TARIFF ORDER

True-up of FY 2021-22, Annual Performance Review of FY 2022-23, Aggregate Revenue Requirements (ARR) for FY 2023-24

Petition No. 92/2022

For

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

30th March 2023

JOINT ELECTRICITY REGULATORY COMMISSION
For the State of Goa and Union Territories,
3rd and 4th Floor, Plot No. 55-56,
Sector -18, Udyog Vihar - Phase IV
Gurugram, (122015) Haryana
Telephone: +91(124) 4684705 Telefax: +91(124) 4684706
Website: www.jercuts.gov.in
E-mail: secy.jercuts@gov.in

Table of Contents

List of Tables

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
HT	High Tension
JERC	Joint Electricity Regulatory Commission for the state of Goa and Union Territories
LT	Low Tension
MYT	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. 92/2022

In the matter of

Approval for the True-up of FY 2021-22, Annual Performance Review of FY 2022-23, Aggregate Revenue Requirements (ARR) for FY 2023-24 and Transmission Tariff for FY 2023-24.

And in the matter of
Electricity Department, Transmission Division, UT of Dadra and Nagar Haveli.................................**Petitioner**

ORDER

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 and Daman and Diu" or "The Licensee") for approval of True-up of FY 2021-22, Annual Performance Review of FY 2022-23, Aggregate Revenue Requirements (ARR) for FY 2023-24 and Transmission Tariff for FY 2023-24 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 26th December, 2022. 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. The Commission had decided to conduct the Public Hearing virtually which was held on 02nd March 2023, 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 2021-22, Annual Performance Review of FY 2022-23, Aggregate Revenue Requirements (ARR) for FY 2023-24 along with the Transmission Tariff for FY 2023-24.

4. A Summary has been provided as follows:

(i) The Commission while truing up of FY 2020-21 in Tariff Order dated 31st March, 2022 had determined the cumulative revenue gap of INR 20.79 Crore at the end of FY 2020-21.

(ii) Now, the Commission in this Order has Trued Up for FY 2021-22 and has approved Annual Revenue Requirement of INR 34.36 Crore vis-à-vis net revenue of INR 30.47 Crore (after adjustment of Previous Year Cumulative Revenue Gap of Rs. 20.79 Crore of FY 2020-21), resulting in revenue gap of INR 3.88 Crore for FY 2021-22.

(iii) Further, for FY 2022-23, the Commission has approved revised Annual Revenue Requirement of INR 32.81 Crore and projected revenue of INR 38.72 Crore at existing tariff, which has resulted in standalone revenue surplus of

Secretary (I/c), JERC
(For Goa and UTs)

INR 5.91 Crore. Thus, the cumulative revenue gap/surplus remaining at the end of FY 2022-23 is shown in the following table:

Table 1: Cumulative Revenue Gap/ (Surplus) at end of FY 2022-23 (INR Crore)

Sr. No	Particular	Formula	FY 2021-22	FY 2022-23
A	Opening gap		-	4.04
B	Addition		3.88	(5.91)
C	Closing gap	C = A+B	3.88	(1.87)
D	Average gap	D = (A+C)/2	1.94	1.09
E	Interest rate		8.00%	8.00%
F	Carrying Cost	F = (D*E)/100	0.16	0.09
G	**Total gap/(Surplus) including carrying cost**	**G = C+F**	**4.04**	**(1.78)**

(iv) The cumulative revenue surplus of INR 1.78 Crore at the end of FY 2022-23 has been amortised by the Commission in FY 2023-24.. The Aggregate Revenue Requirement as submitted by the Petitioner and approved by the Commission for FY 2023-24 is as follows:

Table 2: Aggregate Revenue Requirement for FY 2023-24 (INR Crore)

Sr. No	Particulars	Petitioner's submission	Approved by Commission
1	**Annual Revenue Requirement**	32.16	32.01
2	Add: Surplus of previous years including carrying cost	(2.52)	(1.78)
3	**Net Revenue Requirement**	**29.64**	**30.23**

(v) Considering the Aggregate Revenue Requirement for FY 2023-24 and the transmission capacity, the transmission charges have been approved in "*Chapter 5: Transmission Tariff for FY 2023-24*" of this Order for long-term/medium-term consumers and short-term open access consumers as shown below:

Table 3: Transmission Tariff for FY 2023-24

Sr. No	Particulars	Formula	FY 2023-24
A	Aggregate Revenue Requirement (INR Crore)		30.23
B	Transmission System Capacity (MW)		1,294
C	Energy Required at Periphery (MU)		6,841.52
D	**Long-term/Medium-term Transmission Charges (INR/MW/month)**	**C = ((A/B)/12)*10^7**	19,476.39
E	**Short-term open access Transmission Charges (INR/MW/Day)**	**D = ((A/B)/365)*10^7**	640.32
F	**Transmission Charges (Rs./kWh)**	**F = ((A/C)*10)**	0.04

(vi) 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 (I/c), JERC
(For Goa and UTs)

5. This Order shall come into effect from 1st April, 2023 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: 30th March 2023

Certified Copy

(S.D. Sharma)
Secretary (I/c), JERC

1. Chapter 1: Introduction

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

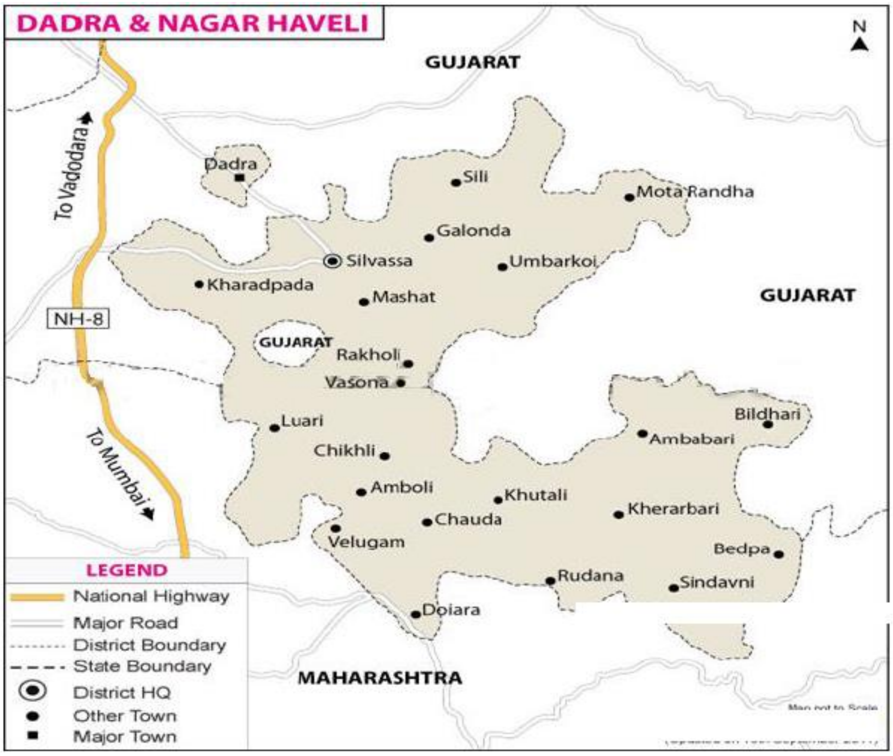
In exercise of powers conferred by the Electricity Act 2003, the Central Government constituted a Joint Electricity Regulatory Commission for all the Union Territories except Delhi to be known as the "Joint Electricity Regulatory Commission for the Union Territories" vide notification no. 23/52/2003-R&R 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, 97% of total sales are to HT and LT industrial consumers. The peak demand of this territory is expected to reach around 776 MW (By March 2023). 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 4: Transmission System 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	03 Nos	--
5	**Total Capacity (220kV Level)**		**1,320 MVA**

1.4. JERC (Terms and Conditions for Determination of Tariff) Regulations 2009 & 2014

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 was 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 was 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).

1.5. Multi Year Tariff Regulations, 2018

The Commission notified the Joint Electricity Regulatory Commission for the State of Goa and Union Territories (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2018 on August 10, 2018. These Regulations were applicable for 3rd Control Period for a period of Three Years from April 1, 2019 to March 31, 2022. 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.

1.6. 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 3rd 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 3rd Control Period.

1.7. Approval of Business Plan and ARR 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.

Further, 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 3rd MYT Control Period (FY 2022-23 to FY 2024-25) and Transmission Tariff for FY 2022-23 on 30th November, 2021. The Commission has issued the MYT Order for the 3rd MYT Control Period (hereinafter referred to as 'MYT Order') on 31 March, 2022.

1.8. Filing and Admission of the Present Petition

In accordance with the Regulation 9.1 of the JERC MYT Regulations, 2018 the Petitioner filed the Petition for approval of True-up of FY 2021-22 vide letter No. DNH/ELE/TRANS/JERC/2019/22/349 dated 05th December, 2022.

In accordance with the Regulation 9.1 of the JERC MYT Regulations, 2021 the Petitioner filed the Petition for approval of Annual Performance Review for FY 2022-23, Aggregate Revenue Requirements (ARR) for FY 2023-24 and Transmission Tariff for FY 2023-24 vide letter No. DNH/ELE/TRANS/JERC/2019/22/349 dated 05th December, 2022.

After initial scrutiny/analysis, the present Petition was admitted on 26th December 2022 and marked as Petition No. 92/2022.

1.9. 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 5: List of Interactions with the Petitioner

Sr. No	Subject	Date
1	Admission of the Petition by the Commission	26th December, 2022
2	First Deficiency Note issued by the Commission	08th February, 2023
3	Replies to Deficiency Note received by the Commission	22nd February, 2023
4	Issuance of Second Deficiency Note	27th February, 2023
5	Technical Validation Session (TVS) with Petitioner at JERC Office	13th March,2023
6	Issuance of Third Deficiency Note post TVS	14th March,2023
7	Reply received from Petitioner to Third Deficiency Note and to queries raised during TVS	16th March, 2023

1.10. 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 6: Details of Public Notices published by the Petitioner

Sr. No.	Date	Name of Newspaper	Place of Circulation
1	20th January, 2023	Daman Ganga Times (Gujarati)	Dadra & Nagar Haveli
2	20th January, 2023	Nishpaksha Janasansar (Hindi)	Dadra & Nagar Haveli

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 02nd March, 2023.

Table 7: Details of Public Notices published by the Commission

Sr. No.	Date	Name of Newspaper	Place of Circulation
1	8th February, 2023/ 28th February, 2023	Indian Express (English)	Ahmedabad, Vodadara
2	8th February, 2023/ 28th February, 2023	Nishpaksha Janasansar (Hindi)	Dadra & Nagar Haveli
3	8th February, 2023/ 28th February, 2023	Gujarat Samachar (Gujarati)	Surat
4	8th February, 2023/ 28th February, 2023	Samna Times (Hindi)	Dadra & Nagar Haveli

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

1.11. Public Hearing

The Commission 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 02nd March, 2023 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 2021-22

2.1. Background

The Commission had issued the Order on determination of transmission tariff for FY 2021-22 on March 23, 2021 (hereinafter referred to as the "ARR Order" for the purpose of truing- Up of FY 2019-20). Further, the Order on true-up of FY 2020-21, Annual Performance Review of FY 2021-22 and Approval of Aggregate Revenue Requirements (ARR) for 3rd MYT Control Period (FY2022-23 to FY 2024-25) and Determination of Transmission Tariff for FY 2022-23 for Electricity Department, Dadra and Nagar Haveli (Transmission Division) was issued by the Commission on March 31, 2022 (hereinafter referred to as the "APR Order" for the purpose of Truing-Up of FY 2021-22).

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 2021-22 as per JERC (Generation, Transmission & Distribution Multi Year Tariff) Regulations, 2018.

2.2. Approach for the True-Up of FY 2021-22

The Petitioner has submitted the audited accounts for FY 2021-22, audited by M/s JVPG & Associates. The Commission in this Chapter now carries out the true-up of FY 2021-22 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 2021-22:

Table 8: 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	300.55	296.19	296.18
2	Addition during the year	3.00	0.00	1.80
3	Closing GFA	303.55	296.19	297.97

Commission's Analysis

The opening gross fixed assets for FY 2021-22 has been considered same as the closing gross fixed assets as per the True-Up of FY 2020-21. The asset addition in the year was also verified from the Fixed Asset Register for FY 2021-22 and annual audited accounts as submitted by the Petitioner.

Further, while scrutinizing the Capitalization claimed by the Petitioner it was observed that out the total capitalization of Rs. 1.80 Crore claimed during FY 2021-22, capitalization of Rs. 1.24 Crore (Rs. 0.86 Crore towards replacement of Relays and Providing NIFPS at 220/66 kV Kharadapda Sub-station and Rs. 0.39 Crore towards Oil Purchase for 100 MVA Old Transformer) pertains to ***"Upgradation and Modernization of existing 220/66 kV Kharadpada Sub-Station by replacing existing circuit breakers and providing SCADA system"*** wherein Commission has allowed the Capitalization of Rs. 15.75 Crore for FY 2021-22 in the Business Plan Order dated 16th November, 2018. However, during the proceedings of Business Plan Petition for 3rd Control Period, the Petitioner has submitted that the previous proposed scheme approved by Commission in previous Business Plan has not been executed due to some Administrative and Technical issues and only urgent works had been executed out by department in which new 220 kV Circuit Breakers has been installed in place of old ones. Accordingly, Commission in its Order dated March 31, 2022 has approved the Scheme for 3rd Control Period with Capitalization of Rs. 6.00 Crore during FY 2023-24. In this regard, the Commission during the Technical Validation Session held on 13th March, 2023 discussed this issue in detail with DNH-T. DNH-T during the TVS, submitted that although the scheme could not be taken up by DNH-T as envisaged during 2nd Control Period but the Hon'ble Commission is requested to kindly approve the minor works taken up under the said scheme during FY 2021-22 without any disallowance as the said works were taken up on urgent basis during FY 2021-22 which will help in the upkeep of the Transmission network of DNH-T.

During the scrutiny of Asset Addition claimed for FY 2021-22, it was also observed by the Commission that the Petitioner has claimed the Capitalization of Rs. 0.39 Crore towards Oil Purchase for 100 MVA Old Transformer during FY 2021-22. The oil purchase of old transformer is not a capital expenditure as it is a nature of Repairs & Maintenance expenses. During the Technical Validation Session (TVS) held on 13th March, 2023 DNH-T agreed that the same is nature of R&M expenses and the accounting adjustment with regard to reversal of the expense capitalized during FY 2021-22 in the Annual Accounts shall be made during FY 2022-23. Accordingly, the Commission has not considered an amount of Rs 0.39 Crore towards Oil Purchase towards capitalisation during FY 2021-22 and has been considered the same as a part of Actual R&M Expenses during FY 2021-22.

The Commission observes that the Petitioner has claimed the Capitalization towards ***"Upgradation and Modernization of existing 220/66 kV Kharadpada Sub-Station by replacing existing circuit breakers and providing SCADA system"*** during FY 2021-22. The Commission further observes that the capitalization achieved against the approved capitalization for the said scheme is substantially lower than the capitalization approved by the Commission. Further, the Commission has observed that Petitioner has not informed the Commission regarding the execution and completion of the schemes undertaken by it in the existing Control Period on a quarterly basis. The Commission is of the opinion that if the Petitioner consistently fails to meet the approved capital expenditure and capitalisation during each quarter or if the Petitioner fails to provide the above reports on time, the Commission would be constrained to reduce the approved capital expenditure and capitalisation. Further, the Commission observed that the Petitioner has submitted that although the scheme couldn't be taken up by DNH-T as was proposed during 2nd Control Period and DNH-T subsequently requested the Commission to approve the scheme for 3rd Period, however, DNH-T has to take up certain urgent works under the said scheme during FY 2021-22 to ensure the upkeep of Transmission Network of DNH-T. The Commission has noted the submissions of the Petitioner. Keeping in view the Petitioner's continuous efforts to upgrade and modernize its existing Transmission System, the Commission approves the capitalization of Rs. 0.86 Crore claimed during FY 2021-22 towards ***"Upgradation and Modernization of existing 220/66 kV Kharadpada Sub-Station by replacing existing circuit breakers and providing SCADA system"***.

Further the Commission observed that the Petitioner has claimed the capitalization of Rs. 0.55 Crore with regard to "***220/66 Khadoli Sub-Station"***. The Commission observes that the scheme was not approved in the Business Plan for 2nd Control Period. However, keeping in view the Petitioner's continuous efforts to upgrade and modernize its existing Transmission System, the Commission approves the capitalization of Rs. 0.55 Crore claimed during FY 2021-22. The Commission accordingly approves the additional capitalization and gross fixed assets for FY 2021-22 as shown in the following table:

Table 9: Gross Fixed Assets and Capitalisation approved by the Commission for FY 2021-22(INR Crore)

Sr. No	Particulars	Submitted by Petitioner	Trued-up by Commission
1	Opening GFA	296.18	296.18
2	Addition during the year	1.80	1.41
3	**Closing GFA**	**297.97**	**297.59**

The Commission approves Rs 297.59 Crore capitalization in the true-up of FY 2021-22.

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, 2018. Accordingly, the depreciation for the year has been submitted as below:

Table 10: Depreciation details submitted by Petitioner (INR Crore)

Sr. No.	Particulars	Approved (ARR Order)	Approved (APR Order)	Submitted by Petitioner
1	Opening GFA	300.55	296.19	296.18
2	Addition during the year	3.00	0.00	1.80
3	Closing GFA	303.55	296.19	297.97
4	Average GFA	302.05	296.19	297.07
5	**Depreciation**	***15.63***	***15.32***	***15.14***

Commission's Analysis

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

"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."
……….

"30.6 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, 2018 that are applicable for FY 2021-22. 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:

Table 11: Depreciation approved by Commission for FY 2021-22 (INR Crore)

Particulars	Depreciation rate	Opening GFA	Addition	Deletion	Closing GFA	Average	Depreciation
Plant and Machinery	5.28%	288.39	1.41	0.00	289.80	289.10	15.26

Particulars	Depreciation rate	Opening GFA	Addition	Deletion	Closing GFA	Average	Depreciation
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
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%**	**296.18**	**1.41**	**0.00**	**297.59**	**296.89**	**15.36**

The Commission approves depreciation of INR 15.36 Cr in the true-up of FY 2021-22. The Depreciation approved by the Commission is higher than the Depreciation claimed by the Petitioner on account of variation in methodology adopted for working out the Depreciation wherein the Petitioner has considered the Depreciation for FY 2021-22 as per the Books of Accounts instead of working out the Depreciation in accordance with Regulation 30 of JERC (Generation, Transmission & Distribution Multi Year Tariff) Regulations, 2018.

2.5. 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 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. The repayment of loans has been considered equal to the depreciation during FY 2021-22.

Further, the Petitioner has considered the rate of interest of 8.00 % (Using State Bank of India Prime Lending Rate (SBI PLR) as on 01.04.2021). Accordingly, the interest and finance charges submitted by the Petitioner as shown in the table below:

Table 12: Interest and Finance charges submitted by Petitioner (INR Crore)

Sr. No.	Particulars	Approved (ARR Order)	Approved (APR Order)	Submitted by Petitioner
1	Opening Loan	44.80	41.86	41.86
2	Loan for additional Capitalization	2.10	0.00	1.26
3	Loan Repayment	15.63	15.32	15.14
4	Closing Loan	31.27	26.54	27.98
5	**Interest Cost on Avg. Loans**	**3.04**	**2.74**	**2.79**

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 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 INR 0.99 Crore. The repayment of loans has been considered equal to the depreciation approved for FY 2021-22.

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, 2021 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 13: Interest on Loan trued-up by Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Opening Normative Loan	41.86	41.86	41.86
2	Add: Normative Loan During the year	0.00	1.26	0.99
3	Less: Normative Repayment equivalent to Depreciation	15.32	15.14	15.36
4	Closing Normative Loan	26.54	27.98	27.49
5	Average Normative Loan	34.20	34.92	34.68
6	Rate of Interest (%)	8.00%	8.00%	8.00%
7	**Interest on Loan**	**2.74**	**2.79**	**2.77**

The Commission approves the Interest of Loan of INR 2.77 Cr in the true-up of FY 2021-22.

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, 2018. 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 2021-22 as shown in the table below:

Table 14: Return on Equity submitted by Petitioner (INR Crore)

Sr. No.	Particulars	Approved (ARR Order)	Approved (APR Order)	Submitted by Petitioner
1	Opening Equity	54.26	52.95	52.95
2	Addition in Equity on account of new capitalization	0.90	0.00	0.54
3	Closing Equity	55.16	52.95	53.49
4	Average Equity	54.71	52.95	53.22
5	**Return on Equity**	**8.48**	**8.21**	**8.25**

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 2021-22 has been considered same as the closing equity 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 INR 0.42 Crore. 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 15: Return on Equity trued-up by Commission for FY 2021-22 (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	0.00	0.54	0.42
3	Closing Equity	52.95	53.49	53.37
4	Average Equity	52.95	53.22	53.16
5	Rate of RoE	15.50%	15.50%	15.50%
6	**Return on Equity**	**8.21**	**8.25**	**8.24**

The Commission approves Return on Equity of INR 8.24 Cr in the True-Up of FY 2021-22.

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 2.56 Cr against approved expenses of INR 2.89 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 2.89 Crore in the APR Order. The actual employee expenses for FY 2021-22 as per audited accounts is INR 2.56 Crore.

As per the Regulations 41.5 provided above, the Commission has determined the revised normative Employee Expenses for FY 2021-22. The revised number is calculated based on the actual Employee Expenses of FY 2020-21 and actual CPI inflation (5.13 %) & value of G_n (Employee Growth - 0%) for FY 2021-22 with respect to FY 2020-21. The revised normative Employee Expenses determined by the Commission works out to be higher than the actual employee expenses claimed by the Petitioner. However, for the purpose of allowing component wise O&M Expenses, the Commission has considered the lower of total O&M expenses (Total of Employee, A&G and R&M Expenses) out of the Actual Expenses and Revised Normative Expenses. For FY 2021-22, the total Revised Normative O&M Expenses works out to be lower than total Actual O&M Expenses. The details of the Total Actual O&M Expenses and Total Revised Normative O&M Expenses is summarised as under:

Table 16: Details of Total Actual and Normative Revised O&M Expenses approved by Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Actual Expenses for FY 2020-21	CPI Inflation for EE and A&G / WPI Inflation for FY R&M for FY 2021-22	Revised Normative Expenses for FY 2021-22	Actual Expenses for FY 2021-22
1	**Employee Expenses (EE)**	2.73	5.13%	2.87	2.56
2	**A&G Expenses (A&G)**	1.07	5.13%	1.12	1.14
3	**Repair & Maintenance (R&M)**	1.90	13.00%	3.61	3.90
Total O&M Expenses		5.72	-	7.60	7.60

Accordingly, Commission approves the Revised Employee Expenses for FY 2021-22.

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 trued-up by Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Revised Normative EE	Trued-up by Commission
1	**Employee Expenses (EE)**	2.89	2.56	2.87	2.87

The Commission approves Employee Expenses of INR 2.87 Cr in the True-up of FY 2021-22.

2.7.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted the actual A&G expenses of INR 2.61 Cr as against the approved expenses of INR 3.28 Crore 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 2021-22.

The Commission observed that the Petitioner has included AMC expenses of SLDC (Amounting to INR 0.90 Cr) in the A&G expenses. The Commission in the APR Order, while carrying out the truing up for FY 2020-21, 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.

Based on the methodology adopted by the Commission in approving the Employee Expenses for FY 2021-22 in the previous section, 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 trued-up by Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Petitioner's Submission after Adjustment	Revised Normative A&G	Trued-up by Commission
1	**Administration & General Expenses**	*1.13*	*2.05*	*1.14**	1.12	*1.12*

** After Adjustment of SLDC AMC Expense of Rs. 0.90 from A&G Expense of Rs. 2.05 Crore claimed by the Petitioner*

The Commission approves the Administrative & General (A&G) expenses of INR 1.12 Cr in the True-up of FY 2021-22.

2.7.3. Repair & Maintenance (R&M) Expenses

Petitioner's submission

The Petitioner has submitted the actual R&M expenses of INR 2.61 Cr as against the approved expenses of INR 3.28 Cr in the APR Order.

Commission's Analysis

The expenses of SLDC AMC (INR 0.90 Cr) have been considered as a part of actual R&M expenses by the Commission instead of A&G expenses. Further, capitalization of Rs. 0.39 Crore towards Oil Purchase for 100 MVA Old Transformer during FY 2021-22 being an R&M activity has been considered as a part of Actual R&M Expense during FY 2021-22.

For working out the 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%. Similar to the methodology followed for approving the Employee Expenses and the A&G Expenses, the Commission approves the R&M expenses for FY 2021-22.

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 trued-up by Commission for FY 2021-22(INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Petitioner's Submission after Adjustment	Revised Normative R&M	Trued-up by Commission
1	Repair & Maintenance Expenses (R&M)	3.28	2.61	3.90*	3.61	3.61
2	AMC of SLDC	-	-	-		0.00
3	**Total Repair & Maintenance Expenses (R&M)**	**3.28**	**2.61**	**3.90***	**3.61**	**3.61**

** After considering SLDC AMC Expense of Rs. 0.90 and Oil Purchase of Rs. 0.39 Crore as a part of R&M Expense in addition to Actual R&M Expense of Rs. 2.61 Crore claimed by the Petitioner*

The Commission approves the Repair & Maintenance (R&M) expenses of INR 3.61 Cr in the True-Up of FY 2021-22.

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

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 trued-up by Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Petitioner's Submission after Adjustment	Revised Normative O&M Expenses	Trued-up by Commission
1	Employee Expenses	2.89	2.56	2.56	2.87	2.87
2	Administrative & General Expenses (A&G)	1.13	2.05	1.14	1.12	1.12
3	Repair & Maintenance Expenses	3.28	2.61	3.90	3.61	3.61
4	**Total Operation & Maintenance Expenses**	**7.30**	**7.22**	**7.6031**	**7.6017**	**7.6017**

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.

Since, actual O&M Expenses are higher than the Normative Expenses. Hence, the total loss of Rs. 7,317 will be on account of Licensee and the same shall not be passed to the Consumers.

Accordingly, the Commission approves the Operation & Maintenance (O&M) expenses of INR 7.60 Cr in the true-up of FY 2021-22.

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 9.00 % (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	4.75	4.17	4.16
2	Maintenance spares @15% of operation and maintenance expenses	1.62	1.09	1.08
3	Operation and maintenance expenses for one month	0.90	0.61	1.08
4	Total Working Capital requirement	7.27	5.87	5.84
5	**Interest on Working Capital**	**0.71**	**0.53**	**0.53**

Commission's Analysis

Regulation 42.1 of the JERC (Generation, Transmission & Distribution Multi Year Tariff), Regulations, 2018, 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 2021-22. The interest on working capital has been computed considering the interest rate as SBI MCLR on April 1, 2021 plus 200 basis points- 9.00%.

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 trued-up by Commission for FY 2021-22 (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	4.17	4.16	4.24
2	Maintenance spares @15% of operation and maintenance expenses	1.09	1.08	1.14
3	Operation and maintenance expenses for one month	0.61	0.60	0.63
4	Total Working Capital requirement	5.87	5.84	6.01
5	Rate of Interest (%)	9.00	9.00	9.00
6	**Interest on Working Capital**	**0.53**	**0.53**	**0.54**

The Commission approves the Interest on Working Capital as INR 0.54 Cr in the True-Up of FY 2021-22.

2.9. Non-Tariff Income (NTI)

Petitioner's submission

The Petitioner has submitted the Non-Tariff Income of INR 0.13 Crore for FY 2021-22.

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 2021-22, STOA income was INR 0.07 Cr. 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 2021-22, 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 0.08 Cr as Non-Tariff Income for FY 2021-22 as these types of income are in the nature of 'Service charges'/ 'Miscellaneous receipts/income'.

The total Non-Tariff Income *trued-up* by the Commission for FY 2021-22 is INR 0.16 Cr (0.07 + 0.08).

Table 23: Non- Tariff Income trued-up by Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	**Non-tariff income**	**0.13**	**0.16**	**0.16**

The Commission approves Non-Tariff Income of INR 0.16 Cr in the True-up of FY 2021-22.

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 33.77 Cr for approval in the True-up of FY 2021-22.

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 2021-22 as given in the following table:

Table 24: Aggregate Revenue Requirement trued-up by Commission for FY 2021-22 (INR Crore)

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
1	Depreciation	15.32	15.14	15.36
2	Interest on Long-term Loans	2.74	2.79	2.77
3	Return on Equity	8.21	8.25	8.24
4	O&M Expense	7.30	7.22	7.60
5	Interest on Working Capital	0.53	0.53	0.54
6	Sharing of gains on account of controllable factors	-	-	-
7	**Total Revenue Requirement**	**34.09**	**33.93**	**34.51**
8	Less: Non-Tariff Income	0.13	0.16	0.16

Sr. No	Particulars	Approved in APR Order	Petitioner's Submission	Trued-up by Commission
9	**Net Revenue Requirement (Annual Fixed Cost)**	***33.96***	***33.77***	***34.36***

The Commission approves net Aggregate Revenue Requirement of INR 34.36 Cr in the true-up of FY 2021-22. The net ARR approved by the Commission is higher than that claimed by the Petitioner due to variation in Depreciation allowed and O&M Expense allowed.

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

Petitioner's submission

The Petitioner has considered revenue from approved tariff for FY 2021-22 as INR 30.47 Crore after adjustment of Previous Year Gap of Rs. 20.79 Crore from the Revenue of Rs. 51.26 Crore earned for FY 2021-22. Accordingly, the standalone gap/surplus for FY 2021-22 as submitted by the Petitioner is as follows:

Table 25: Revenue Gap/(Surplus) for FY 2021-22 as submitted by Petitioner (INR Crore)

Sr. No	Particulars	Amount
1	Annual Revenue Requirement	33.77
2	Revenue for FY 2021-22	51.26
3	Adjustment of Previous Year Gap	20.79
4	Total Revenue	30.47
5	Revenue Gap/(Surplus)	3.30

<u>Commission's Analysis</u>

The Commission has observed that the revenue recovered by the Petitioner in FY 2021-22 as per the annual accounts was INR 51.26 Cr excluding the non-tariff income. Therefore, the Commission has considered revenue from approved tariff for FY 2021-22 as INR 51.26 Cr. Further, the Commission has adjusted the Cumulative Revenue Gap of Rs, 20.79 Crore upto FY 2020-21 to work out the revenue for FY 2021-21. Accordingly, standalone gap/surplus for FY 2021-22 is shown in the following table:

Table 26: Approved Standalone Revenue Gap/(Surplus) for FY 2021-22 (INR Crore)

Sr. No	Particulars	Amount
1	Annual Revenue Requirement	34.36
2	Revenue for FY 2021-22	51.26
3	Adjustment of Cumulative Revenue Gap upto FY 2020-21	20.79
4	Net Revenue (4 = (2-3))	30.47
5	**Revenue Gap/(Surplus) (5 = (1-4))**	**3.88**

The Commission, in the True-Up of FY 2021-22 approves a standalone gap of INR 3.88 Cr.

3. Chapter 3: Annual Performance Review for FY 2022-23

3.1. Background

The Tariff Order for FY 2022-23 was issued by the Commission on March 31, 2022 approving the True-up of FY 2020-21, Annual Performance Review of FY 2021-22, Aggregate Revenue Requirements (ARR) for 3rd MYT Control Period (FY2022-23 to FY 2024-25) and Determination of Transmission Tariff for FY 2022-23 vis-à-vis the cost parameters approved by the Commission in the ARR Order for FY 2022-23. The Annual Performance Review for FY 2022-23 is to be carried out as per the provisions of the JERC (Generation, Transmission & Distribution Multi Year Tariff), Regulations, 2021.

Regulation 12.1 of the JERC MYT Tariff Regulations, 2021 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 41.2 of the JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021. States as follows:

"41.2 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 41.3 of the JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021:

"The Aggregate Revenue Requirement for a Transmission Licensee shall comprise of the following components:
a) Return on Equity;
b) Depreciation;
c) Interest and Finance Charges on Loan Capital;
d) Interest on Working Capital and deposits from Transmission System Users;
e) Operation and maintenance expenses;
f) Income Tax

Less:

g) 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;
h) Non-Tariff Income;
i) Income from Other Business…"

The Commission has accordingly carried out the Annual Performance Review for FY 2022-23 as per the provisions of JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021.

3.2. Approach for the Review of FY 2022-23

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 (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 and on the basis of the norms approved in the ARR Order dated 31st March, 2022.

3.3. Gross Fixed Assets (GFA) and Capitalisation

Petitioner's submission

The Petitioner has proposed capitalization of Rs 0.83 Crore during FY 2022-23 against nil approved capitalization of INR 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	296.18	297.97
2	Addition during the year	0.00	0.83
3	Closing GFA	296.18	298.80

Commission's Analysis

The Petitioner has claimed capitalization of Rs. 0.83 Crore for FY 2022-23. In this regard, Commission vide Letter dated 08.02.2023 has asked the Petitioner to provide the details of capitalization being sought during FY 2022-23. In response to the query of the Commission, the Petitioner vide Letter dated 22.02.2023 has submitted that the capitalization pertains to following schemes:

- Supply erection, testing and commissioning of HVW & Fire Hydrant system at 220/66 KV kharadpada sub-station – Rs. 0.54 Crore.
- Supply erection, testing and commissioning of 110 Volt DC & 220 Volt DC Battery set at 220/66 KV Kharadapada substation, 220 KV Sayali switching station – Rs. 0.29 Crore.

The Commission vide Letter dated 27th February, 2023 has asked the Petitioner to submit the current status of these schemes in detail including physical progress, financial progress and likely date of capitalization. The Petitioner vide Letter dated 10th March 2023 submitted that implementation of these schemes has started and the schemes will be capitalized during the FY 2022-23. The Petitioner provided the copies of Work Orders for both the schemes.

The Commission observed that the Work Orders for these schemes have been placed in the months of January and February, 2023 and it is unlikely that these schemes will get capitalised in FY 2022-23. The Commission during the Technical Validation Session held on 13th March, 2023 discussed this issue in detail with DNH-T. DNH-T during the TVS, agreed that as work orders for these schemes have been placed recently, these schemes will get capitalised in FY 2023-24.

Based on the submissions of the Petitioner, the Commission has not considered the capitalization of Rs. 0.83 for FY 2022-23 and has shifted the same to FY 2023-24. Accordingly, the Commission approves NIL capitalization for FY 2022-23. The opening GFA for FY 2022-23 has been considered same as the closing GFA approved in True-Up of FY 2021-22. 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 2022-23 (INR Crore)

Sr. No.	Particulars	Approved (ARR Order)	Petitioner's Submission	Now Approved by Commission
1	Opening GFA	296.18	297.97	297.59
2	Addition during the year	0.00	0.83	0.00
3	**Closing GFA**	296.18	298.80	297.59

The Commission approves NIL capitalization for the APR for FY 2022-23.

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	296.18	297.97
2	Addition during the year	0.00	0.83
3	Closing GFA	296.18	298.80
4	Average GFA	296.18	298.39
5	Depreciation	15.32	15.43

Commission's Analysis

As per Regulation 31 of the JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021:

"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, 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.

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.

31.7 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.

31.8 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.

31.9 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, true-up and tariff determination for ensuing Year.

31.10 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 2020-21. 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 2022-23(INR Crore)

Particulars	Depreciation Rate	Opening GFA	Addition	Deletion	Closing GFA	Average	Depreciation
Plant and Machinery	5.28%	289.80	0.00	0.00	289.80	289.80	15.30
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
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%**	**297.59**	**0.00**	**0.00**	**297.59**	**297.59**	**15.39**

The Commission now approves depreciation of INR 15.39 Cr in the APR for FY 2022-23.

3.5. Interest on Loan

Petitioner’s submission

The Petitioner has considered the opening loan balance for FY 2022-23 equal to the closing balance of loan for the 2021-22. The normative loan addition in FY 2022-23 has been computed as 70% of the capitalization for FY 2022-23. The repayment of loan has been considered equal to the depreciation during FY 2022-23.

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	26.54	27.98
2	Loan for additional Capitalization	0.00	0.58
3	Loan Repayment	15.32	15.43
4	Closing Loan	11.22	13.13

Sr. No.	Particulars	Approved (ARR Order)	Petitioner's Submission
5	Interest Cost on Avg. Loans	1.51	1.64

Commission's Analysis

Regulation 29 of the JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 specifies as follows:

*"**29. Interest on Loan***

29.1 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.

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:

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 capitalization 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)***

The opening loan balance for FY 2022-23 has been considered equal to the closing balance of loan approved in True-Up of FY 2021-22. The normative loan addition for FY 2022-23 has been considered as NIL since capitalization approved for FY 2022-23 is NIL. The repayment of loans has been considered equal to the depreciation during FY 2022-23.

The Commission for FY 2022-23 has considered the rate of interest as SBI MCLR plus 100 basis points as on April 1, 2022 i.e., 8.00% (7.00% plus 1.00%) as per the provisions of JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021

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 2022-23 (INR Crore)

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Normative Loan	26.54	27.98	27.49
2	Add: Normative Loan During the year	0.00	0.58	0.00
3	Less: Normative Repayment equivalent to Depreciation	15.32	15.43	15.39
4	Closing Normative Loan	11.22	13.13	12.10
5	**Average Normative Loan**	18.88	20.56	19.80
6	Rate of Interest (%)	8.00%	8.00%	8.00%
7	**Interest on Loan**	**1.51**	**1.64**	**1.58**

The Commission approves Interest on Loan of INR 1.58 Cr in the APR of FY 2022-23.

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 2022-23 as follows:

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

Sr. No.	Particulars	Approved (ARR Order)	Petitioner's Submission
1	Opening Equity	52.95	53.49
2	Addition in Equity on account of new capitalization	0.00	0.25
3	Closing Equity	52.95	53.74
4	Average Equity	**52.95**	**53.61**
5	**Return on Equity**	**8.21**	**8.31**

Commission's Analysis

Regulation 28.1 of the JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 states 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:

……..”

Accordingly, the rate of return on equity for transmission business has been considered as 15.50%. The opening equity for FY 2022-23 has been considered same as the closing equity approved in true-up of FY 2021-22. The normative equity addition in FY 2022-23 has been considered as NIL since capitalization approved for FY 2022-23 is 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 2022-23 (INR Crore)

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Opening Equity	52.95	53.49	53.37
2	Equity Addition	0.00	0.25	0.00
3	Closing Equity	52.95	53.74	53.37
4	Average Equity	52.95	53.61	53.37
5	Rate of RoE	15.50%	15.50%	15.50%
6	**Return on Equity**	**8.21**	**8.31**	**8.27**

The Commission approves the Return on Equity of INR 8.27 Cr in the APR of FY 2022-23.

3.7. Operation & Maintenance Expenses

As per Regulation 42 of the JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021:

“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 x GFAn-1 x (WPIinflation)

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

A&Gn = (A&Gn-1) x (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;

CPIinflation – 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.

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 – 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 2.71 Cr against INR 4.39 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 4.39 Cr in the ARR Order. The Petitioner has submitted revised estimates for FY 2022-23 as INR 2.71 Cr.

To determine the O&M expenses for FY 2022-23, the Commission has considered the following:

Regulation 6 of the JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 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 2021-22 based on the audited accounts, the Commission has considered the trued-up expenses for FY 2021-22 as base expenses and applied the Average Increase in CPI Indices over 3 Years preceding FY 2022-23 for approving the revised trajectory of employee expenses FY 2022-23.

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
2019-20	*322.50*	7.53%	
2020-21	*338.69*	5.02%	
2021-22	*356.06*	5.13%	
		CPI Inflation	**5.89%**

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 2022-23 (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)	4.14	-	2.87
2	Growth in number of employees (Gn)	0.00%	-	0.00%
3	CPI Inflation	6.00	-	5.89%
4	Employee Expenses (EMPn)= (EMPn-1) x (1+Gn) x (1+CPI inflation)	4.39	-	3.04
5	**Total Employee Expenses**	**4.39**	**2.71**	**3.04**

The Commission approves employee expenses of INR 3.04 Cr in the APR of FY 2022-23.

3.7.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has submitted revised estimates for A&G expenses at INR 2.17 Cr against INR 2.01 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 2022-23 by escalating trued- up A&G expenses for FY 2021-22 by average CPI Inflation (For FY 2019-20 to FY 2021-22).

Similar to the methodology followed while estimating the Employee Expenses, the Commission has considered the trued-up A&G expenses for FY 2021-22 as Base Year expenses and escalated the same with Average Increase in CPI Indices over 3 Years preceding FY 2022-23 for approving the revised trajectory of A&G expenses for FY 2022-23.

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 2022-23 (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)	1.90		1.12

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
2	CPI Inflation	6.00%		5.89%
3	**Administration & General Expenses**	**2.01**	**2.17**	**1.19**

The Commission now approves the Administrative & General (A&G) expenses of INR 1.19 Cr in the APR for FY 2022-23.

3.7.3. Repair & Maintenance (R&M) Expenses

Petitioner's submission

The Petitioner has submitted revised estimates for R&M expenses at INR 2.23 Cr against INR 2.87 Cr approved in the ARR Order.

Commission's Analysis

Regulation 42.3 of the JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 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 42.3 of the JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 the Commissions has considered the value of 'K' factor as 0.95% which was approved by the Commission in MYT order dated 31th March 2022.

The 'K' factor multiplied with the GFA approved for opening GFA of the Year. The resultant amount is then escalated by Average Increase in CPI Indices over 3 Years preceding FY 2022-23 to arrive upon the R&M Expenses for FY 2022-23.

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
2019-20	121.80	1.68%	
2020-21	123.38	1.29%	
2021-22	139.41	13.00%	
		WPI Inflation	**5.32%**

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 2022-23 (INR Crore)

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	K factor	0.95%		0.95%
2	GFAn-1 (Opening GFA)	296.18		297.59
3	WPI Inflation (%)	2.42%		5.32%
4	**Repair & Maintenance Expenses**	**2.87**	**2.23**	**2.98**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 2.98 Cr in the APR of FY 2022-23.

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

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 2022-23 (INR Crore)

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Employee Expenses	4.39	2.71	3.04
2	Administrative & General Expenses (A&G)	2.01	2.17	1.19
3	Repair & Maintenance Expenses	2.87	2.23	2.98
4	**Total Operation & Maintenance Expenses**	**9.27**	**7.11**	**7.20**

The Commission approves the Operation & Maintenance (O&M) expenses of INR 7.20 Cr in the APR of FY 2022-23.

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 9.00%.

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	4.29	4.05
2	Maintenance spares @15% of operation and maintenance expenses	1.39	1.07
3	Operation and maintenance expenses for one month	*0.77*	0.59
4	Total Working Capital requirement	6.45	5.71
5	**Interest on Working Capital**	**0.58**	**0.51**

Commission's Analysis

Regulation 43.1 of the JERC (Generation, Transmission and Distribution Multi Year Tariff) Regulations, 2021 states the following with regard to Interest on Working Capital:

"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:

"***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 32 of the JERC (Generation, Transmission & Distribution Multi Year Tariff), Regulations, 2021, states the following with regard to interest rate to be considered in working capital calculation:

"***32. Interest on Working Capital***

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

32.2 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.

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 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 2022-23. The interest on working capital has been computed considering the interest rate as one-year SBI MCLR as on April 1, 2022 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 2022-23 (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	4.29	4.05	4.03
2	Maintenance spares @15% of operation and maintenance expenses	1.39	1.07	1.08
3	Operation and maintenance expenses for one month	0.77	0.59	0.60
4	Total Working Capital requirement	6.45	5.71	5.71
5	Rate of Interest (%)	9.00%	9.00%	9.00%
6	**Interest on Working Capital**	**0.58**	**0.51**	**0.51**

The Commission approves the Interest on Working Capital as INR 0.51 Cr in the APR of FY 2022-23.

3.9. Non-Tariff Income

Petitioner's submission

The Petitioner has submitted the revised estimate of non-tariff income for FY 2022-23 as INR 0.15 Cr against non-tariff income of INR 0.13 Cr approved in the ARR Order.

Commission's analysis

The Commission for FY 2022-23 has approved the Non-Tariff Income as claimed by the Petitioner. 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 2022-23 (INR Crore)

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

The Commission now approves Non-Tariff Income of INR 0.15 Cr in the APR for FY 2022-23.

3.10. Aggregate Revenue Requirement (ARR) for FY 2022-23

Petitioner's submission

Based on the expenses as detailed above, the net aggregate revenue requirement of INR 32.86 Cr is submitted after adjusting the Non -Tariff Income for FY 2022-23.

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 2022-23 are approved as follows:

Table 44: Aggregate Revenue Requirement approved by the Commission for FY 2022-23 (INR Crore)

Sr. No	Particulars	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Depreciation	15.32	15.43	15.39
2	Interest on Long-term Loans	1.51	1.64	1.58
3	Return on Equity	8.21	8.31	8.27
4	O&M Expense	9.27	7.11	7.20
5	Interest on Working Capital	0.58	0.51	0.51
6	**Total Revenue Requirement**	**34.89**	**33.01**	**32.96**
7	Less: Non-Tariff Income	0.13	0.15	0.15
8	Add: True-Up of Previous Year	3.96	-	-
9	**Net Revenue Requirement (Annual Fixed Cost)**	**38.72**	**32.86**	**32.81**

The Commission approves the net ARR of INR 32.81 Cr in the APR of FY 2022-23.

3.11. Standalone Gap/(Surplus) for FY 2022-23

The Commission had approved the net revenue requirement of INR 38.72 Cr in the ARR order of FY 2022-23 including impact of previous years Gap/(Surplus). The Commission has now approved the net revenue requirement of INR 32.81 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 2022-23 (INR Crore)

Sr. No	Particular	Approved in ARR Order	Petitioner's Submission	Now Approved by Commission
1	Net Revenue Requirement	38.72	32.86	32.81
2	Revenue at existing Tariff		38.72	38.72
3	**Standalone Gap/(Surplus)**	**38.72**	**(5.86)**	**(5.91)**

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

The Commission while truing up of FY 2020-21 in Tariff Order dated 31st March 2022 had determined a cumulative revenue gap of INR 20.79 Crores. The Commission in this current year Order has adjusted the recovery of cumulative revenue gap of INR 20.79 Cr at the end of FY 2020-21 from the Revenue collected during FY 2021-22, Further, the Commission has approved Annual Revenue Requirement of INR 34.36 Cr vis-à-vis actual revenue of INR 30.47 Cr, resulting in standalone revenue gap of INR 3.88 Cr for FY 2021-22.

Further, for FY 2022-23, the Commission has approved revised Annual Revenue Requirement of INR 32.81 Cr and projected revenue of INR 38.72 Cr at approved tariff, which resulted in standalone revenue surplus of INR 5.91 Cr. Thus, the cumulative revenue surplus at the end of FY 2022-23 is shown in the following table:

Table 46: Cumulative revenue gap/(surplus) at the end FY 2022-23 (INR Crore)

Sr. No.	Particular	FY 2021-22	FY 2022-23
1	Opening Gap/ (Surplus)	-	4.04
2	Addition in Gap / (Surplus)	3.88	(5.91)
3	Closing Gap / (Surplus)	3.88	(1.87)
4	Average Gap / (Surplus)	1.94	1.09
5	Interest rate	8.00%	8.00%
6	Carrying Cost	0.16	0.09
7	**Total Gap / (Surplus) including carrying cost**	**4.04**	**(1.78)**

The cumulative revenue surplus of INR 1.78 Cr at the end of FY 2022-23 has been amortised by the Commission in FY 2023-24.

4. Chapter 4: Determination of Aggregate Revenue Requirement for FY 2023-24

4.1. Background

In this Chapter, the Commission has determined the Aggregate Revenue Requirement (ARR) for FY 2023-24. 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 FY 2023-24

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 2021-22 as per the audited accounts and the provisional information available for FY 2022-23. The ARR has been determined for FY 2023-24 and further the revenue at existing tariff is determined only for FY 2022-23 to arrive at the revenue gap/(surplus) for FY 2022-23 which has been carried forward to FY 20234-24 as the cumulative revenue gap/(surplus).

4.3. Gross Fixed Assets (GFA) and Capitalisation

Petitioner's submission

The Petitioner has submitted the opening Gross Fixed Assets (GFA) of INR 298.80 Cr for FY 2023-24. Further there was asset addition of INR 2.09 Cr by the Petitioner during the FY 2023-24. Thus, the closing GFA of FY 2023-24 INR 300.89 Cr.

Summary of the GFA and capitalization proposed by the Petitioner for FY 2023-24:

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

Sr. No.	Particulars	Approved in MYT Order	Claimed
1	Opening GFA	296.18	298.80
2	Addition during the year	6.00	2.09
3	Closing GFA	302.18	300.89

<u>Commission's Analysis</u>

The Petitioner has claimed capitalization of Rs. 2.09 Crore for FY 2023-24. In this regard, Commission vide Letter dated 08th February, 2023 has asked the Petitioner to provide the current status of schemes proposed to be capitalized in FY 2023-24 along with physical and financial progress. In response to the Query of the Commission, the Petitioner vide letter dated 22nd February, 2023 has submitted that the work under the schemes proposed to be capitalized in FY 2023-24 is yet to be started.

The Commission vide Letter dated 27th February, 2023 has further asked the Petitioner to submit the DPR's for the schemes if DPR has been prepared for schemes proposed to be capitalized in FY 2023-24. Further, the Petitioner was asked to confirm if tendering has been initiated for any of the schemes proposed to be capitalized in FY 2023-24. The Petitioner was also asked to submit the current status of the schemes in detail along with the total time frame envisaged for execution of the schemes after the Award of the Contract. The Petitioner vide Letter dated 10th March, 2023 submitted the following status of schemes proposed to be capitalized during FY 2023-24:

Sr. No.	Scheme Details	Current Status
1	Augmentation of 220/66KV Vaghchipa sub-station from 2x160MV A to 3x160MVA with associates 220KV bay and 66KV Bay in the UT of DNH and DD	Approval received from CEA. Implementation of the scheme is yet to be commenced
2	Supply erection, testing and commissioning of numerical relay of ABB and Alstom make at Sayali LILO switching station	Work Order for implementation of the scheme has been issued
3	Supply installation testing and commissioning of OPGW 24F cable along with hard ware & accessories for replacement existing earth wire of 220 KV Kala to Khadoli to New Kharadpada sub-station for real time SCADA data availability at SLDC-DNH	Implementation of the scheme is yet to commence

Further, DNH-T during the Technical Validation Session conducted on 13th March, 2023 submitted that the tentative date of completion for the schemes proposed during FY 2023-24 as follows:

Sr. No.	Scheme Details	Expected Date of Completion
1	Augmentation of 220/66KV Vaghchipa sub-station from 2x160MV A to 3x160MVA with associates 220KV bay and 66KV Bay in the UT of DNH and DD	FY 2024-25
2	Supply erection, testing and commissioning of numerical relay of ABB and Alstom make at Sayali LILO switching station	FY 2023-24
3	Supply installation testing and commissioning pof OPGW 24F cable along with hard ware & accessories for replacement existing earth wire of 220 KV Kala to Khadoli to New Kharadpada sub-station for real time SCADA data availability at SLDC-DNH	FY 2024-25

Based on the submissions of the Petitioner and considering the current status of proposed schemes in FY 2023-24, the Commission has considered the capitalization of Rs. 0.45 Crore during FY 2023-24 for Scheme **"Supply erection, testing and commissioning of numerical relay of ABB and Alstom make at Sayali LILO Switching Station".**

Further the Commission observed that the Scheme **"Supply erection, testing and commissioning of numerical relay of ABB and Alstom make at Sayali LILO Switching Station"** was not approved in the Business Plan for 3rd Control Period. However, keeping in view the Petitioner's continuous efforts to upgrade and modernize its existing Transmission System, the Commission has approved the capitalization of Rs. 0.45 Crore during FY 2023-24.

Further as decided in the APR Section above, the Commission has approved the Capitalization of Rs. 0.83 Crore since the schemes proposed during FY 2022-23 are expected to be completed during FY 2023-24.

With regard to Capitalization of Rs. 0.83 Crore proposed during FY 2022-23 and now being allowed during FY 2023-24, the Commission observes that as remarked in the Truing Up section, the Scheme **"Upgradation and Modernization of existing 220 kV Switching Sub-Station New Kharadpada and 220/66 kV Kharadpada Sub-station by providing SCADA system"** was approved for 3rd Control Period with capitalization of Rs. 6.00 Crore approved for FY 2023-24. The Commission observes that the capitalization achieved is quite lower than the approved capitalization. The Commission is of the opinion that if the Petitioner consistently fails to meet the approved capital expenditure and capitalisation during each Financial Year, the Commission would be constrained to reduce the approved capital expenditure and capitalisation.

However, keeping in view the Petitioner's continuous efforts to upgrade and modernize its existing Transmission System, the Commission approves the capitalization of Rs. 0.83 Crore during FY 2023-24 towards ***"Upgradation and Modernization of existing 220/66 kV Kharadpada Sub-Station by replacing existing circuit breakers and providing SCADA system"***.

The Commission will consider the actual capitalization during FY 2023-24 at the time of truing up subject to prudence check Further, the Commission has considered the opening GFA for FY 2023-24 same as the closing GFA approved in APR of FY 2022-23.

The table below provides the details of capitalization and GFA approved by the commission for the FY 2023-24:

Table 48: Gross Fixed Assets and Capitalisation Approved by the commission (INR Crore)

Sr. No.	Particulars	Approved in MYT Order	Claimed	Now Approved by commission
1	Opening GFA	296.18	298.80	297.59
2	Addition during the year	6.00	2.09	1.28
3	Closing GFA	302.18	300.89	298.87

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 for FY 2023-24. Accordingly, the depreciation for the Control period has been submitted as below:

Table 49: Depreciation details submitted by Petitioner (INR Crore)

Sr. No.	Particulars	Approved in MYT Order	Claimed
1	Opening GFA	296.18	298.80
2	Addition during the year	6.00	2.09
3	Closing GFA	302.18	300.89
4	Average GFA	299.18	299.85
5	Depreciation during the year	**15.48**	**15.51**

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.

Further, depreciation for FY 2023-24 has been computed on average Gross Fixed Assets (GFA) after considering the net addition approved for the year.

The following table provides the calculation of depreciation approved by the commission for FY 2023-24:

Table 50: Depreciation approved by Commission (INR Crore)

Sr. No	Particulars	Depreciation Rate	Opening GFA	Addition	Deletion	Closing GFA	Average	Depreciation
1	Plant and Machinery	5.28%	289.90	1.28	0.00	291.08	290.44	15.34
2	Buildings	3.34%	2.42	0.00	0.00	2.42	2.42	0.08
3	Vehicles	9.50%	0.00	0.00	0.00	0.00	0.00	0.00
4	Office Equipment	6.33%	0.16	0.00	0.00	0.16	0.16	0.01
5	Computer and Others	6.33%	0.00	0.00	0.00	0.00	0.00	0.00
6	Land	0.00%	5.21	0.00	0.00	5.21	5.21	0.00
7	Total	**5.16%**	**297.59**	**1.28**	**0.00**	**298.87**	**298.23**	**15.43**

The Commission approves a depreciation of INR 15.43 Cr for FY 2023-24.

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 FY 2023-24.

Table 51: Interest on Loan submitted by the Petitioner (INR Crore)

Sr. No.	Particulars	Approved in MYT Order	Claimed
1	Opening Normative Loan	11.22	13.13
2	Add: Normative Loan during the year (70% of proposed capitalization)	4.20	1.46
3	Less: Normative Repayment	15.48	15.51
4	Closing Normative Loan	-	(0.92)
5	Average Normative Loan	5.61	6.11
6	Rate of Interest	8.00%	8.00%
7	Interest on Normative Loan	**0.45**	**0.49**

<u>Commission's Analysis</u>

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 under the GFA and Capitalization Section, the Commission has considered NIL capitalisation for FY 2023-24 based on the submissions of the Petitioner

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, 2022 plus 100 basis points (8.00%) has been considered for FY 2023-24.

The closing loan balance in APR of FY 2022-23 has been considered as the opening loan balance for FY 2023-24. The normative loan addition for FY 2023-24 has been considered as 70% of the capitalization for FY 2023-24, which works out to be Rs. 0.90 Crore.. 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 2023-24:

Table 52: Interest on loan approved by Commission (INR Crore)

Sr. No.	Particulars	Approved in MYT Order	Claimed	Now Approved by Commission
1	Opening Normative Loan	11.22	13.13	12.10
2	Add: Normative Loan during the year	4.20	1.46	0.90
3	Less: Normative Repayment equal to Depreciation	15.48	15.51	13.00*
4	Closing Normative Loan	-	(0.92)	-

Sr. No.	Particulars	Approved in MYT Order	Claimed	Now Approved by Commission
5	Average Normative Loan	5.61	6.11	6.05
6	Rate of Interest (%)	8.00%	8.00%	8.00%
7	**Interest on Loan**	**0.45**	**0.49**	**0.48**

**Normative Repayment of Rs 13.00 Crore considered equivalent to opening loan as depreciation is higher than the normative loan*

The Commission approves Interest on Loan as INR 0.48 Cr for FY 2023-24 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 2023-24 is considered equivalent to the closing equity for FY 2022-23. 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 2023-24:

Table 53: RoE Proposed by the Petitioner (INR Crore)

Sr. No	Particulars	Approved in MYT Order	Claimed
1	Opening Equity	52.95	53.74
2	Additions on account of new capitalization	1.80	0.63
3	Closing Equity	54.75	54.37
4	Average Equity	53.85	54.05
5	Return on Equity (%)	15.50%	15.50%
6	**Return on Equity**	**8.35**	**8.38**

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 2023-24 has been considered equal to the closing equity approved in APR of FY 2022-23. The equity addition during FY 2023-24 has been considered as 30% of the capitalization for FY 2023-24, which works out to be Rs. 0.38 Crore..

The following table provides the return on equity approved for 2023-24:

Table 54: RoE approved by Commission (INR Crore)

Sr. No	Particulars	Approved in MYT	Claimed	Now approved by Commission
1	Opening Equity	52.95	53.74	53.37
2	Additions on account of new capitalization	1.80	0.63	0.38
3	Closing Equity	54.75	54.37	53.76
4	Average Equity	53.85	54.05	53.57
5	Return on Equity (%)	15.50%	15.50%	15.50%
6	**Return on Equity**	**8.35**	**8.38**	**8.30**

The Commission approves Return on Equity of INR 8.30 Cr for FY 2023-24 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 x GFAn-1 x (WPI inflation)

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

A&Gn = (A&Gn-1) x (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 FY 2023-24 based on the norms specified in the JERC MYT Regulations, 2021. The projected employee expenses for FY 2022-23 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 55: Employee Expenses submitted by Petitioner (INR Crore)

Particulars	FY 2023-24
CPI Inflation	6.18%%
Projected Employee Cost	**2.88**

Commission's Analysis

The Commission has determined the Employee expenses for FY 2023-24 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."

As the Commission in this Order has carried out the truing up for FY 2021-22 based on the audited accounts, the Commission has considered the trued-up expenses for FY 2021-22 as base expenses and applied the Average Increase in CPI Indices over 3 Years preceding FY 2022-23 for approving the revised trajectory of employee expenses FY 2022-23. The resultant employee expenses have been further escalated by CPI Inflation to arrive upon the employee expenses of FY 2023-24. The growth factor for FY 2023-24 has been considered zero as the Petitioner during the proceedings of Tariff Determination for 3rd Control Period has submitted that it has no plans for recruitment of new employees.

The average CPI inflation of 5.89% as determined in the APR Section of this Order has been considered for working out the Employee Expenses for FY 2023-24.

Accordingly, the employee expenses approved by the Commission for FY 2023-24 have been provided in the following table:

Table 56: Employee Expenses approved by Commission (INR Crore)

Sr. No	Particulars	Approved in MYT	Claimed	Now Approved by commission
1	Employee Expenses	4.39	2.71	3.04
2	Growth in number of employees (Gn)	0.00%	0.00%	0.00%
3	CPI Inflation for preceding three years (CPI)	6.00%	6.18%	5.89%
4	**Employee Expenses**	**4.65**	**2.88**	**3.21**

The Commission approves Employee Expenses of INR 3.21 Cr for FY 2023-24.

4.7.2. Administrative and General (A&G) Expenses

Petitioner's submission

The Petitioner has determined the A&G expenses for FY 2023-24 based on the norms specified in the JERC MYT Regulations, 2021. The A&G expenses for FY 2022-23 have been taken as base. The average increase in Consumer Price Index (CPI) has been considered the same as considered 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 57: A&G submitted by Petitioner (INR Crore)

Particulars	FY 2023-24
CPI Inflation	6.18%
Projected A&G Expenses	**2.31**

Commission's Analysis

Similar to the methodology followed while estimating the employee expenses, the approved A&G expenses in true-up for FY 2021-22 has been escalated by average CPI inflation to estimate the A&G expenses for FY 2022-23. The resultant A&G expenses have been further escalated by CPI Inflation to arrive upon the employee expenses of FY 2023-24.

The average CPI inflation of 5.89% as determined in the APR Section of this Order has been considered for working out the A&G Expenses for FY 2023-24.

The following table provides A&G expenses approved by the Commission for FY 2023-24:

Table 58: A&G Expenses approved by Commission (INR Crore)

Sr. No.	Particulars	Approved in MYT Order	Claimed	Now Approved by Commission
1	A&G Expenses	2.01	2.17	1.19
2	CPI Inflation	6.00%	6.18%	5.89%
3	**A&G Expenses**	**2.14**	**2.31**	**1.26**

The Commission approves the Administrative & General (A&G) expenses of INR 1.26 Cr for FY 2023-24.

4.7.3. Repair & Maintenance (R&M) Expenses

Petitioner's submission

The Petitioner has determined the R&M expenses for FY 2023-24 by escalating R&M expenses for FY 2022-23 with Wholesale Price Index (WPI) Inflation.

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 59: R&M expenses submitted by Petitioner (INR Crore)

Particulars	FY 2023-24
K-Factor	0.73%
WPI Inflation	2.42%
Projected R&M expenses	**2.16**

Commission's Analysis

While scrutinizing the submissions made by the Petitioner it was observed that the Petitioner has worked out the K-Factor for FY 2023-24 considering the Average K-Factor of Three Years (i.e. from FY 20219-20 to FY 2021-22). The Commission observes that approach adopted by the Petitioner is incorrect and as per the methodology adopted by the Commission, the K-Factor for working out the R&M Expenses during each year of the Control Period shall be equal to the K-Factor approved by the Commission in the MYT Order for the Control Period. Accordingly, the Commission has considered the 'K' factor of 0.95% as determined for 3rd Control Period vide MYT Order dated 31st March 2022.

The average WPI inflation of 5.32% as determined in the APR Section of this Order has been considered for working out the R&M Expenses for FY 2023-24.

The following table provides the R&M expenses approved for FY 2023-24:

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

Table 60: R&M Expenses approved by Commission (INR Crore)

Sr. No	Particulars	Approved in MYT Order	Claimed	Now Approved by Commission
1	Opening GFA for the Year	296.18	298.80	297.59
2	K factor approved (K)	0.95%	0.73%	0.95%
3	WPI Inflation	2.42%	2.42%	5.32%
4	R&M Expenses = K x (GFA n-1) x (1+WPIinflation)	**2.87**	**2.16**	**2.98**

The Commission approves the Repair & Maintenance (R&M) expenses of INR 2.98 Cr for FY 2023-24.

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

The following table provides the total O&M expenses approved by the Commission for FY 2023-24:

Table 61: O&M Expenses approved by Commission (INR Crore)

Sr. No	Particulars	FY 2023-24
1	Employee Expenses	3.21
2	Administrative & General Expenses (A&G)	1.26
3	Repair & Maintenance Expenses	2.98
4	**Total Operation & Maintenance Expenses**	**7.45**

The Commission approves Operation & Maintenance (O&M) expenses of INR 7.45 Cr for FY 2023-24.

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 FY 2023-24

The following table provides the Interest on Working Capital claimed by the Petitioner for FY 2023-24:

Table 62: Interest on Working Capital submitted by Petitioner (INR Crore)

Sr. No	Particulars	Approved in MYT Order	Claimed
1	Receivables equivalent to 45 days of Annual Fixed Cost	4.24	4.05
2	Maintenance spares @15% of operation and maintenance expenses	1.45	1.05
3	Operation and maintenance expenses for month	0.80	0.58
4	Total Working Capital requirement	6.49	5.67
5	Interest on Working Capital	**0.58**	**0.51**

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 1st 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 FY 2023-24. The interest rate has been considered as 1-year SBI MCLR as on April 1, 2022 (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 63: Interest on Working Capital approved by Commission (INR Crore)

Sr. No	Particulars	Approved in MYT Order	Claimed	Now Approved by Commission
1	Receivables equivalent to 45 days of fixed cost	4.24	4.05	3.95
2	Maintenance spares @15% of operation and maintenance expenses	1.45	1.05	1.12
3	Operation and maintenance expenses for one month	0.80	0.58	0.62
4	Total Working Capital requirement	6.49	5.67	5.68
5	Rate of Interest (%)	9.00%	9.00%	9.00%
6	**Interest on Working Capital**	**0.58**	**0.51**	**0.51**

The Commission approves the Interest on Working Capital of INR 0.51 Cr for FY 2023-24.

4.9. Non-Tariff Income

Petitioner's submission

The Petitioner has proposed the Non-Tariff Income of Rs. 0.16 Crore for FY 2023-24 considering an escalation of 5% over the Non-Tariff Income proposed for FY 2022-23.

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 considered an escalation of 5% over the Non-Tariff Income proposed for FY 2022-23 while proposing the Non-Tariff Income of Rs. 0.16 Crore for FY 2023-24.

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 FY 2023-24:

Table 64: Non -tariff Income approved by Commission (INR Crore)

Particular	Approved in MYT Order	Claimed	Now Approved by Commission
Non- Tariff Income	0.13	0.16	0.16

The Commission approves Non-Tariff Income of INR 0.16 Cr for FY 2023-24.

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 FY 2023-24 as shown in the following table:

Table 65: Aggregate Revenue Requirement (ARR) submitted by the Petitioner (INR Crore)

Sr. No	Particulars	Approved in MYT Order	Claimed
1	Depreciation	15.48	15.51
2	Interest Cost on Long-term Capital Loans	0.45	0.49
3	Return on Equity	8.35	8.38
4	O&M Expense	9.65	7.43
5	Interest on Working Capital Loans	0.58	0.51
6	**Total Revenue Requirement**	**34.51**	**32.32**
7	Less: Non-Tariff Income	0.13	0.16
8	**Net Revenue Requirement (Annual Fixed Cost)**	**34.38**	**32.16**
9	Add: true-up of previous years	-	-

Sr. No	Particulars	Approved in MYT Order	Claimed
10	**Net Revenue Requirement**	**34.38**	**32.16**

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 66: Aggregate Revenue Requirement approved by Commission (INR Crore)

Sr. No	Particulars	Approved in MYT Order	Claimed	Now Approved by Commission
1	Depreciation	15.48	15.51	15.43
2	Interest Cost on Long-term Capital Loans	0.45	0.49	0.48
3	Return on Equity	8.35	8.38	8.30
4	O&M Expense	9.65	7.43	7.45
5	Interest on Working Capital Loans	0.58	0.51	0.51
6	**Total Revenue Requirement**	**34.51**	**32.32**	**32.17**
7	Less: Non-Tariff Income	0.13	0.16	0.16
8	**Net Revenue Requirement (Annual Fixed Cost)**	**34.38**	**32.16**	**32.01**
9	Add: True-Up of previous years	-	(2.52)	(1.78)*
10	**Net Revenue Requirement**	**34.38**	**29.64**	**30.23**

** Refer to Table 46 under APR Section for detailed computation*

The Commission approves net ARR of INR 30.23 Cr for FY 2023-24.

5. Chapter 5: Transmission Tariff for FY 2023-24

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 67: Transmission Capacity approved by Commission (MW)

Transmission Capacity (MW)	FY 2023-24
Transmission Capacity	1,294

5.2. Normative Availability

Regulation 45.1 of JERC MYT Regulations, 2021 stipulates as follows:

"45.1 The norms of operations for a Transmission Licensee shall be applicable as specified in the prevalent CERC Tariff Regulations"

Regulation 51 of the CERC Tariff Regulations, 2019 stipulates as under:

"51. Normative Annual Transmission System Availability Factor (NATAF):
(a) For recovery of Annual Fixed Cost, NATAF shall be as under:

(1) AC system: 98.00%;
....
"

Accordingly, the Commission approves the Normative Annual Transmission System Availability Factor (NATAF) for recovery of full Annual Fixed Cost as 98%.

Further, **the Commission directs the Petitioner to submit the Transmission Availability Report for DNH-T on Monthly Basis to the Commission starting from the month of April 2023**.

5.3. Transmission Loss

The Commission sought the details regarding the energy audit conducted by the Petitioner for FY 2021-22. The petitioner has submitted the energy audit report for FY 2021-22 for entire DNHPDCL. Based on the Energy Audit Report submitted for FY 2021-22, the Commission observed that the overall Transmission system loss of DNH-T is not available in the Energy Audit Report.

In the absence of energy audit report and unavailability of transmission loss of DNH-T overall system, the Commission has provisionally approved the Transmission Loss of 0.30% as approved in the Business Plan Order dated 31st March 2022.

5.4. Tariff Determination

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

Table 68: Transmission Tariff proposed by Petitioner

Tariff Determination	FY 2023-24
Aggregate Revenue Requirement (INR Crore)	29.64
Transmission Capacity (MW)	1294
Energy Required at periphery (MU)	7570.94
Long/Medium Term Transmission charges (INR / MW/ Month)	19093.61
Short Term Open Access Transmission charges (INR /MW/Day)	627.74
Transmission Charges (INR/kWh)	0.0391

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

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: ½ 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 2023-24 for the approval of transmission charges for FY 2023-24.

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 2023-24 is as follows:

Table 69: Transmission Tariff for FY 2023-24

Sr. No	Particular	Petitioner's Proposal	Approved by Commission
1	Aggregate Revenue Requirement (INR Crore)	29.64	30.23
2	Transmission System Capacity (MW)	1294	1294
3	Energy Required at periphery (MU)	7570.94	6841.52
4	Long-term/Medium-term Transmission Charges (INR/MW/month)	19093.61	19476.39
5	Short-term open access Transmission Charges (INR/MW/Day)	627.74	640.32
6	Transmission Charges (INR/kWh)	0.0391	0.0442

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.

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 Tariff Petition for FY 2022-23:

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 Directive in the Tariff Order dated March 31, 2022: 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.
Petitioner's Submission in present Tariff Petition: The ED-DNH would like to submit that the SLDC of both the regions i.e. Dadra and Nagar Haveli and Daman and Diu have been merged and head office has been located at Silvassa. Further, a sub SLDC has been formed at Daman. Further, complete segregation of accounts of SLDC in both Silvassa and Daman is yet to be done.
Commission's Directive in current Tariff Order: The Commission reiterates its directions to segregate the accounts of SLDC business and transmission business and directs the petitioner 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 2024-25.

Directive 2: Intra State Load Flow Study

Commission's Direction in Tariff Order dated March 31, 2022: 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.
Petitioner's Submission in present Tariff Petition: The ED-DNH would like to submit that the merger of the transmission departments in Daman and Silvassa will be done. Post the merger, Intra State Load Flow Study shall be submitted to the Hon'ble Commission for the whole utility.
Commission's Directive in current Tariff Order: The Commission directs the Petitioner to submit an action plan detailing the timeline of Merger of transmission departments in Daman and Silvassa within 60 days from the issuance of this Order and conduct a fresh Intra State Load Flow Study and submit a compliance report for Commission's consideration along with ARR and Tariff petition for FY 2024-25.

Directive 3: 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.
Petitioner's Submission in present Tariff Petition: The ED-DNH would like to submit that the merger of the transmission departments in Daman and Silvassa will be done. Post the merger, Intra State Load Flow Study shall be submitted to the Hon'ble Commission for the whole utility.
Commission's Directive in current Tariff Order: The Commission directs the Petitioner to submit an action plan detailing the timeline of Merger of transmission departments in Daman and Silvassa within 60 days from the issuance of this Order and conduct the Energy Audit of combined transmission system to assess the actual transmission losses and submit the report as part of ARR and Tariff petition for FY 2024-25.

New Directive: Transmission System Availability

Commission's Direction: The Commission directs the Petitioner to submit the details of Transmission Availability Report for DNH-T on monthly basis to the Commission starting from the month of April 2023.

New Directive: Quarterly Statement of Capital Expenditure

Commission's Direction: The Commission directs the Petitioner to submit report on progress achieved towards execution and completion of the schemes undertaken by it in the existing Control Period on quarterly basis with regard to the Capital Expenditure and Capitalization approved for the schemes in the Business Plan for existing Control Period.

****

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 March, 2023.

Table 70: List of participants in Public Hearing

S. No.	Name of Stakeholder	Designation
1	Shri Umesh Patel	President Youth Action Force, Daman and Diu
2	Shri Atul Shah	FIA, Silvassa
3	Shri Jignesh Langalia	DNHDD PDCL