirement for FY 2022-23 (INR Crore)

Sr. No	Particulars	Petitioner's submission	Approved by Commission
1	<b>Annual Revenue Requirement</b>	32.84	34.76
2	Add: gap of previous years' including carrying cost	0.73	3.96
3	Net Revenue Requirement	<b>33.5</b> 7	38.72

(vi) Considering the Aggregate Revenue Requirement for FY 2022-23 and the transmission capacity, the transmission charges have been approved in "Chapter 5: Transmission Tariff for FY 2022-23" of this Order for longterm/medium-term consumers and short-term open access consumers as shown below:

Table 4: Transmission Tariff for FY 2022-23

Sr. No	Particulars Formula		FY 2022-23
A	Aggregate Revenue Requirement (INR Crore)		38.72
В	Transmission System Capacity (MW)		1,294
С	Long-term/Medium-term Transmission Charges (INR/MW/month)	C = ((A/B)/12)*10^7	24,936.43
D	Short-term open access Transmission Charges (INR/MW/Day)	D = ((A/B)/365)*10^7	819.83

(vii) The open access consumers shall pay charges in accordance with charges determined above and Regulation 4.1 of the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017 as amended from time to time.

> Secretary, JERC (For Goa and UTs)

- 5. This Order shall come into effect from 1st April, 2022 and shall remain applicable till further Orders. All existing provisions that are not modified by this Order shall continue to be in force.
- 6. The Petitioner shall publish the tariff as determined by the Commission in this Order within one week of receipt of the Order in three daily newspapers in the respective local languages of the region, besides English, having wide circulation in their respective areas of supply and also upload the Tariff Order on its website.
- 7. Ordered accordingly. The attached documents giving detailed reasons, grounds and conditions are integral part of this Order.

Sd/-(Jyoti Prasad) Member (Law)

Place: Gurugram

Date: 31st March 2022

**Certified Copy** 

Rakesh Kumar (Secretary)

# 1. Chapter 1: Introduction

# 1.1. About Joint Electricity Regulatory Commission (JERC) (for the State of Goa & UTs)

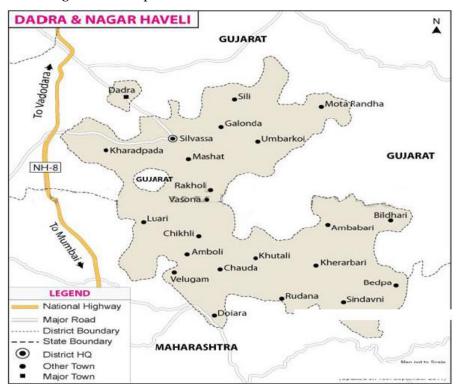
In exercise of powers conferred by the Electricity Act 2003, the Central Government constituted a Joint Electricity Regulatory Commission for all the Union Territories except Delhi to be known as the "Joint Electricity Regulatory Commission for the Union Territories" vide notification no. 23/52/2003-R&R dated May 2, 2005. Later with the joining of the State of Goa, the Commission came to be known as "Joint Electricity Regulatory Commission for the State of Goa and Union Territories" (hereinafter referred to as "the JERC" or "the Commission") vide notification no. 23/52/2003-R&R (Vol. II) dated May 30, 2008.

JERC is a statutory body responsible for regulating the Power Sector in the State of Goa and the Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Dadra & Nagar Haveli and Daman & Diu and Puducherry, consisting of generation, transmission, distribution, trading and use of electricity. Its primary objective includes taking measures conducive to the development of the electricity industry, promoting competition therein, protecting interest of consumers and ensuring supply of electricity to all areas.

# 1.2. About Dadra and Nagar Haveli

Dadra and Nagar Haveli (hereinafter referred to as "DNH") is spread over 491 sq. km, has 72 villages with a population of 3, 42,853 as per Census 2011. The natural attractions of this region have made it a popular tourist destination in the Western region of India. Additionally, due to liberalized policies of Central Government of tax benefits, DNH has also developed into a highly industrialized area.

The rapid development of DNH has led to a tremendous increase in the demand for power. Currently, 96% of total sales are to HT and LT industrial consumers. The present peak demand of this territory is around 835 MW (As on December 2020). DNH has also achieved 100% electrification and 100% metering which further contributes to the increasing demand for power.



# 1.3. Electricity Department, Transmission Division, UT of Dadra and Nagar Haveli

The Dadra and Nagar Haveli Electricity Reforms Transfer Scheme 2013 was notified by the Administration of Dadra and Nagar Haveli vide notification no. 1-1(594) ELE/2013/697 dated March 7, 2013. Further, the Administration vide notification no. 1-1(656)/ELE/2012/700 dated March 8, 2013 for implementing the Dadra and Nagar Haveli Electricity Reforms Transfer Scheme 2013 notified the effective date as April 1, 2013.

As per the Clause 4(1) of the notified transfer scheme:

"Subject to the provision of this scheme on and with effect from such date as may be notified by the Administration as effective date of transfer:

(a) The functions of Distribution and associated divisions of department as set out in Schedule A shall stand out and vested with DNH Power Distribution Corporation Limited without any further act or things to be done by the Administration or the Company or any other person."

As per the Schedule 'B' of the notified Transfer Scheme, the assets at 66/11 kV and below were transferred to DNHPDCL.

Further, as per para at serial no. 8:

"(8) The functions, duties, personnel, assets, liabilities and proceedings as set out in schedule 'C' shall not be transferred to the company and vest with the Electricity Department."

As per Schedule 'C':

"Unless otherwise specified by the Administration, the assets, liabilities, personnel and proceedings in relation to following shall not be transferred to the Company:

- 1. Function of generation of electricity except non-conventional source of energy.
- 2. Functions of transmission of electricity.
- 3. Functions of policy making, Planning and Coordination.
- 4. Functions which are not transferred to the Company under this scheme."

Accordingly, as the functions of transmission of electricity has not been vested on DNH Power Distribution Corporation Limited, the Electricity Department, Transmission Division of UT of Dadra and Nagar Haveli (hereinafter referred to as "ED-DNH Transmission") has been entrusted with the function of transmission of electricity in its license area. The details of operational transmission infrastructure are as below:

### Existing Transmission Network

The present transmission system of ED-DNH consists of 38.18 circuit km of 220 kV double circuit (D/C) lines. At present, the State gets power from 400/220 kV Vapi Substation of Powergrid (PGCIL) and 400/220 kV Kala Substation of Powergrid (PGCIL).

The details of the transformation capacity of ED-DNH are as follows:

Table 5: Transmission Sustem of ED-DNH

Sr. No.	Sub-station	Configuration	Total
1	220 kV Kharadpada Sub-Station	2 x 100 + 2 x 160 MVA	520 MVA
2	220 kV Khadoli Sub-Station	3 x 160 MVA	480 MVA
3	220/66 kV Vaghchipa Sub-Station	2 x 160 MVA	320 MVA
4	220kV Switching Stations at Sayli and New Kharadpada and Bhilosa	o3 Nos	
5	Total Capacity (220kV Level)		1,320 MVA

# 1.4. JERC (Terms and Conditions for Determination of Tariff) Regulations

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Terms and Conditions for Determination of Tariff) Regulations, 2009 on February 9, 2010. The Commission subsequently notified the Joint Electricity Regulatory Commission for the State of Goa and UTs (Terms and Conditions for Determination of Tariff) (First Amendment) Regulations, 2009 on June 27, 2012. Further, the Commission notified the JERC for the state of Goa & Union Territories (Multi Year Distribution Tariff) Regulations, 2014 on June 30, 2014. This Regulation is applicable for only the Distribution Licensees in the state of Goa & Union Territories and is applicable for determination of tariff from April 1, 2015 up to March 31, 2018. (i.e., till FY 2015-18). Accordingly, JERC (Terms and Conditions for Determination of Tariff) Regulations, 2009 are applicable to generation companies and transmission licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Dadra & Nagar Haveli and Daman & Diu and Puducherry for determination of tariff from April 1, 2009 up to March 31, 2018. (i.e., till FY 2018-19). The Commission issued the Order on MYT Petition for second Control Period from FY 2019-20 to FY 2021-22 (hereinafter referred to as 'MYT Order') on May 20, 2019.

### 1.5. Multi Year Tariff Regulations, 2021

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 on March 22, 2021 (hereinafter referred to as 'JERC MYT Regulations, 2021). These Regulations are applicable in the 3<sup>rd</sup> MYT Control Period comprising of three financial years from FY 2022-23 to FY 2024-25. These Regulations are applicable to all the generation companies, transmission and distribution licensees in the State of Goa and Union Territories of Andaman & Nicobar Islands, Lakshadweep, Chandigarh, Dadra & Nagar Haveli and Daman & Diu, and Puducherry for determination of tariff in 3<sup>rd</sup> Control Period.

### 1.6. Approval of Business Plan for 3rd MYT Control Period

In accordance with the Regulation 8.1 of the JERC MYT Regulations, 2021 the Petitioner filed the Petition for approval of Business Plan for 3rd Multi-Year Control Period from FY 2022-23 to FY 2024-25 on 6 December, 2021. The Commission has issued the Business Plan Order for the MYT Control Period (hereinafter referred to as 'Business Plan Order') on 31 March, 2022.

# 1.7. Filing and Admission of the Present Petition

In accordance with the Regulation 9.1 of the JERC MYT Regulations, 2021 the Petitioner filed the MYT Petition for approval of True-up of FY 2020-21, Annual Performance Review for FY 2021-22, Aggregate Revenue Requirements (ARR) for 3<sup>rd</sup> MYT Control Period (FY 2022-23 to FY 2024-25) and Transmission Tariff for FY 2022-23 vide letter No. DNH/ELE/TRANS/JERC/2019/22/299-A dated November 30, 2021.

After initial scrutiny/analysis, the present Petition was admitted on 23 December 2021 and marked as Petition no.61/2021.

### 1.8. Interaction with the Petitioner

A preliminary scrutiny/analysis of the Petition was conducted, and certain deficiencies were observed. Accordingly, deficiency notes were issued to the Petitioner. Further, additional information/clarifications were solicited from the Petitioner as and when required. The Commission and the Petitioner also discussed various concerns of the Petition and key data gaps. The Petitioner submitted its response on the issues through various letters/emails.

The Commission conducted the Technical Validation Session (TVS) with the Petitioner at the Commission's office in Gurugram, during which the discrepancies in the Petition were conveyed and additional information required by the Commission was sought. Subsequently, the Petitioner submitted replies to the issues raised in this session and provided documentary evidence to substantiate its claims regarding various submissions. The following table provides the list of interactions with the Petitioner on the Petition along with the dates:

Table 6: List of Interactions with the Petitioner

Sr. No	Subject	Date	
1	Admission of the Petition by the Commission	23 December, 2021	
2	First Deficiency Note issued by the Commission	25 January, 2022	
3	Replies to Deficiency Note received by the Commission	28 January, 2022	
4	Technical Validation Session (TVS) with Petitioner at JERC Office	18 February,2022	
5	Issuance of Second Deficiency Note	20 February,2022	
6	Reply received from Petitioner on queries raised during TVS	02 March, 2022	
7	Issuance of Third Deficiency Note	07 March, 2022	
8	Replies to Third Deficiency Note received by the Commission	11 March,2022	

The Order has referred at numerous places to various actions taken by the "Commission". It may be mentioned for the sake of clarity that the term "Commission," except for the Hearing and Orders, denotes the Secretariat of the Commission responsible for carrying out technical due diligence and validation of data of the Petitions filed by the Utilities, obtaining and analysing information/clarifications received from the Utilities, and submitting relevant issues for consideration of the Commission.

# 1.9. Notice for Public Hearing

Public notices were published by the Petitioner for inviting objections/ suggestions/ comments from stakeholders on the Tariff Petition details of which are as follows:

Table 7: Details of Public Notices published by the Petitioner

Sr. No.	Date	Name of Newspaper	Place of Circulation
1	24.01.2022	Hindustan Times (English)	Dadra & Nagar Haveli
2	24.01.2022	Nishpaksha Janasansar (Hindi)	Dadra & Nagar Haveli
3	24.01.2022	Vartman Prabha (Gujarati)	Dadra & Nagar Haveli

The Petitioner also uploaded the Petition on its website (<a href="www.dnh.nic.in">www.dnh.nic.in</a>) for inviting objections and suggestions on the Petition. Interested parties/stakeholders were requested to file their objections / suggestions on the Petition to the Commission with a copy to the Petitioner on or before February 01, 2022. The Commission has also uploaded the copy of the Petition on its website to facilitate the stakeholders.

The Commission also published Public Notices in the leading newspapers as tabled below, giving due intimation to the stakeholders, consumers and the public at large that the Online Public Hearing is to be conducted by the Commission on 02 February, 2022 from 11 AM onwards.

Table 8: Details of Public Notices published by the Commission

Sr.	Date	Name of Newspaper	Place of Circulation
No.			
1	07.01.2022	Indian Express (English)	Dadra & Nagar Haveli
2	07.01.2022	Nishpaksha Janasansar (Hindi)	Dadra & Nagar Haveli
3	07.01.2022	Gujarat Samachar (Gujarati)	Dadra & Nagar Haveli
4	07.01.2022	Navbharat Times (Hindi)	Dadra & Nagar Haveli
5	31.01.2022	Indian Express (English)	Dadra & Nagar Haveli
6	31.01.2022	Nishpaksha Janasansar (Hindi)	Dadra & Nagar Haveli
7	31.01.2022	Gujarat Samachar (Gujarati)	Dadra & Nagar Haveli
8	31.01.2022	Navbharat Times (Hindi)	Dadra & Nagar Haveli

The Public notice was also uploaded on the Commission's website.

### 1.10. Public Hearing

The COVID-19 pandemic has adversely impacted the movement of people as per the guidelines of GoI. These guidelines have also suggested avoiding of travel and gathering of people as far as possible. In view of above, the physical conduct of proceedings by the Commission was not possible. So, The Commission deemed it is necessary to provide an access to all the stakeholders by conducting proceedings remotely, by the use of audio and video enabled hearings in the matters of Petition submitted by Electricity Department, Transmission Division, UT of Dadra & Nagar Haveli. Therefore, the Commission has decided that the comments/suggestions of the stakeholders need to be heard virtually through video conferencing for seeking their opinion.

Accordingly, the Virtual Public Hearing was held on 02 February, 2022 onwards to enable the stakeholders to raise issues, if any, related to the Petition filed by the Petitioner. **However, there was no written or verbal comments from the Public/ Stakeholders in respect of this Petition.** The names of stakeholders who attended the Public Hearing are provided as Annexure I.

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

# 2.1. Background

The Commission had issued the Order on determination of transmission tariff for FY 2020-21 on May 18, 2020 (hereinafter referred to as the "ARR Order" for the purpose of truing- Up of FY 2020-21). Further, the Order on true-up of FY 2019-20, Annual Performance Review of FY 2020-21 and Approval of Aggregate Revenue Requirement (ARR) and determination of tariff for FY 2021-22 for Electricity Department, Dadra and Nagar Haveli (Transmission Division) was issued by the Commission on March 23, 2021 (hereinafter referred to as the "APR Order" for the purpose of truing -up of FY 2020-21).

As per Regulation 11 of the JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2018, the review and true-up of revenue and expenses of the Petitioner shall be carried out as follows:

"11.1 The Generating Company, Transmission Licensee and Distribution Licensee shall be subject to annual Performance review and truing up of expenses and revenue during the Control Period in accordance with these Regulations'.

"11.2 The Generating Company, Transmission Licensee and Distribution Licensee shall file an application for the annual performance review of the current year, truing up of the previous Year or the Year for which the Audited accounts are available and determination of tariff for the ensuing Year on or before 30th November of each Year, in formats specified by the Commission from time to time."

.....

"11.3 The scope of the annual performance review, truing up and tariff determination shall be a comparison of the performance of the Generating Company, Transmission Licensee or Distribution Licensee with the approved forecast of Aggregate Revenue Requirement and Expected Revenue from Tariff and Charges and shall comprise of the following:

a) **True-up:** a comparison of the audited performance of the Applicant for the Financial Year for which the true up is being carried out with the approved forecast for such previous Financial Year, subject to the prudence check;"

••••

The Commission now in this Chapter carries out the true-up for FY 2020-21 as per JERC (Generation, Transmission & Distribution Multi Year Tariff) Regulations, 2018.

# 2.2. Approach for the True-Up of FY 2020-21

The Petitioner has submitted the audited accounts for FY 2020-21, audited by M/s JVPG & Associates. The Commission in this Chapter now carries out the true-up of FY 2020-21 in accordance with the principles laid down in the JERC (Generation, Transmission & Distribution Multi Year Tariff) Regulations, 2018.

# 2.3. Gross Fixed Assets and Capitalization

### **Petitioner's Submission**

The Petitioner has submitted the following details with regard to the capitalisation for FY 2020-21:

Table 9: Gross Fixed Assets and Capitalisation details submitted by Petitioner (INR Crore)

Sr. No	Particulars	Approved (ARR Order)	Approved (APR Order)	Submitted by Petitioner
1	Opening GFA	229.80	296.19	296.18
2	Addition during the year	67.70	4.37	0.00
3	Closing GFA	297.50	300.56	296.18

### **Commission's Analysis**

The opening gross fixed assets for FY 2020-21 has been considered same as the closing gross fixed assets as per the true-up of FY 2019-20. The asset addition in the year was also verified from the Fixed Asset Register for FY 2020-21 and annual audited accounts as submitted by the Petitioner.

The Commission accordingly approves the additional capitalization and gross fixed assets for FY 2020-21 as shown in the following table:

Table 10: Gross Fixed Assets and Capitalisation approved by the Commission for FY 2020-21(INR Crore)

Sr. No	Particulars	Submitted by Petitioner	Trued-up by Commission
1	Opening GFA	296.18	296.18
2	Addition during the year	0.00	0.00
3	Closing GFA	296.18	296.18

The Commission approves Nil capitalization in the true-up of FY 2020-21.

# 2.4. Depreciation

### **Petitioner's submission**

The Petitioner has submitted that the depreciation has been worked out after applying the depreciation rates as per the CERC (Terms and Conditions for Tariff), Regulations, 2019. Accordingly, the depreciation for the year has been submitted as below:

*Table 11: Depreciation details submitted by Petitioner (INR Crore)* 

Sr. No.	Particulars	Approved (ARR Order)	Approved (APR Order)	Submitted by Petitioner
1	Opening GFA	229.8	296.19	296.18
2	Addition during the year	67.7	4.37	0
3	Closing GFA	297.5	300.56	296.18
4	Average GFA	263.65	298.37	296.18
5	Depreciation	13.60	15.43	15.32

### Commission's Analysis

As per Regulation 30 of the JERC (Generation, Transmission & Distribution Multi Year Tariff) Regulations, 2018:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

Provided also that the no depreciation shall be allowed on the assets financed through consumer contribution, deposit work, capital subsidy or grant."

"30.2 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset."

"30.3 Land other than the land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets."

•••••

"30.6 For Transmission Licensee, the depreciation shall be calculated at rates and norms specified in the prevalent CERC Tariff Regulations for transmission system."

Accordingly, the Commission has considered and applied the depreciation rates as specified in the CERC (Terms and Conditions of Tariff) Regulations, 2019 that are applicable for FY 2020-21. The Commission, after verification of the asset class wise fixed asset addition in the books of accounts, has arrived at the depreciation values as follows:

<sup>&</sup>quot; 30.1 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Table 12: Depreciation approved by Commission for FY 2020-21 (INR Crore)

Particulars	Depreciat ion rate	Opening GFA	Addition	Deletion	Closing GFA	Average	Depreciati on
Plant and Machinery	5.28%	288.40	0.00	0.00	288.40	288.40	15.23
Buildings	3.34%	2.42	0.00	0.00	2.42	2.42	0.08
Vehicles	9.50%		0.00	0.00	0.00	0.00	0.00
Office Equipment	6.33%	0.16	0.00	0.00	0.16	0.16	0.01
Computers and Others	6.33%		0.00	0.00	0.00	0.00	0.00
Land	0.00%	5.21	0.00	0.00	5.21	5.21	0.00
Total	5.17%	296.19	0.00	0.00	296.19	296.19	15.32

The Commission approves depreciation of INR 15.32 Cr in the true-up of FY 2020-21.

### 2.5. Interest on Loan

### **Petitioner's submission**

The Petitioner has considered the opening loan balance for FY 2020-21 equal to the closing balance of loan approved in true-up of FY 2019-20. The normative loan addition in FY 2020-21 has been computed as 70% of the capitalization for FY 2020-21. The repayment of loans has been considered equal to the depreciation during FY 2020-21.

Further, the Petitioner has considered the rate of interest of 8.75 % (Using State Bank of India Prime Lending Rate (SBI PLR) as on 01.04.2020). Accordingly, the interest and finance charges submitted by the Petitioner as shown in the table below:

Table 13: Interest and Finance charges submitted by Petitioner (INR Crore)

Sr. No.	Particulars	Approved (ARR Order)	Approved (APR Order)	Submitted by Petitioner
1	Opening Loan	12.47	57.18	57.18
2	Loan for additional Capitalization	47.39	3.06	0.00
3	Loan Repayment	13.6	15.43	15.32
4	Closing Loan	46.26	44.81	41.86
5	Interest Cost on Avg. Loans	2.6	4.46	4.33

### **Commission's Analysis**

Regulation 28 of the JERC MYT Regulations, 2018 specifies the following:

#### "28. Interest on Loan

28.1 The loans arrived at in the manner indicated in Regulation 26 on the assets put to use, shall be considered as gross normative loan for calculation of interest on the loan:

Provided that interest and finance charges on capital works in progress shall be excluded:

Provided, further that in case of De-capitalisation or retirement or replacement of assets, the loan capital shall be reduced to the extent of outstanding loan component of the original cost of the de-capitalised or retired or replaced assets, based on documentary evidence.

28.2 The normative loan outstanding as on April 1, 2019, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2018, from the gross normative loan.

28.3 Notwithstanding any moratorium period availed by the Transmission Licensee or the Distribution Licensee, as the case may be, the repayment of loan shall be considered from the first Year of commercial operation of the project and shall be equal to the annual depreciation allowed in accordance with Regulation 31.

28.4 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Transmission Licensee or the Distribution Licensee:

Provided that at the time of truing up, the weighted average rate of interest calculated on the basis of the actual loan portfolio during the Year applicable to the Transmission Licensee or the Distribution Licensee shall be considered as the rate of interest:

Provided also that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest for the actual loan shall be considered:

Provided further that if the Transmission Licensee or the Distribution Licensee does not have actual loan, then 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 relevant Year plus 100 basis points shall be considered as the rate of interest for the purpose of allowing the interest on the normative loan.

28.5 The interest on loan shall be calculated on the normative average loan of the Year by applying the weighted average rate of interest:

Provided that at the time of truing up, the normative average loan of the Year shall be considered on the basis of the actual asset capitalization approved by the Commission for the Year.

28.6 For new loans proposed for each Financial Year of the Control Period, interest rate shall be considered as lower of (i) 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 relevant Year plus 100 basis points, and (ii) weighted average rate of interest proposed by the Distribution Licensee.

28.7 The above interest computation shall exclude the interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, deposit work, capital subsidy or grant, carried out by Transmission Licensee or Distribution Licensee." (Emphasis supplied)

.....

The opening loan balance for FY 2020-21 has been considered equal to the closing balance of loan approved in true-up of FY 2019-20. The normative loan addition in FY 2020-21 is nil as per petitioner's submissions as there is no capitalisation during the year, hence the commission has also approved no addition of loan for FY 2020-21. The repayment of loans has been considered equal to the depreciation approved for FY 2020-21.

As per JERC MYT Regulations, 2018, in absence of any actual loan borrowed by the Petitioner, the interest rate has been considered equivalent to SBI MCLR as on April 01, 2020 plus 100 basis points.

The following table provides the Interest on Loan, approved by the Commission in the APR Order, Petitioner's submission and now trued-up by the Commission:

Table 14: Interest on Loan approved by Commission for FY 2020-21 (INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	57.18	57.18	57.18
2	Add: Normative Loan During the year	3.06	0.00	0.00
3	Less: Normative Repayment equivalent to Depreciation	15.43	15.32	15.32
4	Closing Normative Loan	44.81	41.86	41.86
5	Average Normative Loan	51	49.52	49.52
6	Rate of Interest (%)	8.75%	8.75%	8.75%

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
7	Interest on Loan	4.46	4.33	4.33

The Commission approves the Interest of Loan of INR 4.33 Cr in the true-up of FY 2020-21.

### 2.6. Return on Equity (RoE)

### **Petitioner's submission**

The Petitioner has computed the Return on Equity considering the rate specified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2019. The equity addition has been considered to the tune of 30% of assets capitalized during the year. Accordingly, the Petitioner has claimed the return on equity for FY 2020-21 as shown in the table below:

Table 15: Return on Equity submitted by Petitioner (INR Crore)

Sr. No.	Particulars	Approved (ARR Order)	Approved (APR Order)	Submitted by Petitioner
1	Opening Equity	33.04	52.95	52.95
2	Addition in Equity on account of new capitalization	20.31	1.31	0.00
3	Closing Equity	53.35	54.26	52.95
4	Average Equity	43.2	53.61	52.95
5	Return on Equity	6.70	8.31	8.21

### Commission's analysis

Regulation 27 of the JERC (Generation, Transmission and Distribution Multi Year Tariff), Regulations, 2018 states the following:

"27.1 Return on equity shall be computed on the paid up equity capital determined in accordance with Regulation 26 for the assets put to use for the Transmission Licensee and shall be allowed in accordance with the prevalent CERC Tariff Regulations for transmission system."

.....

Further, the Regulation 30 (2) of the CERC (Terms and Conditions of Tariff) Regulations, 2019, states that:

"(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station ..."

Accordingly, the rate of return on equity for transmission business has been considered as 15.50%. The opening equity for FY 2020-21 has been considered same as the closing equity in true-up of FY 2019-20. The normative equity addition in FY 2020-21 is submitted as nil by the petitioner, so accordingly the commission has approved no equity addition for FY 2020-21. The following table provides the Return on Equity approved by the Commission in the APR Order, Petitioner's submission and now trued-up by the Commission:

Table 16: Return on Equity approved by Commission for FY 2020-21 (INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Equity	52.95	52.95	52.95
2	Equity Addition	1.31	0.00	0.00
3	Closing Equity	54.26	52.95	52.95
4	Average Equity	53.61	52.95	52.95
5	Rate of RoE	15.5%	15.5%	15.5%
6	Return on Equity	8.31	8.21	8.21

The Commission approves Return on Equity of INR 8.21 Cr in the true-up of FY 2020-21.

### 2.7. Operation & Maintenance Expenses

As per Regulation 41 of the JERC (Generation, Transmission & Distribution MYT) Regulations, 2018:

### "41. Operation and Maintenance (O&M) expenses for Transmission Licensees

41.1 Operation and Maintenance (O&M) expenses shall comprise of the following:

- a) Employee expenses salaries, wages, pension contribution and other employee costs;
- b) Administrative and General expenses including insurance charges if any; and
- c) Repairs and Maintenance expenses.

. . . . .

41.5 For the purpose of estimation, the same value of factors –  $CPI_{inflation}$  and  $WPI_{inflation}$  shall be used for all Years of the Control Period. However, the Commission shall consider the actual values of the factors –  $CPI_{inflation}$  and  $WPI_{inflation}$  during the truing up exercise for the Year for which true up is being carried out and true up the O&M Expenses for that Year, only to the extent of inflation.

.....

As above, the components comprising of the O&M expenses- employee expenses, R&M expenses and A&G expenses have been discussed separately below.

### 2.7.1. Employee Expenses

### **Petitioner's submission**

The Petitioner has incurred actual Employee expenses of INR 2.73 Cr against approved expenses of INR 4.07 Cr in the APR Order.

### **Commission's Analysis**

The employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses. The Commission had approved employee expenses of INR 4.07 Cr in the APR Order. The actual employee expenses for FY 2020-21 as per audited accounts is INR 2.73 Cr.

As per the Regulations 41.5 provided above, the Commission has determined the revised normative Employee Expenses for FY 2020-21. The revised number is calculated based on the actual Employee Expenses of FY 2019-20 and actual CPI inflation (5.02 %) & value of Gn (Employee Growth- 0%) for FY 2020-21 with respect to FY 2019-20. The revised normative Employee Expenses determined by the Commission works out to be higher than the actual (claimed by the petitioner) employee expenses. Accordingly, the Commission approves the employee expenses as per the actual/audited accounts.

The following table provides the employee expenses approved by the Commission in the APR Order, Petitioner's submission, revised normative employee expenses and now trued-up by the Commission:

Table 17: Employee Expenses approved by Commission for FY 2020-21 (INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Revised Normative EE	Trued-up by Commission
1	<b>Employee Expenses (EE)</b>	4.07	2.73	4.05	2.73

The Commission approves Employee Expenses of INR 2.73 Cr in the True-up of FY 2020-21.

### 2.7.2. Administrative and General (A&G) Expenses

### **Petitioner's submission**

The Petitioner has submitted the actual A&G expenses of INR 1.59 Cr as against the approved expenses of INR 3.04 Cr in the APR Order.

### Commission's Analysis

A&G expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, etc. Similar to the methodology followed for approving the Employee Expenses, the Commission verifies the A&G expenses as per the audited accounts of FY 2020-21.

The Commission observed that the petitioner has included AMC expenses of SLDC (Amounting to INR 0.52 Cr) in the A&G expenses. The Commission in the APR Order, while carrying out the truing up for FY 2019-20, included the AMC expenses of SLDC in R&M expenses. In line with similar approach, the Commission has now allowed AMC expense of SLDC as a part of R&M expenses instead of A&G expenses.

The following table provides the A&G expenses approved by the Commission in the APR Order, Petitioner's submission, revised normative A&G expenses and now trued-up by the Commission:

Table 18: A&G Expenses approved by Commission for FY 2020-21 (INR Crore)

Sr.	Particulars	Approved in	Petitioner's	Revised	Trued-up by
No		APR Order	Submission	Normative A&G	Commission
1	Administration & General Expenses	3.04	1.59	3.02	1.07

The Commission approves the Administrative & General (A&G) expenses of INR 1.07 Cr in the True-up of FY 2020-21.

### 2.7.3. Repair & Maintenance Expenses (R&M)

#### Petitioner's submission

The Petitioner has submitted the actual R&M expenses of INR 1.41 Cr as against the approved expenses of INR 3.29 Cr in the APR Order.

### Commission's Analysis

The expenses of SLDC AMC (INR 0.52 Cr) are allowed to form part of R&M expenses by the Commission instead of A&G expenses. Similar to the methodology followed for approving the Employee Expenses and the A&G Expenses, the Commission approves the R&M expenses as per the audited accounts of FY 2020-21. For computing revised normative R&M expenses, K factor has been considered same as approved by the Commission in MYT Order dated 22.03.2021, i.e., 1.08%.

The following table provides the R&M expenses approved by the Commission in the APR Order, Petitioner's submission, revised normative R&M expenses and now trued-up by the Commission.

Table 19: R&M Expenses approved by Commission for FY 2020-21(INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Revised Normative R&M	Trued-up by Commission
1	Repair & Maintenance Expenses (R&M)	3.29	1.41	3.24	1.41
2	AMC of SLDC	-	-		0.52
3	Total Repair & Maintenance Expenses (R&M)	3.29	1.41	3.24	1.93

The Commission approves the Repair & Maintenance (R&M) expenses of INR 1.93 Cr in the trueup of FY 2020-21.

### 2.7.4. Total Operation and Maintenance Expenses (O&M)

The following table provides the O&M expenses, as approved by the Commission in the APR Order, Petitioner's submission, revised Normative O&M expenses and O&M expenses now trued-up by the Commission:

Table 20: O&M Expenses approved by Commission for FY 2020-21 (INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Revised Normative O&M Expenses	Trued-up by Commission
1	Employee Expenses	4.07	2.73	4.05	2.73
2	Administrative & General Expenses (A&G)	3.04	1.59	3.02	1.07
3	Repair & Maintenance Expenses	3.29	1.41	3.24	1.93
4	Total Operation & Maintenance Expenses	10.40	5.72	10.32	5.72

As regards to mechanism for pass through of gains and losses on account of controllable factors Regulation 12.2 and 14 of JERC MYT Regulations, 2018 stipulates as follows:

12.2 For the purpose of these Regulations, the term "controllable factors" for a Transmission or Distribution Licensee shall comprise of the following factors, which were beyond the control of the Licensee, and could not be mitigated by the Licensee:

.....

h) Variation in O&M Expenses, except to the extent of inflation;

. . . . .

### "14 Mechanism for pass through of gains or losses on account of controllable factors

# 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.

14.2 Approved aggregate loss, if any to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be on account of the Licensee, and shall not be passed to the Consumers. "(Emphasis supplied)

As per the above provisions, the O&M Expenses as per JERC MYT Regulations, 2018 are controllable and the Approved aggregate gain to the Transmission Licensee or Distribution Licensee on account of controllable factors shall be shared equally between Licensee and Consumers.

Hence, the total Incentive that shall be shared is equal to Licensee and Consumers is INR 2.30 Cr ((INR 10.32 Cr. - INR 5.72 Cr.)/2) i.e. the half of the difference between Revised Normative O&M expenses of INR 10.32 Cr. and the actual O&M expense of INR 5.72 Crore.

Accordingly, the Commission approves the Operation & Maintenance (O&M) expenses of INR 5.72 Cr in the true-up of FY 2020-21 with the sharing of incentive of INR 2.30 Cr.

# 2.8. Interest on Working Capital

### Petitioner's submission

The Petitioner has calculated interest on working capital based on the principles outlined in the JERC (Generation. Transmission & Distribution Multi Year Tariff), Regulations, 2018, by considering the below parameters:

- a) Receivables equivalent to 45 days of annual fixed cost.
- b) Maintenance spares @15% of operation and maintenance expenses including security expenses.
- c) Operation and maintenance expenses, including security expenses for one month.

The Petitioner has considered rate of interest on working capital as 9.75 % (SBI base rate plus 200 basis points).

Table 21: Interest on Working Capital submitted by Petitioner (INR Crore)

Sr. No.	Particulars	Approved (ARR Order)	Approved (APR Order)	Submitted by Petitioner
1	Receivables equivalent to two months of fixed cost	3.93	4.82	4.18
2	Maintenance spares @15% of operation and maintenance expenses	1.27	1.56	0.84
3	Operation and maintenance expenses for one month	0.7	0.87	0.48
4	Total Working Capital requirement	5.90	7.25	5.53
5	Interest on Working Capital	0.62	0.71	0.54

### Commission's Analysis

Regulation 42.1 of the JERC (Generation, Transmission & Distribution Multi Year Tariff), Regulations, 2021, states the following with regard to interest on working capital calculation:

"42.1 The Transmission Licensee shall be allowed interest on the estimated level of working capital for the Financial Year computed in accordance with prevalent CERC Tariff Regulations.

Further, Regulation 34 of the CERC (Terms and Conditions of Tariff) Regulations, 2019 that are applicable for FY 2020-21 specifies:

"34. Interest on Working Capital: (1) The working capital shall cover:

•••••

# (c) Hydro generating station including pumped storage hydro-electric generating station and transmission system including communication system:

- i. Receivables equivalent to 45 days of annual fixed cost;
- ii. Maintenance spares @ 15% of operation and maintenance including security expenses and
- iii. Operation and maintenance expense, including security expenses, for one month."

Regulation 31 of the JERC (Generation, Transmission & Distribution Multi Year Tariff), Regulations, 2018, states the following with regard to interest rate to be considered on working capital calculation:

### "31. Interest on Working Capital

- 31.1 The norms for working capital for Transmission Licensee shall be as specified in Chapter 5 of these Regulations.
- 31.2 The norms for working capital for Distribution Wires Business and Retail Supply Business shall be as specified in Chapter 6 and Chapter 7 of these Regulations.
- 31.3 The interest on working capital shall be a payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures.
- 31.4 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 1stApril of the Financial Year in which the Petition is filed plus 200 basis points." (Emphasis supplied)

Accordingly, the Commission has computed the working capital requirement for the Petitioner for FY 2020-21. The interest on working capital has been computed considering the interest rate as SBI MCLR on April 1, 2020 plus 200 basis points- 9.75%.

The following table provides the interest on working capital approved by the Commission in the APR Order, Petitioner's submission and now trued-up by the Commission:

Table 22: Interest on Working Capital approved by Commission for FY 2020-21 (INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Receivables equivalent to 45 days of annual fixed cost	4.82	4.18	4.48
2	Maintenance spares @15% of operation and maintenance expenses	1.56	0.84	0.86
3	Operation and maintenance expenses for one month	0.87	0.48	0.48
4	Total Working Capital requirement	7.25	5.53	5.81
5	Rate of Interest (%)	9.75	9.75	9.75
6	Interest on Working Capital	0.71	0.54	0.57

The Commission approves the Interest on Working Capital as INR 0.57 Cr in the true-up of FY 2020-21.

### 2.9. Non-Tariff Income (NTI)

### **Petitioner's submission**

The Petitioner has submitted the Non-Tariff Income of INR 0.13 Cr for FY 2020-21.

### Commission's Analysis

Regulation 43.2 of the JERC (Generations, Transmission & Distribution Multi Year Tariff), Regulations, 2018, provides as follows:

"43.2. The Non-Tariff Income shall Inter alia include:

- (a) Income from rent on land or buildings:
- (b) Income from sale of scrap;
- (c) Income from statutory investments:
- (d) Interest on advances to suppliers/contractors;
- (e) Rental from staff quarters;
- (f) Rental from contractors;
- (g) Income from hire charges from contactors and others;
- (h) Income from advertisements, etc.;
- (i) Miscellaneous receipts like parallel operation charges;
- (j) Deferred Income from grant, subsidy, etc., as per Annual Accounts;
- (k) Excess found on physical verification;
- (l) Interest on investments, fixed and call deposits and bank balances;
- (m) Prior period income, etc.:

Provided that the interest/dividend earned from investments made out of Return on Equity corresponding to Licensed Business of the Transmission Licensee shall not be included in Non-Tariff Income."

The Commission has observed that as per the Annual Accounts for FY 2020-21, STOA income was INR 7,30,000.00. It was clarified by the Petitioner that this income has been received from Scheduling Charges as

against STOA charges shown in the accounts. Hence, complete amount is considered by the Commission as Non-Tariff Income as these types of income are in the nature of 'Service charges.'

Further, as per the Annual Accounts for FY 2020-21, the Commission has considered the actual revenue earned by the licensee from O&M works for 220 KV bays of PGCIL that amounts to INR 6,50,848.00 as Non-Tariff Income for FY 2020-21 as these types of income are in the nature of 'Service charges'/ 'Miscellaneous receipts/income'. The total Non-Tariff Income approved by the Commission is INR 0.13 Cr (0.06 + 0.07).

Table 23: Non- Tariff Income approved by Commission for FY 2020-21 (INR Crore)

Sr.	Particulars	Approved in	Petitioner's	Trued-up by
No		APR Order	Submission	Commission
1	Non-tariff income	0.14	0.13	0.13

The Commission approves Non-Tariff Income of INR 0.13 Cr in the True-up of FY 2020-21.

### 2.10. Aggregate Revenue Requirement (ARR)

### **Petitioner's submission**

Based on the expenses as detailed above, the Petitioner has submitted the net Aggregate Revenue Requirement of INR 33.99 Cr for approval in the True-up of FY 2020-21.

### **Commission's Analysis**

The Commission on the basis of the detailed analysis of the cost parameters of the ARR, as shown above, approves the net revenue requirement in the true-up of FY 2020-21 as given in the following table:

Table 24: Aggregate Revenue Requirement approved by Commission for FY 2020-21 (INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Depreciation	15.43	15.32	15.32
2	Interest on Long-term Loans	4.46	4.33	4.33
3	Return on Equity	8.31	8.21	8.21
4	O&M Expense	10.4	5.72	5.72
5	Interest on Working Capital	0.71	0.54	0.57
6	Sharing of gains on account of controllable factors	0.00	0.00	2.30
7	Total Revenue Requirement	39.31	34.12	36.45
8	Less: Non-Tariff Income	0.14	0.13	0.13
9	Net Revenue Requirement (Annual Fixed Cost)	39.17	33.99	36.31

The Commission approves net Aggregate Revenue Requirement of INR 36.31 Cr in the true-up of FY 2020-21. The net ARR approved by the Commission is higher than that claimed by the Petitioner due to sharing of gains on account of controllable factors.

# 2.11. Revenue at existing Transmission Tariff and Standalone Gap/Surplus

### Petitioner's submission

The Petitioner has considered revenue from approved tariff for FY 2020-21 as INR 41.25 Crore. Accordingly, the standalone gap/surplus for FY 2020-21 as submitted by the Petitioner is as follows:

Table 25: Revenue Gap/(Surplus) for FY 2020-21 as submitted by Petitioner (INR Crore)

Sr. No	Particulars	Amount
1	Annual Revenue Requirement	33.99
2	Total Revenue	41.25
3	Revenue Gap/(Surplus)	(7.26)

### Commission's Analysis

The Commission sought the petitioner to reconcile the variation observed between the revenue detail provided by the petitioner for FY 2020-21, revenue recorded in the Annual Accounts for FY 2020-21 and the revenue as per petition claim of Rs. 41.25 Crore.

The petitioner has clarified the revenue in the audited accounts for FY 2020-21 is inclusive of Non-Tariff Income. Further, the Commission has observed that the total amount of revenue recovered by the Petitioner in FY 2020-21 as per the annual accounts was INR 41.25 Cr excluding the non-tariff income. Therefore, the Commission has considered revenue from approved tariff for FY 2020-21 as INR 41.25 Cr. Accordingly, standalone gap/surplus for FY 2020-21 is shown in the following table:

Table 26: Approved Standalone Revenue Gap/(Surplus) for FY 2020-21 (INR Crore)

Sr. No	Particulars	Amount
1	Annual Revenue Requirement	33.99
2	Total Revenue	36.31
3	Revenue Gap/(Surplus)	(4.94)

The Commission, in the true-up of FY 2020-21 approves a standalone surplus of INR 4.94 Cr.

# 3. Chapter 3: Annual Performance Review for FY 2021-22

### 3.1. Background

The Tariff Order for FY 2021-22 was issued by the Commission on March 23, 2021 approving the Aggregate Revenue Requirement (ARR) and transmission tariff for FY 2021-22 (hereinafter referred to as 'ARR Order' for the purpose of APR of FY 2021-22). This Chapter covers the Annual Performance Review (APR) for FY 2021-22 vis-à-vis the cost parameters approved by the Commission in the ARR Order for FY 2021-22. The Annual Performance Review for FY 2021-22 is to be carried out as per the provisions of the JERC (Generation, Transmission & Distribution Multi Year Tariff), Regulations, 2018.

Regulation 11.1 of the JERC MYT Tariff Regulations, 2018 states as follows:

"The Generating Company, Transmission Licensee and Distribution Licensee shall be subject to annual performance review and truing up of expenses and revenue during the Control Period in accordance with these Regulations."

Further Regulation 40.2 of the JERC (MYT Tariff Regulations, 2018 states as follows:

"40.2 The annual Transmission Charges of the Transmission licensee shall be determined by the Commission on the basis of application for determination of Aggregate Revenue Requirement made by Transmission licensee..."

As per Regulation 40.3 of the JERC MYT Tariff Regulations, 2018:

- "The Aggregate Revenue Requirement for a Transmission Licensee shall comprise of the following components: a) Return on Equity;
- h) Depreciation;
- i) Interest and Finance Charges on Loan Capital;
- j) Interest on Working Capital and deposits from Transmission System Users;
- k) Operation and maintenance expenses;
- l) Income Tax

### Less:

m) Income from Open Access Charges, in accordance with Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017 as amended from time to time;

- n) Non-Tariff Income;
- o) Income from Other Business..."

The Commission has accordingly carried out the Annual Performance Review for FY 2021-22 as per the provisions of JERC MYT Tariff Regulations, 2018.

# 3.2. Approach for the Review of FY 2021-22

The review of the Aggregate Revenue Requirement requires assessment of the various cost elements like capital expenditure, O&M expenses, interest on long term loans, interest on working capital loans, depreciation, etc. The various cost elements constituting the Aggregate Revenue Requirement have been approved based on the prudence check of actual information submitted by the Petitioner, the JERC MYT Regulations, 2018 and on the basis of the norms approved in the ARR Order dated March 23, 2021.

# 3.3. Gross Fixed Assets (GFA) and Capitalisation

### **Petitioner's submission**

The Petitioner has proposed nil capitalization during FY 2021-22 against approved capitalization of INR 3.00 Cr in the ARR Order. Accordingly, the Petitioner has submitted the gross fixed assets and capitalization as shown in the following table:

Table 27: Gross Fixed Assets and Capitalisation details submitted by Petitioner (INR Crore)

Sr. No.	Particulars	Approved (ARR Order)	Petitioner's Submission
1	Opening GFA	300.56	296.18
2	Addition during the year	3.00	-
3	Closing GFA	303.56	296.18

### Commission's Analysis

The Petitioner has claimed Nil capitalization for FY 2021-22. Accordingly, the Commission approves Nil capitalization for FY 2021-22. The opening GFA for FY 2021-22 has been considered same as the closing GFA approved in true-up of FY 2020-21. In accordance with the same, the Commission approves the capitalization and Gross Fixed Assets for the year as shown in the following table:

Table 28: Gross Fixed Assets and Capitalization approved by the Commission for FY 2021-22 (INR Crore)

Sr. No.	Particulars	Approved (ARR Order)	Petitioner's Submission	Now Approved by Commission
1	Opening GFA	300.56	296.18	296.18
2	Addition during the year	3.00	-	-
3	Closing GFA	303.56	296.18	296.18

The Commission approves Nil capitalization in the APR for FY 2021-22.

# 3.4. Depreciation

### **Petitioner's submission**

The Petitioner has submitted that the depreciation has been worked out after applying the depreciation rates as per the CERC (Terms and Conditions for determination of Tariff), Regulations, 2019. Accordingly, the depreciation for the year has been submitted as below:

Table 29: Depreciation details submitted by Petitioner (INR Crore)

Sr. No.	Particulars	Approved (ARR Order)	Petitioner's Submission
1	Opening GFA	300.56	296.18
2	Addition during the year	3.00	-
3	Closing GFA	303.56	296.18
4	Average GFA	302.06	298.36
5	Depreciation	15.63	15.32

### **Commission's Analysis**

As per Regulation 30 of the JERC (MYT Regulations), 2018:

### "30 Depreciation

30.1 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

Provided, also that the no depreciation shall be allowed on the assets financed through consumer contribution, deposit work, capital subsidy or grant.

30.2 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.

30.3 Land other than the land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets.

30.4 In case of existing assets, the balance depreciable value as on April 1, 2019, shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to March 31, 2018, from the gross depreciable value of the assets.

30.5 The depreciation shall be chargeable from the first Year of commercial operations. In case of projected commercial operation of the assets during the Year, depreciation shall be computed based on the average of opening and closing value of assets:

Provided that depreciation shall be re-calculated during truing-up for assets capitalised at the time of truing up of each Year of the Control Period, based on documentary evidence of asset capitalised by the Applicant, subject to the prudence check of the Commission.

# 30.6 For Transmission Licensee, the depreciation shall be calculated at rates and norms specified in the prevalent CERC Tariff Regulations for transmission system.

30.7 The depreciation for a Distribution Licensee shall be calculated annually, based on the Straight Line Method, over the Useful Life of the asset at rates specified in Appendix I of the Regulations.

30.8 In addition to allowable depreciation, the Distribution Licensee shall be entitled to advance against depreciation (AAD), computed in the manner given hereunder:

AAD = Loan (raised for capital expenditure) repayment amount based on loan repayment tenure, subject to a ceiling of 1/10th of loan amount minus depreciation as calculated on the basis of these Regulations:

Provided that advance against depreciation shall be permitted only if the cumulative repayment upto a particular Year exceeds the cumulative depreciation upto that Year:

Provided further that advance against depreciation in a Year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation upto that Year.

30.9 The Distribution Licensee shall provide the list of assets added during each Year of Control Period and list of assets completing 90% of depreciation in the Year along with Petition for annual performance review, trueup and tariff determination for ensuing Year.

30.10 The remaining depreciable value for a Distribution Licensee shall be spread over the balance useful life of the asset, on repayment of the entire loan." (Emphasis supplied)

Accordingly, the Commission has considered the depreciation rates as specified in the CERC (Terms and Conditions of Tariff) Regulations, 2019. The asset class wise opening fixed assets have been considered to be equal to closing fixed assets as approved in true-up of FY 2019-20. Accordingly, the Commission has arrived at the depreciation values for the year as shown in the table below:

*Table 30: Depreciation approved by Commission for FY 2021-22(INR Crore)* 

Particulars	Deprecia tion rate	Opening GFA	Addition	Deletion	Closing GFA	Average	Deprecia tion
Plant and Machinery	5.28%	288.40	0.00	0.00	288.40	288.40	15.23
Buildings	3.34%	2.42	0.00	0.00	2.42	2.42	0.08
Vehicles	9.50%	0.00	0.00	0.00	0.00	0.00	0.00
Office Equipment	6.33%	0.16	0.00	0.00	0.16	0.16	0.01

Particulars	Deprecia tion rate	Opening GFA	Addition	Deletion	Closing GFA	Average	Deprecia tion
Computers and Others	6.33%	0.00	0.00	0.00	0.00	0.00	0.00
Land	0.00%	5.21	0.00	0.00	5.21	5.21	0.00
Total	5.17%	296.19	0.00	0.00	296.19	296.19	15.32

The Commission now approves depreciation of INR 15.32 Cr in the APR for FY 2021-22.

### 3.5. Interest on Loan

### **Petitioner's submission**

The Petitioner has considered the opening loan balance for FY 2021-22 equal to the closing balance of loan for the 2020-21. The normative loan addition in FY 2021-22 has been computed as 70% of the capitalization for FY 2021-22. The repayment of loans has been considered equal to the depreciation during FY 2021-22.

Further, the Petitioner has considered the rate of interest as the State Bank of India Prime Lending Rate (SBI PLR plus 100 basis points) of 8.00%. Accordingly, the interest and finance charges submitted by the Petitioner as shown in the table below:

*Table 31: Interest and Finance charges submitted by Petitioner (INR Crore)* 

Sr. No.	Particulars	Approved (ARR Order)	Petitioner's Submission
1	Opening Loan	44.80	41.86
2	Loan for additional Capitalization	2.10	0.00
3	Loan Repayment	15.63	15.32
4	Closing Loan	31.27	26.54
5	Interest Cost on Avg. Loans	3.04	2.74

### **Commission's Analysis**

Regulation 28 of the JERC MYT Regulations, 2018 specifies as follows:

### "28. Interest on Loan

28.1 The loans arrived at in the manner indicated in Regulation 26 on the assets put to use, shall be considered as gross normative loan for calculation of interest on the loan:

Provided that interest and finance charges on capital works in progress shall be excluded:

Provided, further that in case of De-capitalisation or retirement or replacement of assets, the loan capital shall be reduced to the extent of outstanding loan component of the original cost of the de-capitalised or retired or replaced assets, based on documentary evidence.

28.2 The normative loan outstanding as on April 1, 2019, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2018, from the gross normative loan.

28.3 Notwithstanding any moratorium period availed by the Transmission Licensee or the Distribution Licensee, as the case may be, the repayment of loan shall be considered from the first Year of commercial operation of the project and shall be equal to the annual depreciation allowed in accordance with Regulation 30.

28.4 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Transmission Licensee or the Distribution Licensee:

Provided that at the time of truing up, the weighted average rate of interest calculated on the basis of the actual loan portfolio during the Year applicable to the Transmission Licensee or the Distribution Licensee shall be considered as the rate of interest:

Provided also that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest for the actual loan shall be considered:

Provided further that if the Transmission Licensee or the Distribution Licensee does not have actual loan, then 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 relevant Year plus 100 basis points shall be considered as the rate of interest for the purpose of allowing the interest on the normative loan.

28.5 The interest on loan shall be calculated on the normative average loan of the Year by applying the weighted average rate of interest:

Provided that at the time of truing up, the normative average loan of the Year shall be considered on the basis of the actual asset capitalization approved by the Commission for the Year.

28.6 For new loans proposed for each Financial Year of the Control Period, interest rate shall be considered as lower of (i) 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 relevant Year plus 100 basis points, and (ii) weighted average rate of interest proposed by the Distribution Licensee.

28.7 The above interest computation shall exclude the interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, deposit work, capital subsidy or grant, carried out by Transmission Licensee or Distribution Licensee." (Emphasis supplied)

The opening loan balance for FY 2021-22 has been considered equal to the closing balance of loan approved in true-up of FY 2020-21. The normative loan addition in FY 2021-22 has been computed as 70% of the capitalization for FY 2021-22, which works out to be Nil. The repayment of loans has been considered equal to the depreciation during FY 2020-21.

The Commission for FY 2021-22 has considered the rate of interest as SBI MCLR plus 100 basis points as on April 1, 2020 i.e., 8.00% (7.00% plus 1.00%) as per the provisions of JERC MYT Regulations, 2018.

The following table provides the Interest on Loan approved by the Commission in the ARR Order, Petitioner's submission and revised estimates now approved by the Commission.

Table 32: Interest on Loan approved by Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	44.80	41.86	41.86
2	Add: Normative Loan During the year	2.10	0.00	-
3	Less: Normative Repayment equivalent to Depreciation	15.63	15.32	15.32
4	Closing Normative Loan	31.27	26.54	26.54
5	Average Normative Loan	38.04	34.20	34.20
6	Rate of Interest (%)	8.00%	8.00%	8.00%
7	Interest on Loan	3.04	2.74	2.74

The Commission approves Interest on Loan of INR 2.74 Cr in the APR of FY 2021-22.

# 3.6. Return on Equity (RoE)

### **Petitioner's submission**

The Petitioner has computed the Return on Equity considering the rate specified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2019. The equity addition has been considered to the tune of 30% of assets capitalized during the year. Accordingly, the Petitioner has submitted the revised estimates for return on equity for FY 2021-22 as follows:

Table 33: Return on Equity submitted by Petitioner (INR Crore)

Sr. No.	Particulars	Approved (ARR Order)	Petitioner's Submission
1	Opening Equity	54.26	52.95
2	Addition in Equity on account of new capitalization	0.90	0.00
3	Closing Equity	55.16	52.95
4	Average Equity	54.71	52.95
5	Return on Equity	8.48	8.21

### Commission's Analysis

Regulation 27.1 of the JERC (MYT Regulations), 2018 states the following:

"27.1 Return on equity shall be computed on the paid up equity capital determined in accordance with Regulation 26 for the assets put to use for the Transmission Licensee and shall be allowed in accordance with the prevalent CERC Tariff Regulations for transmission system."

Further, the Regulation 30 (2) of the CERC (Terms and Conditions of Tariff) Regulations, 2019, states that:

"(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage:

......"

Accordingly, the rate of return on equity for transmission business has been considered as 15.50%. The opening equity for FY 2021-22 has been considered same as the closing equity approved in true-up of FY 2020-21. The normative equity addition in FY 2021-22 has been computed as 30% of the capitalization for FY 2021-22, which works out to be Nil. The following table provides the Return on Equity approved by the Commission in the ARR Order, Petitioner's submission and revised estimates now approved by the Commission.

Table 34: Return on Equity approved by Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	54.26	52.95	52.95
2	Equity Addition	0.90	0.00	0.00
3	Closing Equity	55.16	52.95	52.95
4	Average Equity	54.71	52.95	52.95
5	Rate of RoE	15.50%	15.50%	15.50%
6	Return on Equity	8.48	8.21	8.21

The Commission approves the Return on Equity of INR 8.21 Cr in the APR of FY 2021-22.

# 3.7. Operation & Maintenance Expenses

As per Regulation 41 of the JERC (MYT Regulations), 2018:

### "41. Operation and Maintenance (O&M) expenses for Transmission Licensees

*41.1 Operation and Maintenance (O&M) expenses shall comprise of the following:* 

- a) Employee expenses salaries, wages, pension contribution and other employee costs;
- b) Administrative and General expenses including insurance charges if any; and
- c) Repairs and Maintenance expenses."

41.2 The Transmission Licensee shall submit the required O&M expenses for the Control Period as a part of Multi Year Tariff Petition. O&M expenses for the base Year shall be approved by the Commission taking into

account the latest available audited accounts, business plan filed by the transmission Licensee, estimates of the actuals for the base Year, prudence check and any other factors considered appropriate by the Commission."

41.3 O&M expenses for the nth Year of the Control Period shall be approved based on the formula given below:

O&Mn = (R&Mn + EMPn + A&Gn) x (1 - Xn) + Terminal Liabilities

Where,

 $R&Mn = K \times GFAn-1 \times (WPIinflation)$ 

EMPn = (EMPn-1) x (1+Gn) x (CPIinflation)

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

'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;

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

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

*EMPn – Employee expenses of the Transmission Licensee for the nth Year;* 

A&Gn – Administrative and General expenses of the Transmission Licensee for the nth Year;

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

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

Xn is an efficiency factor for nth Year. Value of Xn shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate;

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, approved cost by the Commission in past and any other factor that the Commission feels appropriate:

Provided that in case the Distribution Licensee has been in operation for less than three (3) Years as on the date of effectiveness of these Regulations, O&M Expenses shall be determined on case to case basis.

41.4 Terminal liabilities of employees of Licensee including pension expenses etc. shall be approved as per actuals submitted by the Licensee, subject to prudence check or be established through actuarial studies. Additionally, any variation due to changes recommended by the pay commission shall be allowed separately by the Commission, subject to prudence check.

41.5 For the purpose of estimation, the same value of factors — CPIinflation and WPIinflation shall be used for all Years of the Control Period. However, the Commission shall consider the actual values of the factors — CPIinflation and WPIinflation during the truing up exercise for the Year for which true up is being carried out and true up the O&M Expenses for that Year, only to the extent of inflation."

The components comprising of the O&M – employee expenses, R&M expenses and A&G expenses have been discussed separately as follows.

### 3.7.1. Employee Expenses

#### **Petitioner's submission**

The Petitioner has submitted revised estimates for employee expenses at INR 2.89 Cr against INR 4.28 Cr approved in the ARR Order.

### Commission's Analysis

The employee expenses comprise of salaries, dearness allowance, bonus, terminal benefits in the form of pension & gratuity, leave encashment and staff welfare expenses. The Commission had approved employee expenses of INR 4.28 Cr in the ARR Order. The Petitioner has submitted revised estimates for FY 2021-22 as INR 2.89 Cr.

To determine the O&M expenses for FY 2021-22 in the ARR Order the Commission had escalated approved expenses for FY 2020-21 by average CPI inflation.

Regulation 6 of the JERC MYT Regulations, 2018 specifies the following:

### "6. Values for Base Year

6.1 The values for the Base Year of the Control Period shall be determined on the basis of the audited accounts or provisional accounts of last three (3) Years, and other factors considered relevant by the Commission:

Provided that, in absence of availability of audited accounts or provisional accounts of last three (3) Years, the Commission may benchmark the parameters with other similar utilities to establish the values for Base Year:

Provided further that the Commission may change the values for Base Year and consequently the trajectory of parameters for Control Period, considering the actual figures from audited accounts........"

Regulation 6 provides that the Commission may change the values for Base Year considering the actual figures from audited accounts. As the Commission in this Order has carried out the truing up for FY 2020-21 based on the audited accounts, the Commission has considered the trued-up expenses for FY 2020-21 as base expenses and applied the CPI Inflation for approving the revised trajectory of employee expenses FY 2021-22.

The CPI Inflation has been computed as follows:

Table 35: Computation of CPI Inflation (%)

FY	Average of (Apr-Mar)	Increase in CPI Index	Average increase in CPI indices over 3 years
2018-19	299.92	5.45%	
2019-20	322.50	7.53%	
2020-21	338.69	5.02%	
		CPI Inflation	6.00%

The following table provides the employee expenses approved by the Commission in the ARR Order, Petitioner's submission and revised estimates now approved by the Commission:

Table 36: Employee Expenses approved by Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses for the previous year (EMPn-1)	4.07	-	2.73
2	Growth in number of employees (Gn)	0.00%	-	0.00%
3	CPI Inflation	5.35%	-	6.00%
4	Employee Expenses (EMPn)= (EMPn-1) x (1+Gn) x (1+CPI inflation)	4.28	-	2.89
5	<b>Total Employee Expenses</b>	4.28	2.89	2.89

The Commission approves employee expenses of INR 2.89 Cr in the APR of FY 2021-22.

### 3.7.2. Administrative and General (A&G) Expenses

### **Petitioner's submission**

The Petitioner has submitted revised estimates for A&G expenses at INR 1.68 Cr against INR 3.20 Cr approved in the ARR Order.

### **Commission's Analysis**

A&G expenses mainly comprise of rents, telephone and other communication expenses, professional charges, conveyance and travelling allowances, etc. The Commission has determined A&G expenses for FY 2021-22 by escalating trued- up A&G expenses for FY 2020-21 by average CPI Inflation (For FY 2018-19 to FY 2020-21).

Similar to the methodology followed while estimating the employee expenses, the Commission has considered the trued-up A&G expenses for FY 2020-21 as Base Year expenses and escalated the same with CPI Inflation for approving the revised trajectory of A&G expenses for FY 2021-22.

The following table provides the A&G expenses approved by the Commission in the ARR Order, Petitioner's submission and revised estimates now approved by the Commission:

Table 37: A&G Expenses approved by Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Administration & General Expenses for the previous year (A&Gn-1)	3.04	ı	1.07
2	CPI Inflation	5.35%	-	6.00%
3	Administration & General Expenses	3.20	1.68	1.13

The Commission now approves the Administrative & General (A&G) expenses of INR 1.13 Cr in the APR for FY 2021-22.

### 3.7.3. Repair & Maintenance Expenses (R&M)

### **Petitioner's submission**

The Petitioner has submitted revised estimates for R&M expenses at INR 2.12 Cr against INR 3.34 Cr approved in the ARR Order.

### **Commission's Analysis**

Regulation 41.3 of the JERC MYT Regulation, 2018 states as shown below: "  $\,$ 

'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, bench marking 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;

As provided in clause 41.3 of the JERC MYT Regulations, 2018 the Commissions has considered the value of 'K' factor as 1.08% which was approved by the Commission in MYT order dated 20th May 2019.

The 'K' factor multiplied with the GFA approved for (n-1)<sup>th</sup> year. The resultant amount is then escalated by WPI Inflation to arrive upon the R&M Expenses for FY 2021-22.

The WPI Inflation has been computed as follows:

Table 38: Computation of WPI Inflation (%)

FY	Average of (Apr-Mar)	Increase in WPI Index	Average increase in WPI indices over 3 years
2018-19	119.79	4.28%	
2019-20	121.80	1.68%	
2020-21	123.38	1.29%	
		WPI Inflation	2.42%

The following table provides the R&M expenses approved by the Commission in the ARR Order, Petitioner's submission and revised estimates now approved by the Commission:

Table 39: R&M Expenses approved by Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	K factor	1.08%	-	1.08%
2	GFAn-1 (opening GFA)	300.55	-	296.18
3	WPI Inflation (%)	2.96%	-	2.42%
4	Repair & Maintenance Expenses	3.34	2.12	3.28

The Commission approves the Repair & Maintenance (R&M) expenses of INR 3.28 Cr in the APR of FY 2021-22.

### 3.7.4. Total Operation and Maintenance Expenses (O&M)

The following table provides the O&M expenses approved by the Commission in the ARR Order, Petitioner's submission and revised estimates of O&M expenses now approved by the Commission:

*Table 40: O&M Expenses approved by Commission for FY 2021-22 (INR Crore)* 

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	4.28	2.89	2.89
2	Administrative & General Expenses (A&G)	3.2	1.68	1.13
3	Repair & Maintenance Expenses	3.34	2.12	3.28
4	Total Operation & Maintenance Expenses	10.82	6.69	7.30

The Commission approves the Operation & Maintenance (O&M) expenses of INR 7.30 Cr in the APR of FY 2021-22.

# 3.8. Interest on Working Capital

### **Petitioner's submission**

The Petitioner has calculated interest on working capital based on the principles outlined in the CERC (Terms and Conditions for determination of Tariff), Regulations, 2019, by considering the below parameters (as in CERC Tariff Regulations, 2019):

- a) Receivables equivalent to 45 days of annual fixed cost
- b) Maintenance spares @15% of operation and maintenance expenses
- c) Operation and maintenance expenses for one month

The Petitioner has considered rate of interest on working capital as 9.75%.

Table 41: Interest on Working Capital submitted by Petitioner (INR Crore)

Sr. No.	Particulars	Approved (ARR Order)	Petitioner's Submission
1	Receivables equivalent to 45 days of fixed cost	4.75	4.12
2	Maintenance spares @15% of operation and maintenance expenses	1.62	1.00
3	Operation and maintenance expenses for one month	0.90	0.56
4	Total Working Capital requirement	7 <b>.2</b> 7	5.68
5	Interest on Working Capital	0.71	0.51

#### Commission's Analysis

Regulation 42.1 of the JERC MYT Regulations, 2018 states the following with regard to Interest on Working Capital:

"42.1 The Transmission Licensee shall be allowed interest on the estimated level of working capital for the Financial Year computed in accordance with prevalent CERC Tariff Regulations."

Further, Regulation 34 (C) of the CERC (Terms and Conditions of Tariff) Regulations, 2019 specifies:

"34. Interest on Working Capital: (1) The working capital shall cover:

•••••

# (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:

- (i) Receivables equivalent to 45 days of annual fixed cost;
- (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
- (iii) Operation and maintenance expenses, including security expenses for one month."

Further, Regulation 31 of the JERC (Generation, Transmission & Distribution Multi Year Tariff), Regulations, 2018, states the following with regard to interest rate to be considered in working capital calculation:

#### "31. Interest on Working Capital

31.1 The norms for working capital for Transmission Licensee shall be as specified in Chapter 5 of these Regulations

31.2 The norms for working capital for Distribution Wires Business and Retail Supply Business shall be as specified in Chapter 6 and Chapter 7 of these Regulations.

31.3 The interest on working capital shall be a payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures.

31.4 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 1stApril of the Financial Year in which the Petition is filed plus 200 basis points." (Emphasis supplied)

Accordingly, the Commission has computed the revised estimates of working capital requirement for the Petitioner for FY 2021-22. The interest on working capital has been computed considering the interest rate as one year SBI MCLR as on April 1, 2021 as 7.00% plus 200 basis points.

The following table provides the interest on working capital approved by the Commission in the ARR Order, Petitioner's submission and now approved by the Commission.

Table 42: Interest on Working Capital approved by Commission for FY 2021-22(INR Crore)

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Receivables equivalent to 45 days of net Annual Fixed Cost	4.75	4.12	4.17
2	Maintenance spares @15% of operation and maintenance expenses	1.62	1.00	1.09
3	Operation and maintenance expenses for one month	0.90	0.56	0.61

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
4	Total Working Capital requirement	7 <b>.2</b> 7	5.68	5.88
5	Rate of Interest (%)	9.75%	9.00%	9.00%
6	Interest on Working Capital	0.71	0.51	0.53

The Commission approves the Interest on Working Capital as INR 0.53 Cr in the APR of FY 2021-22.

#### 3.9. Non-Tariff Income

#### Petitioner's submission

The Petitioner has submitted the revised estimate of non-tariff income for FY 2021-22 as INR 0.13 Cr against non-tariff income of INR 0.15 Cr approved in the ARR Order.

#### Commission's analysis

The Commission for FY 2021-22 has approved the same amount as Trued up Non-Tariff Income for FY 2020-21. However, the same shall be trued up on actual basis.

The NTI approved in the ARR Order, the Petitioner's submission and now approved by the Commission is shown in the table below:

Table 43: Non-Tariff Income approved by Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Non-Tariff Income	0.15	0.13	0.13

The Commission now approves Non-Tariff Income of INR 0.13 Cr in the APR for FY 2021-22.

#### 3.10. Aggregate Revenue Requirement (ARR) for FY 2021-22

#### **Petitioner's submission**

Based on the expenses as detailed above, the net aggregate revenue requirement of INR 33.33 Cr is submitted after adjusting the Non-Tariff Income for FY 2021-22.

#### Commission's Analysis

On the basis of the detailed analysis of the cost parameters of the ARR as shown above, the revenue requirements in the APR of FY 2021-22 are approved as follows:

Table 44: Aggregate Revenue Requirement approved by the Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Depreciation	15.63	15.32	15.32
2	Interest on Long-term Loans	3.04	2.74	2.74
3	Return on Equity	8.48	8.21	8.21
4	O&M Expense	10.82	6.69	7.30
5	Interest on Working Capital	0.71	0.51	0.53
6	Total Revenue Requirement	38.68	<b>33.4</b> 7	34.09
7	Less: Non-Tariff Income	0.15	0.13	0.13
8	Net Revenue Requirement (Annual Fixed Cost)	38.53	33.33	33.95

The Commission approves the net ARR of INR 33.95 Cr in the APR of FY 2021-22.

#### 3.11. Standalone Gap/(Surplus) for FY 2021-22

The Commission had approved the net revenue requirement of INR 51.72 Cr in the ARR order of FY 2021-22 including impact of previous years Gap/(Surplus). The Commission has now approved the net revenue requirement of INR 33.95 Cr on standalone basis. Thus, the standalone revenue gap/(surplus) as approved by the Commission is shown in the following table:

*Table 45: Standalone revenue gap/(surplus) for FY 2021-22 (INR Crore)* 

Sr. No	Particular	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Net Revenue Requirement	51.72	33.33	33.95
2	Revenue at existing Tariff	51.73	51.73	51.73
3	Standalone Gap/(Surplus)	(0.01)	(18.40)	(17.78)

#### 3.12. Gap/Surplus to be carried forward to FY 2022-23

The Commission while truing up of FY 2018-19 in Tariff Order dated 18th May 2020 had determined a standalone revenue surplus of INR 12.93 Crores. In the said Order, the Commission in APR of FY 2019-20 had approved revised standalone surplus of INR 15.18 Cr. In order to avoid a Tariff shock, the Commission had allowed the recovery of cumulative revenue gap of INR 16.96 Cr at the end of FY 2019-20, in a phased manner over a period of two years.

In the previous year Order, the Commission has trued up for FY 2019-20 and has approved Annual Revenue Requirement of INR 33.99 Cr vis-à-vis actual revenue of INR 42.59 Cr, resulting in standalone revenue surplus of INR 8.60 Cr for FY 2019-20.

The Commission in this current year Order has trued up for FY 2020-21 and has approved Annual Revenue Requirement of INR 36.31 Cr vis-à-vis actual revenue of INR 41.25 Cr, resulting in standalone revenue surplus of INR 4.94 Cr for FY 2020-21.

Further, for FY 2021-22, the Commission has approved revised Annual Revenue Requirement of INR 33.95 Cr and projected revenue of INR 51.73 Cr at approved tariff, which resulted in standalone revenue surplus of INR 17.78 Cr. Thus, the cumulative revenue gap at the end of FY 2021-22 is shown in the following table:

Table 46: Cumulative revenue gap/(surplus) at the end FY 2021-22 (INR Crore)

Sr. No.	Particular	FY 2020-21	FY 2021-22
1	Opening Gap/ (Surplus)	23.85	20.79
2	Addition in Gap / (Surplus)	(4.94)	(17.78)
3	Closing Gap / (Surplus)	18.92	3.01
4	Average Gap / (Surplus)	21.39	11.90
5	Interest rate	8.75%	8.00%
6	Carrying Cost	1.87	0.95
7	Total Gap / (Surplus) including carrying cost	20.79	3.96

The cumulative revenue gap of INR 3.96 Cr at the end of FY 2021-22 has been amortised by the Commission in in FY 2022-23, which is cumulative opening gap for FY 2022-23.

# 4. Chapter 4: Determination of Aggregate Revenue Requirement for FY 2022-23, FY 2023-24 and FY 2024-25 (3<sup>rd</sup> MYT Control Period)

#### 4.1. Background

In this Chapter, the Commission has determined the Aggregate Revenue Requirement (ARR) for FY 2022-23, FY 2023-24 and FY 2024-25 (3rd MYT Control Period). The determination of Aggregate Revenue Requirement has been done in accordance with the 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, 2021").

# 4.2. Approach for determination of ARR for each year of the 3rd MYT Control period

The Commission has computed the individual elements constituting the Aggregate Revenue Requirement for each year based on figures approved in the Business Plan Order dated 31 March 2022, the actual information available of various parameters for FY 2020-21 as per the audited accounts and the provisional information available for FY 2021-22. The ARR has been determined for each year of the Control Period whereas the revenue at existing tariff is determined only for FY 2022-23 to arrive at the revenue gap/surplus for FY 2022-23.

#### 4.3. Gross Fixed Assets (GFA) and Capitalisation

#### Petitioner's submission

The petitioner has submitted the opening Gross Fixed Assets (GFA) of INR 296.18 Cr for FY 2020-21. Further there was no asset addition by the petitioner during the FY 2020-21 and FY 2021-22. Thus, the closing GFA of FY 2021-22 is INR 296.18 Cr.

Summary of the GFA and capitalization proposed by the petitioner for each year of the Control Period:

**Table 47:** Gross Fixed Assets and Capitalisation Proposed by the petitioner (INR Crore)

Sr. No.	Particulars	FY 2021-22 (RE)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2024-25 (Projected)
1	Opening GFA	296.18	296.18	302.18	314.18
2	Addition during the year	0.00	6.00	12.00	10.00
3	Closing GFA	296.18	302.18	314.18	324.18

#### Commission's Analysis

As discussed in the Business Plan Order, the petitioner has provided the details of revised submission for capitalisation for the upcoming control period. The summary of the revised projections for capitalisation in upcoming control period are as follows:

Table 48: Revised Capitalisation submitted by the Petitioner (INR Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Capitalisation during the year	0.00	6.00	22.00

In the Business Plan Order, the Commission has approved the revised capitalisation submitted by the petitioner. Further, the opening GFA for FY 2022-23 has been considered same as the closing GFA approved in APR of FY 2021-22.

The following table provides the capitalization and GFA approved by the commission for each year of the Control Period:

Table 49: Gross Fixed Assets and Capitalisation Approved by the commission (INR Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening GFA	296.18	296.18	302.18
2	Addition during the year	0.00	6.00	22.00
3	Closing GFA	296.18	302.18	324.18

The Commission approves the capitalization and Gross Fixed Assets as shown in the table above.

#### 4.4. Depreciation

#### **Petitioner's submission**

The Petitioner has determined the depreciation by applying category-wise depreciation rates notified in the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2019 on the opening balance of Gross Fixed assets and average of the addition during each year of the control period. Accordingly, the depreciation for the Control period has been submitted as below:

*Table 50: Depreciation details submitted by Petitioner (INR Crore)* 

Sr. No.	Particulars	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2024-25 (Projected)
1	Opening GFA	296.18	302.18	314.18
2	Addition during the year	6.00	12.00	10.00
3	Closing GFA	302.18	314.18	324.18
4	Average GFA	299.18	308.18	319.18
5	Depreciation during the year	15.48	15.95	16.53

#### Commission's Analysis

Regulation 31 of the JERC MYT Regulations, 2021 specifies the following:

#### "31. Depreciation

31.1 The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission:

Provided that the depreciation shall be allowed after reducing the approved original cost of the retired or replaced or decapitalized assets:

Provided also that the no depreciation shall be allowed on the assets financed through consumer contribution, deposit work, capital subsidy or grant.

31.2 The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to a maximum of 90% of the capital cost of the asset.

Provided further that the salvage value of Information Technology equipment and computer software shall be considered at zero (0) per cent of the allowable capital cost.

31.3 Land other than the land held under lease shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the assets.

31.4 In case of existing assets, the balance depreciable value as on April 1, 2022, shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to March 31, 2021, from the gross depreciable value of the assets.

31.5 The depreciation shall be chargeable from the first Year of commercial operations. In case of projected commercial operation of the assets during the Year, depreciation shall be computed based on the average of opening and closing value of assets:

Provided that depreciation shall be re-calculated during truing-up for assets capitalised at the time of truing up of each Year of the Control Period, based on documentary evidence of asset capitalised by the Applicant, subject to the prudence check of the Commission.

# 31.6 For Transmission Licensee, the depreciation shall be calculated at rates and norms specified in the prevalent CERC Tariff Regulations for transmission system.

....." (Emphasis supplied)

Accordingly, depreciation rates have been considered based on CERC (Terms and Conditions of Tariff), 2019. The weighted average depreciation rate has been calculated based on asset class wise fixed assets as per audited accounts of FY 2020-21 and the depreciation rates as considered. Further, deprecation for each year has been computed on average Gross Fixed Assets (GFA) after considering the net addition proposed during each year of the Control Period.

The following table provides the calculation of depreciation approved by the commission for each year of the Control Period:

	Table 51: Depreciation approved	d by Commission (INR Crore)
--	---------------------------------	-----------------------------

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Gross Fixed Assets	296.19	296.19	302.19
2	Addition during the year	-	6.00	22.00
3	Adjustment/Retirement during the year	0.00	-	-
4	Closing Gross Fixed Assets	296.19	302.19	324.19
5	Average Gross Fixed Assets	296.19	299.19	313.19
6	Effective Rate of Depreciation (%)	5.17%	5.12%	5.00%
7	Depreciation	15.32	15.48	16.22

The Commission approves a depreciation of INR 15.32 Cr for FY 2022-23, INR 15.48 Cr for FY 2023-24 and INR 16.22 Cr for FY 2024-25.

#### 4.5. Interest on Loan

#### **Petitioner's submission**

The Petitioner has considered normative debt-equity ratio of 70:30 as per the JERC MYT regulations, 2021. Further, the Petitioner has considered interest rate of 8.00% to compute the interest on long-term loans.

The following table provides the Interest on Loan projected for each year of the Control Period.

*Table 52: Interest on Loan submitted by the Petitioner (INR Crore)* 

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Normative Loan	26.54	15.26	7.71
2	Add: Normative Loan during the year (70% of proposed capitalization)	4.20	8.40	7.00
3	Less: Normative Repayment	15.48	15.95	16.53
4	Closing Normative Loan	15.26	7.71	(1.82)
5	Average Normative Loan	20.90	11.49	2.95
6	Rate of Interest	8.00%	8.00%	8.00%
7	Interest on Normative Loan	1.67	0.92	0.24

#### **Commission's Analysis**

The Regulation 29 of the JERC MYT Regulations, 2021 specifies the following:

#### "29. Interest on Loan

29.1 The loans arrived at in the manner indicated in Regulation 27 on the assets put to use, shall be considered as gross normative loan for calculation of interest on the loan:

Provided that interest and finance charges on capital works in progress shall be excluded:

Provided further that in case of De-capitalisation or retirement or replacement of assets, the loan capital shall be reduced to the extent of outstanding loan component of the original cost of the decapitalised or retired or replaced assets, based on documentary evidence.

29.2 The normative loan outstanding as on April 1, 2022, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2021, from the gross normative loan.

29.3 Notwithstanding any moratorium period availed by the Transmission Licensee or the Distribution Licensee, as the case may be, the repayment of loan shall be considered from the first Year of commercial operation of the project and shall be equal to the annual depreciation allowed in accordance with Regulation 31.

29.4 The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Transmission Licensee or the Distribution Licensee:

Provided that at the time of truing up, the weighted average rate of interest calculated on the basis of the actual loan portfolio during the Year applicable to the Transmission Licensee or the Distribution Licensee shall be considered as the rate of interest after prudence check:

Provided also that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest for the actual loan shall be considered:

Provided further that if the Transmission Licensee or the Distribution Licensee does not have actual loan, then 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 relevant Year plus 100 basis points shall be considered as the rate of interest for the purpose of allowing the interest on the normative loan.

29.5 The interest on loan shall be calculated on the normative average loan of the Year by applying the weighted average rate of interest:

Provided that at the time of truing up, the normative average loan of the Year shall be considered on the basis of the actual asset capitalisation approved by the Commission for the Year.

29.6 For new loans proposed for each Financial Year of the Control Period, interest rate shall be considered as lower of (i) 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 relevant Year plus 100 basis points, and (ii) weighted average rate of interest proposed by the Distribution Licensee.

29.7 The above interest computation shall exclude the interest on loan amount, normative or otherwise, to the extent of capital cost funded by consumer contribution, deposit work, capital subsidy or grant, carried out by Transmission Licensee or Distribution Licensee.

#### ....." (Emphasis supplied)

As discussed in the GFA Section, the Commission has considered the capitalisation which has been already approved in the Business Plan Order.

Since, the Petitioner has no actual loans, the rate of interest will be in accordance with the Regulation 29 of the JERC MYT Regulations, 2021 and shall be the 1-year SBI MCLR as on 1st April of the relevant year plus 100 basis points. For projection, the latest available 1-year SBI MCLR as on April 1, 2021 (7.00%) has been considered for FY 2022-23.

The closing loan balance in APR of FY 2021-22 has been considered as the opening loan balance for FY 2022-23. The normative loan addition in FY 2022-23 has been considered as 70% of the approved section 4.3 – GFA and capitalization. The Interest on Loan has been calculated on the average loan during the year.

The following table provides the Interest on Loan approved by the Commission for each year of the Control Period:

Table 53: Interest on loan approved by Commission (INR Crore)

Sr. No.	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Normative Loan	26.54	11.22	0.00
2	Add: Normative Loan during the year	0.00	4.20	15.40
3	Less: Normative Repayment equal to Depreciation	15.32	15.48	16.22
4	Closing Normative Loan	11.22	0.00	0.00
5	Average Normative Loan	18.88	5.61	0.00
6	Rate of Interest (%)	8.00%	8.00%	8.00%
7	Interest on Loan	1.51	0.45	0.00

The Commission approves Interest on Loan as INR 1.51 Cr, INR 0.45 Cr and NIL for FY 2022-23, FY 2023-24 and FY 2024-25 respectively.

#### 4.6. Return on Equity (RoE)

#### **Petitioner's submission**

The Petitioner has computed the Return on Equity (RoE) in accordance with the JERC MYT Regulations 2021, wherein RoE is computed on 30% of the capital base. The opening equity for FY 2022-23 is considered equivalent to the closing equity for FY 2021-22. Further, equity addition is considered to the tune of 30% of proposed capitalization during the year. The Petitioner has considered a post-tax rate of return on equity of 15.50% as per Regulations 30 (2) of the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2019.

The following table provides the return on equity proposed by the petitioner for each year of the Control Period:

*Table 54: RoE Proposed by the Petitioner (INR Crore)* 

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Equity	52.95	54.75	58.35
2	Additions on account of new capitalization	1.80	3.60	3.00
3	Closing Equity	54.75	58.35	61.35
4	Average Equity	53.85	56.55	59.85
5	Return on Equity (%)	15.50%	15.50%	15.50%
6	Return on Equity	8.35	8.77	9.28

#### Commission's Analysis

The Regulation 28.1 of the JERC MYT Regulations, 2021 stipulates the following:

"28.1 Return on equity shall be computed on the paid up equity capital determined in accordance with Regulation 27 for the assets put to use for the Transmission Licensee and shall be allowed in accordance with the prevalent CERC Tariff Regulations for transmission system."

Further, the Regulation 30 (2) of the CERC (Terms and Conditions of Tariff) Regulations, 2019, states that:

**"(2)** Return on equity shall be computed at the base rate of 15.50% for thermal generating station, transmission system including communication system and run-of river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run-of river generating station with pondage:

#### ......" (Emphasis supplied)

Accordingly, the Commission has considered a rate of return on equity of 15.50%. The opening equity for FY 2022-23 has been considered equal to the closing equity approved in APR of FY 2021-22. The equity component for capitalization during the respective year has been considered as 30% of the approved capitalization.

The following table provides the return on equity approved for each year of the Control Period:

15.50%

8.35

15.50%

9.00

Return on Equity (%)

**Return on Equity** 

5 6

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening Equity	52.95	52.95	54.75
2	Additions on account of new capitalization	-	1.80	6.60
3	Closing Equity	52.95	54.75	61.35
4	Average Equity	52.95	53.85	58.05

15.50%

8.21

Table 55: RoE approved by Commission (INR Crore)

The Commission approves Return on Equity of INR 8.21 Cr, INR 8.35 Cr and INR 9.00 Cr for FY 2022-23, FY 2023-24 & FY 2024-25 respectively.

#### 4.7. Operation & Maintenance Expenses

The Operation & Maintenance Expenses comprise of the Employee Expenses, Administrative and General Expenses (A&G) and the Repair & Maintenance Expenses (R&M). Regulation 42 of the JERC MYT Regulation, 2021 states the following:

#### "42. Operation and Maintenance (O&M) expenses for Transmission Licensees

- 42.1 Operation and Maintenance (O&M) expenses shall comprise of the following:
- a) Employee expenses salaries, wages, pension contribution and other employee costs;
- b) Administrative and General expenses including insurance charges if any; and
- c) Repairs and Maintenance expenses.

42.2 The Transmission Licensee shall submit the required O&M expenses for the Control Period as a part of Multi Year Tariff Petition. O&M expenses for the base Year shall be approved by the Commission taking into account the latest available audited accounts, business plan filed by the transmission Licensee, estimates of the actuals for the base Year, prudence check and any other factors considered appropriate by the Commission.

42.3 O&M expenses for the nth Year of the Control Period shall be approved based on the formula given below:

O&Mn = (R&Mn + EMPn + A&Gn) x (1 - Xn) + Terminal Liabilities

Where,

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

EMPn = (EMPn-1) x (1+Gn) x (CPIinflation)

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

'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;

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

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

*EMPn* – *Employee expenses of the Transmission Licensee for the nth Year;* 

A&Gn – Administrative and General expenses of the Transmission Licensee for the nth Year;

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

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

Xn is an efficiency factor for nth Year. Value of Xn shall be determined by the Commission in the Multi Year Tariff Order based on Licensee's filing, benchmarking, approved cost by the Commission in past and any other factor the Commission feels appropriate;

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, approved cost by the Commission in past and any other factor that the Commission feels appropriate:

42.4 Terminal liabilities of employees of Licensee including pension expenses etc. shall be approved as per actuals submitted by the Licensee, subject to prudence check or be established through actuarial studies. Additionally, any variation due to changes recommended by the pay commission shall be allowed separately by the Commission, subject to prudence check.

42.5 For the purpose of estimation, the same value of factors – CPI inflation and WPI inflation shall be used for all Years of the Control Period. However, the Commission shall consider the actual values of the factors – CPI inflation and WPI inflation during the truing up exercise for the Year for which true up is being carried out and true up the O&M Expenses for that Year, only to the extent of inflation.

....."

The components comprising of the O&M expenses viz. employee expenses, R&M expenses and A&G expenses have been discussed separately below.

#### 4.7.1. Employee Expenses

#### Petitioner's submission

The Petitioner has determined the employee expenses for each year of the control period based on the norms specified in the JERC MYT Regulations, 2021. The projected employee expenses for FY 2021-22 have been taken as base. The average increase in Consumer Price Index (CPI) has been calculated based on the average increase in the Consumer Price Index (CPI) for immediately preceding three years.

The following table provides the employee expenses projected by the petitioner for each year of the control period:

Table 56: Employee Expenses submitted by Petitioner (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
CPI Inflation	6%	6%	6%
<b>Projected Employee Cost</b>	3.06	3.25	3.44

#### Commission's Analysis

The Commission has determined the Employee expenses for each year of the MYT Control Period in accordance with the MYT Regulations, 2021. The Regulation 6 of the MYT Regulations, 2021 stipulates the following:

#### "6. Values for Base Year

6.1 The values for the Base Year of the Control Period shall be determined on the basis of the audited accounts or provisional accounts of last three (3) Years, and other factors considered relevant by the Commission:

Provided that, in absence of availability of audited accounts or provisional accounts of last three (3) Years, the Commission may benchmark the parameters with other similar utilities to establish the values for Base Year:

Provided, further that the Commission may change the values for Base Year and consequently the trajectory of parameters for Control Period, considering the actual figures from audited accounts."

In order to estimate the employee expenses for FY 2021-22, the approved employee expenses in true-up for FY 2020-21 has been escalated by average CPI inflation. Further, the Commission has computed the average of net employee expenses for FY 2018-19, FY 2019-20 and FY 2020-21 to arrive at the net employee expenses of Rs. 3.71 Crore for the median year FY 2019-20. Thereafter, the net employee expenses, thus, arrived for the median year have been escalated by the CPI inflation of the corresponding years – 5.35% for FY 2020-21 and 6.00% for FY 2021-22 to arrive at the net employee expenses for the base year, FY 2021-22. The resultant employee expenses have been escalated by CPI Inflation to arrive upon the employee expenses of each year of the Control Period. The growth factor for the Control Period has been considered zero as the Petitioner has submitted that it has no plans for recruitment of new employees.

The average CPI inflation is average of increase in CPI Index for last three available fiscal years (For FY 2018-19 to FY 2020-21).

The CPI Inflation has been computed as follows:

Table 57: Computation of CPI Inflation (%)

FY	Average of (Apr- Mar)	Increase in CPI Index	Average increase in CPI indices over 3 years
2018-19	299.92	5.45%	
2019-20	322.50	7.53%	
2020-21	338.69	5.02%	
		CPI Inflation	6.00%

Accordingly, the employee expenses approved by the Commission in the MYT Control Period have been provided in the following table:

Table 58: Employee Expenses approved by Commission (INR Crore)

Sr. No	Particulars	Average of preceding 3 years	Total expenses for base year	FY 2022-23	FY 2023-24	FY 2024-25
1	Employee Expenses	3.71		4.14	4.39	4.65
9	Growth in number of employees (Gn)			0.00%	0.00%	0.00%
1 9	CPI Inflation for preceding three years (CPI)		6.00%	6.00%	6.00%	6.00%
4	Employee Expenses	3.71	4.07	4.39	4.65	4.93

The Commission approves Employee Expenses of INR 4.39 Cr, INR 4.65 Cr and INR 4.93 Cr for FY 2022-23, FY 2023-24 & FY 2024-25 respectively.

#### 4.7.2. Administrative and General (A&G) Expenses

#### Petitioner's submission

The Petitioner has determined the A&G expenses for each year of the Control Period based on the norms specified in the JERC MYT Regulations, 2021. The A&G expenses for FY 2021-22 have been taken as base. The average increase in Consumer Price Index (CPI) has been considered same while projecting the employee expenses.

Following table provides the A&G expenses projected for each year of the Control Period along with various parameters considered.

Table 59: A&G submitted by Petitioner (INR Crore)

Particulars	FY 2022-23	FY 2023-24	FY 2024-25	
CPI Inflation	6%	6%	6%	
Projected A&G expenses	1.78	1.89	2.00	

#### **Commission's Analysis**

Similar to the methodology followed while estimating the employee expenses, the approved A&G expenses in true-up for FY 2020-21 has been escalated by average CPI inflation to estimate the A&G expenses for FY 2021-22. The Commission has determined the A&G expenses for the median year of FY 2019-20 after taking the average of actual A&G expenses of FY 2018-19, FY 2019-20 and FY 2020-21. The resultant A&G expenses have been escalated by CPI Inflation of the corresponding years – 5.35% for FY 2020-21 and 6.00% for FY 2021-22 to arrive upon the A&G expenses for the base year. Thereafter, the A&G expenses are escalated by CPI Inflation to determine the A&G expenses for each year of the Control Period. Hence, the Commission has determined the A&G expenses for control period by escalating approved A&G expenses for FY 2021-22 by average CPI inflation increase for last three available fiscal years.

The following table provides A&G expenses approved by the Commission for each year of the control period:

Table 60: A&G Expenses approved by Commission (INR Crore)

Sr. No	Particulars	Average of preceding 3 years	Base Year	FY 2022-23	FY 2023-24	FY 2024-25
1	A&G Expenses	1.70		1.90	2.01	2.14
2	CPI Inflation		6.00%	6.00%	6.00%	6.00%
3	A&G Expenses	1.70	1.87	2.01	2.14	2.26

The Commission approves the Administrative & General (A&G) expenses of INR 2.01 Cr, INR 2.14 Cr and INR 2.26 Cr for FY 2022-23, FY 2023-24 & FY 2024-25 respectively.

#### 4.7.3. Repair & Maintenance Expenses (R&M)

#### Petitioner's submission

The Petitioner has determined the R&M expenses for each year of the Control Period by escalating R&M expenses for FY 2021-22 with average increase in Wholesale Price Index (WPI) for FY 2018-19, FY 2019-20 & FY 2020-21.

The following table provides the R&M expenses proposed for each year of the Control Period along with various parameters considered for its computation.

*Table 61: R&M expenses submitted by Petitioner (INR Crore)* 

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
WPI Inflation	2.42%	2.42%	2.42%

Particulars	FY 2022-23	FY 2023-24	FY 2024-25
Projected R&M expenses	2.12	2.16	2.25

#### Commission's Analysis

The 'K' factor has been determined as the average of ratio of R&M expenses to opening GFA for FY 2018-19, FY 2019-20 & FY 2020-21 as per audited accounts, average for three years. The 'K' factor has been computed as follows:

The following table provides the R&M expenses approved for each year of the Control Period

Table 62: Computation of 'K' factor for the MYT Control Period (INR Crore)

Sr. No.	Particulars	FY 2018-19	FY 2019-20	FY 2020-21
1	R&M Expenses	2.42	2.60	1.93
2	Opening GFA	229.72	229.80	296.18
3	K Factor	1.05%	1.13%	0.65%
4	K Factor Approved by the Commission (Average of 3 years)			0.95%

The 'K' factor is kept constant for all the years and multiplied with the GFA approved for (n-1)th year. The resultant amount is then escalated by WPI Inflation to arrive upon the R&M Expenses for each year of the Control Period.

The WPI Inflation has been computed as follows:

Table 63: Computation of WPI Inflation (%)

FY	Average of (Apr-Mar)	Increase in WPI Index	Average increase in WPI indices over 3 years
2018-19	119.79	4.28%	
2019-20	121.80	1.68%	
2020-21	123.38	1.29%	
		WPI Inflation	2.42%

The following table provides R&M expenses approved by the Commission for each year of the Control Period:

Table 64: R&M Expenses approved by Commission (INR Crore)

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Opening GFA (GFAn-1)	296.18	296.18	302.18
2	K factor approved (K)	0.95%	0.95%	0.95%
3	WPI Inflation	2.42%	2.42%	2.42%
1 1	R&M Expenses = K x (GFA n-1) x (1+WPIinflation)	2.87	2.87	2.93

The Commission approves the Repair & Maintenance (R&M) expenses of INR 2.87 Cr, INR 2.87 Cr and INR 2.93 Cr for FY 2022-23, FY 2023-24 & FY 2024-25 respectively.

#### 4.7.4. Total Operation and Maintenance Expenses (O&M)

The following table provides the total O&M expenses approved by the Commission for each year of the Control Period:

Table 65: O&M Expenses approved by Commission (INR Crore)

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Employee Expenses	4.39	4.65	4.93
2	Administrative & General Expenses (A&G)	2.01	2.14	2.26
3	Repair & Maintenance Expenses	2.87	2.87	2.93
4	Total Operation & Maintenance Expenses	<b>9.2</b> 7	9.65	10.12

The Commission approves Operation & Maintenance (O&M) expenses of INR 9.27 Cr, INR 9.65 Cr and INR 10.12 Cr for FY 2022-23, FY 2023-24 & FY 2024-25 respectively.

#### 4.8. Interest on Working Capital

#### Petitioner's submission

The Petitioner has calculated interest on working capital based on the principles outlined in the JERC MYT Regulations, 2021, by considering the below parameters (as in CERC Tariff Regulations, 2019):

- a) Receivables equivalent to 45 days of annual fixed cost;
- b) Maintenance spares @15% of operation and maintenance expenses including security expenses;
- c) Operation and maintenance expenses including security expenses for one month

The Petitioner has considered rate of interest on working capital as 9% for the MYT Control Period

The following table provides the Interest on Working Capital submitted by the petitioner for each year of the control period.

Table 66: Interest on Working Capital submitted by Petitioner (INR Crore)

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Receivables equivalent to 45 days of Annual Fixed Cost	4.05	4.11	4.21
2	Maintenance spares @15% of operation and maintenance expenses	1.05	1.10	1.15
3	Operation and maintenance expenses for month	0.58	0.61	0.64
4	Total Working Capital requirement	5.67	5.81	6.01
5	Interest on Working Capital	0.51	0.52	0.54

#### Commission's Analysis

The Regulation 43 of the JERC MYT Regulations, 2021 stipulates as follows:

#### "43. Norms of Working Capital for Transmission Licensee

"43.1 The Transmission Licensee shall be allowed interest on the estimated level of working capital for the Financial Year computed in accordance with prevalent CERC Tariff Regulations."

Further, Regulation 34 (C) of the CERC (Terms and Conditions of Tariff) Regulations, 2019 specifies:

- (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
  - i. Receivables equivalent to 45 days of annual fixed cost;
  - ii. Maintenance spares @ 15% of operation and maintenance expenses including security expenses
  - iii. Operation and maintenance expenses, including security expenses for one month

The Regulation 32 of the JERC MYT Regulation, 2021 stipulates the following:

"

32.3 The interest on working capital shall be a payable on normative basis notwithstanding that the Licensee has not taken working capital loan from any outside agency or has exceeded the working capital loan based on the normative figures.

32.4 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 1<sup>st</sup> April of the Financial Year in which the Petition is filed plus 200 basis points.

....." (Emphasis supplied)

In accordance with the JERC MYT Regulation, 2021, the Commission has computed the Working Capital for the control period. The interest rate has been considered as 1-year SBI MCLR as on April 1, 2021 (7%) plus 200 basis points.

The following table provides the Interest on Working Capital Approved by the commission for each year of the control period.

Table 67: Interest on Working Capital approved by Commission (INR Crore)

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
4	Receivables equivalent to 45 days of	4.00	4.04	4.40
1	fixed cost	4.29	4.24	4.42
2	Maintenance spares @15% of operation	1.00	1.45	1.50
	and maintenance expenses	1.39	1.45	1.52
0	Operation and maintenance expenses	0.55	0.80	0.84
3	for one month	0.77	0.60	0.64
4	Total Working Capital requirement	6.45	6.49	<b>6.</b> 77
5	Rate of Interest (%)	9.00%	9.00%	9.00%
6	Interest on Working Capital	0.58	0.58	0.61

The Commission approves the Interest on Working Capital of INR 0.58 Cr, INR 0.58 Cr & INR 0.61 Cr for FY 2022-23, FY 2023-24 & FY 2024-25 respectively.

#### 4.9. Non-Tariff Income

#### **Petitioner's submission**

The Petitioner has estimated the non-tariff income for each year of the Control period as shown in the following table:

Table 68: Non-Tariff Income submitted by the Petitioner (INR Crore)

Particular	FY 2022-23	FY 2023-24	FY 2024-25
Non-Tariff Income	0.13	0.13	0.13

#### Commission's Analysis

The Regulation 44 of the JERC MYT Regulations, 2021 stipulates the following:

#### "44. Non-Tariff Income

44.1 The amount of Non-Tariff Income relating to the transmission business as approved by the Commission shall be deducted from the Aggregate Revenue Requirement in determining annual transmission charges of the Transmission Licensee:

Provided that the Transmission Licensee shall submit full details of its forecast of Non-Tariff Income to the Commission along with its application for determination of Aggregate Revenue Requirement.

- 44.2 The Non-Tariff Income shall inter-alia include:
- a) Income from rent of land or buildings;
- b) Income from sale of scrap in excess of the 10% of the salvage value;
- c) Income from statutory investments;
- d) Interest on advances to suppliers/contractors;
- e) Rental from staff quarters;
- *f)* Rental from contractors;
- g) Income from hire charges from contactors and others.
- h) Income from advertisements, etc.;
- i) Miscellaneous receipts like parallel operation charges;
- j) Deferred Income from grant, subsidy, etc., as per Annual Accounts;
- k) Excess found on physical verification;
- l) Interest on investments, fixed and call deposits and bank balances;
- m) Prior period income, etc.:

Provided that the interest/dividend earned from investments made out of Return on Equity corresponding to the Licensed Business of the Transmission Licensee shall not be included in Non-Tariff Income."

The Commission has observed that the petitioner has proposed same Non-Tariff Income as per actuals of FY 2020-21 for each year of the control period. The Commission also approves the same, which shall be trued-up on actual basis at the time of processing of True-Up Petition for the corresponding financial year.

The following table provides the Non-Tariff Income approved by the commission for each year of the control period:

Table 69: Non -tariff Income approved by Commission (INR Crore)

Particular	FY 2022-23	FY 2023-24	FY 2024-25
Non- Tariff Income	0.13	0.13	0.13

The Commission approves Non-Tariff Income of INR 0.13 Cr for each year of the MYT Control Period.

#### 4.10. Aggregate Revenue Requirement (ARR)

#### **Petitioner's submission**

Based on the expenses as detailed above, the Petitioner submitted the net aggregate revenue requirement for each year of control period as shown in the following table:

Table 70: Aggregate Revenue Requirement (ARR) submitted by the Petitioner (INR Crore)

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Depreciation	15.48	15.95	16.53
2	Interest Cost on Long-term Capital Loans	1.67	0.92	0.24
3	Return on Equity	8.35	8.77	9.28
4	O&M Expense	6.97	7.30	7.70
5	Interest on Working Capital Loans	0.51	0.52	0.54
6	Total Revenue Requirement	32.98	33.46	34.28
7	Less: Non-Tariff Income	0.13	0.13	0.13
8	Net Revenue Requirement (Annual Fixed Cost)	32.84	33.33	34.15
9	Add: true-up of previous years	0.73	-	-
10	Net Revenue Requirement	33.57	33.33	34.15

#### **Commission's Analysis**

On the basis of the detailed analysis of the cost parameters of the ARR, as shown above, the net revenue requirement for each year of the control period is approved by the commission as provided in the following table:

*Table 71: Aggregate Revenue Requirement approved by Commission (INR Crore)* 

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
1	Depreciation	15.32	15.48	16.22
2	Interest Cost on Long-term Capital Loans	1.51	0.45	0.00
3	Return on Equity	8.21	8.35	9.00
4	O&M Expense	9.27	9.65	10.12

Sr. No	Particulars	FY 2022-23	FY 2023-24	FY 2024-25
5	Interest on Working Capital Loans	0.58	0.58	0.61
6	Total Revenue Requirement	34.89	34.51	35.94
7	Less: Non-Tariff Income	0.13	0.13	0.13
8	Net Revenue Requirement (Annual Fixed Cost)	34.76	34.38	35.81
9	Add: true-up of previous years	3.96*	-	-
10	Net Revenue Requirement	38.72	34.38	35.81

st Refer APR Section -Table -46 for detailed calculation

The Commission approves net ARR of INR 38.72 Cr, INR 34.38 Cr and INR 35.81 Cr for FY 2022-23, FY 2023-24 and FY 2024-25 respectively.

# 5. Chapter 5: Transmission Tariff for FY 2022-23

#### 5.1. Transmission capacity of system

The transmission system capacity is the contracted capacity made available to the beneficiary during the given period. The present capacity of Kharadpada substation is 509.60 MW and the present capacity of Khadoli substation is 470.40 MW. Further, the capacity of 220/66 KV Vaghchhipa Substation has been added to the network during the FY 2019-20 i.e. 2X160 MVA.

The approved contracted transmission capacity of the system is as under:

Table 72: Transmission Capacity approved by Commission (MW)

Transmission Capacity (MW)	FY 2021-22	FY 2022-23
Transmission Capacity	1,294	1,294

#### 5.2. Tariff Determination

Based upon the projected capacity of the transmission capacity, the tariff determined by the Petitioner is as follows:

Table 73: Transmission Tariff proposed by Petitioner

Tariff Determination	FY 2022-23
Aggregate Revenue Requirement (INR Crore)	33.57
Transmission Capacity (MW)	1,294
Energy Required at periphery (MU)	7,335.94
Long/Medium Term Transmission charges (INR / MW/ Month)	21,624.48
Short Term Open Access Transmission charges (INR /MW/Day)	720.82

#### **Commission's Analysis**

The Regulation 47 of the JERC MYT Regulations, 2021 states that:

#### "47. Sharing of charges for Intra-State Transmission Network

47.1 The Aggregate Revenue Requirement of the Transmission Licensee, as approved by the Commission, shall be shared by all long-term users and medium-term users of the transmission system on a monthly basis in the ratio of their respective Allotted Transmission Capacity to the total Allotted Transmission Capacity, in accordance with the following formula:

 $ATC_n = (Transmission ARR / 12) x (CC_n / SCC)$ 

Where.

 $ATC_n$  = annual transmission charges payable by the nth long-term user or medium-term user of the transmission system;

 $Transmission\ ARR = Aggregate\ Revenue\ Requirement\ of\ the\ Transmission\ Licensee,\ determined\ in\ accordance\ with\ these\ Regulations;$ 

 $CC_n$  = Allotted Transmission Capacity by the  $n^{th}$  long-term user or medium-term user of the transmission sustem:

SCC = sum of Allotted Transmission Capacity by all long-term users and medium-term users of the transmission system:

( Secy JERC)

Provided that the  $ATC_n$  shall be payable on a monthly basis by each long-term user or medium-term user of the transmission system and shall be collected by the State Transmission Utility (STU).

47.2 The short-term Open Access Consumers shall pay transmission charges on INR/MW/day basis determined in accordance with Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017, as amended from time to time.

....."

Further, the Regulation 4.1 of the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017 states that:

#### **4.1 Transmission Charges**

1. An Open Access Consumer using the Intra-State Transmission System, shall pay transmission charges to the State Transmission Utility or the Intra-State Transmission Licensee other than the State Transmission Utility for usage of their system as determined by the Commission in the Tariff Order from time to time: Provided that transmission charges shall be payable on the basis of contracted capacity in case of Long-term and Medium-term Open Access Consumers and on the basis of scheduled load in case of Short-term Open Access Consumers. For Open Access for a part of a Day, the transmission charges shall be payable as under:

- a. Up to six (6) hours in a Day in one (1) block: 1/4th of the charges for Long-term and Medium-term users; b. More than six (6) hours and up to twelve (12) hours in a Day in one (1) block:  $\frac{1}{2}$  of the charges for Long-term and Medium-term users; and
- c. More than twelve (12) hours and upto twenty-four (24) hours in a Day in one (1) block: equal to Long term and Medium-term users"

The Commission has considered the Transmission Capacity of 1,294 MW during FY 2022-23 for the approval of transmission charges for FY 2022-23.

Accordingly, the transmission charges proposed by Petitioner and approved by the Commission for long-term and medium-term consumers and short-term open access consumers for FY 2022-23 is as follows:

Table 74: Transmission Tariff for FY 2022-23

Sr. No	Particular	Petitioner's Proposal	Approved by Commission
1	Aggregate Revenue Requirement (INR Crore)	33.57	38.72
2	Transmission System Capacity (MW)	1,294	1,294
3	Long-term/Medium-term Transmission Charges (INR/MW/month)	21,624.48	24,936.43
4	Short-term open access Transmission Charges (INR/MW/Day)	720.82	819.83

The short-term open access consumers shall pay the charges in accordance with the charges determined above and Regulation 4.1 of the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Connectivity and Open Access in Intra-State Transmission and Distribution) Regulations, 2017 as amended from time to time.

(Secy, JERC)

# 6. Chapter 6: Directives

This Chapter deals with the Petitioner's compliance with the Commission's directives and Commission's views thereon as well as the summary of new directives for compliance and implementation by the Electricity Department, Transmission Division, Dadra and Nagar Haveli.

#### **Directive 1: Functioning of SLDC**

## Originally issued in Tariff Order dated March 30, 2015 and carried forward to the Tariff Order dated May 20, 2019

The Commission in Tariff Order dated May 20, 2019 as regard to this Directive observed as follows:

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

Hence, the Commission takes a serious note of non-compliance and reiterates its directions with the following points:

- To establish an independent SLDC for DNH.
- To segregate the accounts of SLDC business and transmission business.
- To file separate ARR Petitions for SLDC and transmission business compulsorily from FY 2019-20 onwards.

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

#### **Submission of the Petitioner in the Tariff Petition for FY 2020-21:**

The ED-DNH would like to submit that the functioning of the SLDC has already been transferred to Electricity Department, Transmission Division vide. Order No. DNHPDCL/11/2012/565 dated 05.03.2019.

#### Commission's Directive in the Tariff Order dated May 18, 2020:

The Commission has noted that Petitioner has transferred functioning of SLDC to Electricity Department, Transmission Division vide order no. DNHPDCL/11/2012/565 dated 05.03.2019. However, the Petitioner has not yet complied to two specific directives which are as follows:

- To segregate the accounts of SLDC business and transmission business.
- To file separate ARR Petitions for SLDC and transmission business compulsorily from FY 2019-20 onwards.

*Hence, the Commission reiterates its directions with the following points:* 

- To segregate the accounts of SLDC business and transmission business.
- To file separate ARR Petitions for SLDC and transmission business compulsorily from FY 2021-22 onwards.

#### Submission of the Petitioner in the Tariff Petition for FY 2021-22:

The ED-DNH submits that the Department is in the process of segregating the accounts of SLDC.

#### Commission's Directive in the Tariff Order dated March 23, 2021:

The Commission has noted that Petitioner is still in the process of segregating the accounts of SLDC. Hence, the Commission reiterates its directions to segregate the accounts of SLDC business and transmission business.

#### **Petitioner's Submission in present Tariff Petition:**

The ED-DNH would like to submit that presently the UT of Dadra and Nagar Haveli and UT of Daman and Diu have merged into a single UT. The Competent Authority is yet to decide the location of the SLDC and other

related matters in the merged UT. Hence, the process of segregation of accounts and other matters shall be initiated once decision regarding the SLDC is taken by the Competent Authority.

#### **Commission's direction:**

The Commission reiterates its directions to segregate the accounts of SLDC business and transmission business and directs the petition to confirm the segregation of accounts of SLDC within 60 days from the issuance of this Order. The Commission further directs the petitioner to file separate ARR Petition for SLDC and transmission business separately while filing tariff petition for FY 2023-24.

#### New Directive: Intra State Load Flow Study

#### **Commission's direction:**

The Commission directs the Petitioner to conduct a fresh Intra State Load Flow Study to assess if there is any further need for 220 kV network augmentation and submit a compliance report for Commission's consideration along with ARR and Tariff petition for FY 2023-24.

#### **Energy Audit**

#### **Commission's direction:**

The Commission directs the Petitioner to conduct the Energy Audit of DNH-T to assess the actual transmission losses in DNH-T system and submit the report as part of ARR and Tariff petition for FY 2023-24.

\*\*\*\*\*\*\*

### Annexures

#### Annexure I: List of persons attended Virtual Public Hearing

The following is the list of the participants who have attended the Virtual Public Hearing on 02 February, 2022.

Table 75: List of participants in Public Hearing

S. No.	Name of Stakeholder	Designation
1	Shri Chandrakant M. Parekh	President FIA, Silvassa
2	Shri P. K. Jadia	Executive Secretary, FIA, Silvassa