

Uttar Pradesh Electricity Regulatory Commission

Lucknow

Petition No. 1907 of 2022



Order under Section 62 and 64
of The Electricity Act, 2003

on

True-up for FY 2021-22,

Annual Performance Review for FY 2022-23,

Aggregate Revenue Requirement and Tariff for FY 2023-24

for

Uttar Pradesh Power Transmission Corporation Limited

Lucknow

May 24, 2023





CONTENTS

LIST OF TABLES	5
1 BACKGROUND AND PROCEDURAL HISTORY	12
1.1 BACKGROUND	12
1.2 TRANSMISSION TARIFF REGULATIONS	16
2 PROCEDURAL HISTORY	17
2.1 DETAILS OF PREVIOUS YEARS TARIFF ORDERS / BUSINESS PLAN ORDERS	17
2.2 DETERMINATION OF APR FOR FY 2022-23, ARR FOR FY 2023-24 AND TRUE-UP FOR FY 2021-22	17
2.3 PRELIMINARY SCRUTINY OF THE PETITION	17
2.4 ADMITTANCE OF THE PETITION	18
2.5 PUBLICITY OF THE PETITION	18
3 PUBLIC HEARING PROCESS	19
3.1 OBJECTIVE	19
3.2 VIEWS / COMMENTS / SUGGESTIONS / OBJECTIONS / REPRESENTATIONS ON DETERMINATION OF APR FOR FY 2022-23, ARR FOR FY 2023-24 AND TRUE UP OF ARR FOR FY 2021-22	19
4 TRUE-UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2021-22	26
4.1 INTRODUCTION	26
4.2 TRANSMISSION SYSTEM AVAILABILITY	26
4.3 INTRA-STATE TRANSMISSION LOSS	28
4.4 OPERATION AND MAINTENANCE EXPENSES (O&M)	30
4.5 CAPITAL WORK IN PROGRESS & GROSS FIXED ASSET	44
4.6 CONSUMER CONTRIBUTION, CAPITAL GRANTS AND SUBSIDIES	67
4.7 DEBT-EQUITY RATIO	69
4.8 DEPRECIATION	71
4.9 INTEREST ON LONG TERM LOANS	79
4.10 INTEREST ON WORKING CAPITAL	84
4.11 RETURN ON EQUITY	87
4.12 INCOME TAX	88
4.13 NON TARIFF INCOME	89
4.14 REVENUE	91





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

4.15	SUMMARY OF ANNUAL REVENUE REQUIREMENT AND GAP/(SURPLUS).....	93
4.16	TRANSMISSION TARIFF	95
5	ANNUAL PERFORMANCE REVIEW FOR FY 2022-23	98
5.1	INTRODUCTION.....	98
5.2	TRANSMISSION SYSTEM AVAILABILITY	99
5.3	TRANSMISSION LOSS	99
5.4	OPERATION AND MAINTENANCE EXPENSES (O&M)	99
5.5	CAPITAL WORK IN PROGRESS (CWIP) & GROSS FIXED ASSET (GFA)	101
5.6	CONSUMER CONTRIBUTION, CAPITAL GRANTS AND GRANTS.....	102
5.7	DEBT-EQUITY RATIO	103
5.8	DEPRECIATION	104
5.9	INTEREST ON LONG TERMS LOANS	106
5.10	INTEREST ON WORKING CAPITAL	107
5.11	RETURN ON EQUITY.....	108
5.12	NON-TARIFF INCOME	109
5.13	INCOME FROM OTHER BUSINESS.....	109
5.14	SUMMARY OF AGGREGATE REVENUE REQUIRMENT FOR FY 2022-23	110
6	AGGREGATE REVENUE REQUIREMENT FOR FY 2023-24.....	112
6.1	INTRODUCTION.....	112
6.2	TRANSMISSION SYSTEM AVAILABILITY	113
6.3	INTRA-STATE TRANSMISSION LOSS.....	115
6.4	OPERATION AND MAINTENANCE EXPENSES (O&M)	116
6.5	CAPITAL WORK IN PROGRESS, GROSS FIXED ASSET & ASSET CAPITALISATION	121
6.6	CONSUMER CONTRIBUTION, CAPITAL GRANTS AND GRANTS.....	127
6.7	DEBT-EQUITY RATIO OF CAPITALIZATION	129
6.8	DEPRECIATION	131
6.9	INTEREST ON LONG TERM LOANS	138
6.10	INTEREST ON WORKING CAPITAL	141
6.11	RETURN ON EQUITY.....	144
6.12	INCOME TAX.....	146
6.13	NON TARIFF INCOME	147
6.14	INCOME FROM OTHER BUSINESS.....	148





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

6.15	UPSLDC ARR	154
6.16	SUMMARY OF AGGREGATE REVENUE REQUIREMENT FOR FY 2023-24	156
6.17	TRANSMISSION TARIFF	157
6.18	OPEN ACCESS: TRANSMISSION TARIFF	161
7	DIRECTIVES	163
7.1	COMPLIANCE OF DIRECTIVES ISSUED IN THE TARIFF ORDER DATED JULY 20, 2022	163
7.2	DIRECTIVES ISSUED IN THIS ORDER	168
8	APPLICABILITY OF THE ORDER	171
9	ANNEXURE 1: ADMITTANCE ORDER	172
10	ANNEXURE 2: PUBLIC NOTICE ISSUED BY THE COMMISSION FOR PUBLIC HEARING	175
11	ANNEXURE 3: LIST OF PERSONS WHO ATTENDED PUBLIC HEARING	176





List of Tables

Table 2-1: LIST OF NEWSPAPERS AND DATES OF PUBLICATION OF PUBLIC NOTICE BY PETITIONER	18
Table 4-1: NORMATIVE & ACTUAL ANNUAL TRANSMISSION SYSTEM AVAILABILITY FACTOR SUBMITTED BY PETITIONER (%)	27
Table 4-2: NORMATIVE & ACTUAL ANNUAL TRANSMISSION SYSTEM AVAILABILITY FACTOR APPROVED BY THE COMMISSION (%)	28
Table 4-3: INTRA-STATE TRANSMISSION LOSS SUBMITTED BY PETITIONER (%)	29
Table 4-4: ACTUAL INTRA-STATE TRANSMISSION LOSS FROM FY 2008-09 TO FY 2013-14 (%)	29
Table 4-5: ACTUAL INTRA-STATE TRANSMISSION LOSS FROM FY 2014-15 TO FY 2020-21 (%)	29
Table 4-6: INTRA-STATE TRANSMISSION LOSS APPROVED BY THE COMMISSION (%)	30
Table 4-7: BASE YEAR (FY 2019-20) O&M EXPENSES SUBMITTED BY PETITIONER (Rs. Crore)	30
Table 4-8: NORMATIVE O&M EXPENSES SUBMITTED BY PETITIONER (Rs. Crore)	32
Table 4-9: INFLATION INDEX FOR FY 2021-22 CONSIDERED BY THE COMMISSION (%)	38
Table 4-10: ESCALATION FACTOR FOR FY 2018-19 & FY 2019-20 AS COMPUTED BY THE COMMISSION (%)	39
Table 4-11: O&M EXPENSES FOR BASE YEAR (FY 2019-20) APPROVED BY THE COMMISSION (Rs. Crore)	39
Table 4-12: DIFFERENCE BETWEEN PETITIONER AND COMMISSION IN BASE YEAR (FY 2019-20) VALUE OF O&M EXPENSES (Rs. Crore)	39
Table 4-13: NORMATIVE O&M EXPENSES COMPUTED BY THE COMMISSION (Rs. Crore)	42
Table 4-14: ACTUAL O&M EXPENSES AS PER AUDITED ACCOUNTS (Rs. Crore)	42
Table 4-15: O&M EXPENSES APPROVED BY THE COMMISSION (Rs. Crore)	43
Table 4-16: CAPITAL EXPENDITURE SUBMITTED BY PETITIONER (Rs. Crore)	44
Table 4-17: GFA AS SUBMITTED BY PETITIONER (Rs. Crore)	44
Table 4-18: CAPITAL EXPENDITURE APPROVED BY THE COMMISSION (Rs. Crore)	67
Table 4-19: GFA APPROVED BY THE COMMISSION (Rs. Crore)	67
Table 4-20: CONSUMER CONTRIBUTION SUBMITTED BY PETITIONER (Rs. Crore)	67
Table 4-21: CONSUMER CONTRIBUTION APPROVED BY THE COMMISSION (Rs. Crore)	68
Table 4-22: DEBT: EQUITY RATIO SUBMITTED BY PETITIONER (Rs. Crore)	69
Table 4-23: DEBT: EQUITY RATIO APPROVED BY THE COMMISSION (Rs. Crore)	71
Table 4-24: GROSS DEPRECIATION FOR ASSETS UPTO 31.03.2020 (PART-A) SUBMITTED BY PETITIONER (Rs. Crore)	72
Table 4-25: GROSS DEPRECIATION FOR ASSETS FROM 01.04.2020 (PART-B) SUBMITTED BY PETITIONER (Rs. Crore)	72
Table 4-26: NET DEPRECIATION (PART-A + PART-B) SUBMITTED BY PETITIONER (Rs. Crore)	73
Table 4-27: GROSS FIXED ASSETS UPTO 31.03.2020 (PART-A) APPROVED BY THE COMMISSION IN TARIFF ORDER FOR FY 2021-22 DATED JUNE 29, 2021 (Rs. Crore)	76
Table 4-28: GROSS DEPRECIATION FOR ASSETS UPTO 31.03.2020 (PART-A) APPROVED BY THE COMMISSION (Rs. Crore)	78





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Table 4-29: GROSS DEPRECIATION FOR ASSETS FROM 01.04.2020 ONWARDS (PART-B) APPROVED BY THE COMMISSION (Rs. Crore).....	78
Table 4-30: NET DEPRECIATION (PART-A + PART-B) APPROVED BY THE COMMISSION (Rs. Crore)	79
Table 4-31: OPENING NORMATIVE LOAN AS ON 01.04.2020 SUBMITTED BY PETITIONER (Rs. Crore).....	79
Table 4-32: NORMATIVE LOAN & NORMATIVE EQUITY ADDED DURING FY 2021-22 SUBMITTED BY PETITIONER (Rs. Crore).....	80
Table 4-33: INTEREST ON LONG TERM LOANS SUBMITTED BY PETITIONER (Rs. Crore).....	80
Table 4-34: INTEREST RATE ON LONG TERM LOAN SUBMITTED BY PETITIONER (%).....	83
Table 4-35: REVISED INTEREST RATE ON LONG TERM LOAN SUBMITTED BY PETITIONER IN REPLY DATED 15.02.2023 (%).....	83
Table 4-36: INTEREST RATE ON LONG TERM LOAN APPROVED BY THE COMMISSION (Rs. Crore).....	84
Table 4-37: INTEREST ON LONG TERM LOAN APPROVED BY THE COMMISSION (Rs. Crore).....	84
Table 4-38: INTEREST ON WORKING CAPITAL SUBMITTED BY PETITIONER (Rs. Crore).....	85
Table 4-39: INTEREST RATE ON WORKING CAPITAL FOR FY 2021-22 APPROVED BY THE COMMISSION (%).....	86
Table 4-40: INTEREST ON WORKING CAPITAL APPROVED BY THE COMMISSION (Rs. Crore).....	86
Table 4-41: RETURN ON EQUITY SUBMITTED BY PETITIONER (Rs. Crore).....	87
Table 4-42: RETURN ON EQUITY APPROVED BY THE COMMISSION (Rs. Crore).....	88
Table 4-43: NON-TARIFF INCOME SUBMITTED BY PETITIONER (Rs. Crore).....	89
Table 4-44: NON-TARIFF INCOME APPROVED BY THE COMMISSION (Rs. Crore).....	90
Table 4-45: REVENUE FROM OPERATIONS SUBMITTED BY PETITIONER (Rs. Crore).....	91
Table 4-46: DETAILED BREAKUP OF REVENUE FROM OPERATIONS SUBMITTED BY PETITIONER (Rs. Crore).....	92
Table 4-47: REVENUE FROM OPERATIONS APPROVED BY THE COMMISSION (Rs. Crore).....	92
Table 4-48: DETAILED BREAKUP OF REVENUE FROM OPERATIONS APPROVED BY THE COMMISSION (Rs. Crore).....	93
Table 4-49: SUMMARY OF ARR SUBMITTED BY PETITIONER (Rs. Crore).....	93
Table 4-50: SUMMARY OF ARR APPROVED BY THE COMMISSION (Rs. Crore).....	94
Table 4-51: TRUED UP TRANSMISSION TARIFF APPROVED BY THE COMMISSION (Rs. / kWh).....	96
Table 4-52: REVENUE GAP RECOVERY FOR FY 2021-22 APPROVED BY THE COMMISSION (Rs. / kWh).....	97
Table 5-1: INTRA-STATE TRANSMISSION LOSS SUBMITTED BY PETITIONER (%).....	99
Table 5-2: NORMATIVE O&M EXPENSES SUBMITTED BY PETITIONER (Rs. Crore).....	100
Table 5-3: SOURCE OF CAPITAL INVESTMENT SUBMITTED BY PETITIONER (Rs. Crore).....	101
Table 5-4: CAPITAL EXPENDITURE SUBMITTED BY PETITIONER (Rs. Crore).....	102
Table 5-5: GFA SUBMITTED BY PETITIONER (Rs. Crore).....	102
Table 5-6: CONSUMER CONTRIBUTION SUBMITTED BY PETITIONER (Rs. Crore).....	103
Table 5-7: DEBT: EQUITY RATIO AND FINANCING OF CAPITALISATION SUBMITTED BY PETITIONER (Rs. Crore).....	104





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Table 5-8: GROSS DEPRECIATION FOR ASSETS UPTO 31.03.2020 (PART-A) SUBMITTED BY PETITIONER (Rs. Crore)	105
Table 5-9: GROSS DEPRECIATION FOR ASSETS FROM 01.04.2020 (PART-B) SUBMITTED BY PETITIONER (Rs. Crore)	105
Table 5-10: NET ALLOWABLE DEPRECIATION (PART-A + PART-B) SUBMITTED BY PETITIONER (Rs. Crore)	106
Table 5-11: INTEREST ON LONG TERM LOANS SUBMITTED BY PETITIONER (Rs. Crore)	107
Table 5-12: INTEREST ON WORKING CAPITAL SUBMITTED BY PETITIONER (Rs. Crore)	107
Table 5-13: RETURN ON EQUITY SUBMITTED BY PETITIONER (Rs. Crore)	108
Table 5-14: NON-TARIFF INCOME SUBMITTED BY PETITIONER (Rs. Crore)	109
Table 5-15: INCOME FROM OTHER BUSINESS SUBMITTED BY PETITIONER (Rs. Crore)	110
Table 5-16: SUMMARY OF ARR SUBMITTED BY PETITIONER (Rs. Crore)	111
Table 6-1: ACTUAL ANNUAL TRANSMISSION SYSTEM AVAILABILITY FACTOR FOR FY 2011-12 TO FY 2016-17 (%)	115
Table 6-2: ACTUAL ANNUAL TRANSMISSION SYSTEM AVAILABILITY FACTOR FOR FY 2017-18 TO FY 2021-22 (%)	115
Table 6-3: ACTUAL INTRA-STATE TRANSMISSION LOSS FROM FY 2008-09 TO FY 2013-14 (%)	116
Table 6-4: ACTUAL INTRA-STATE TRANSMISSION LOSS FROM FY 2014-15 TO FY 2020-21 (%)	116
Table 6-5: APPROVED TRAJECTORY OF INTRA-STATE TRANSMISSION LOSS (%)	116
Table 6-6: NORMATIVE O&M EXPENSES SUBMITTED BY PETITIONER (Rs. Crore)	117
Table 6-7: INFLATION INDEX FOR FY 2023-24 CONSIDERED BY THE COMMISSION (%)	119
Table 6-8: NORMATIVE O&M EXPENSES FOR FY 2023-24 APPROVED BY THE COMMISSION (Rs. Crore)	120
Table 6-9: O&M EXPENSES FOR FY 2023-24 APPROVED BY THE COMMISSION (Rs. Crore)	120
Table 6-10: SOURCE OF CAPITAL INVESTMENT SUBMITTED BY PETITIONER (Rs. Crore)	121
Table 6-11: CAPITAL EXPENDITURE SUBMITTED BY PETITIONER (Rs. Crore)	122
Table 6-12: GFA SUBMITTED BY PETITIONER (Rs. Crore)	122
Table 6-13: ACTUAL PEAK DEMAND (MW) & YEAR ON YEAR INCREASE (%)	124
Table 6-14: PEAK DEMAND (MW) APPROVED BY THE COMMISSION IN BUSINESS PLAN ORDER DATED 15.10.2020	124
Table 6-15: CAPITAL INVESTMENT PLAN FOR MYT CONTROL FOR FY 2020-21 TO FY 2024-25 SUBMITTED BY PETITIONER IN ITS BUSINESS PLAN PETITION (Rs. Crore)	124
Table 6-16: CAPITAL INVESTMENT COMPUTED FOR FY 2022-23 (Rs. Crore)	126
Table 6-17: CAPITAL INVESTMENT APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)	126
Table 6-18: GFA COMPUTED FOR FY 2022-23 (Rs. Crore)	127
Table 6-19: GFA APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)	127
Table 6-20: CONSUMER CONTRIBUTION, CAPITAL GRANTS & SUBSIDIES SUBMITTED BY PETITIONER (Rs. Crore)	127
Table 6-21: CONSUMER CONTRIBUTION, CAPITAL GRANTS & SUBSIDIES COMPUTED PROVISIONALLY FOR FY 2022-23 (Rs. Crore)	128





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Table 6-22: CONSUMER CONTRIBUTION, CAPITAL GRANTS & SUBSIDIES APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)	128
Table 6-23: DEBT: EQUITY RATIO OF CAPITALIZATION SUBMITTED BY PETITIONER (Rs. Crore)	129
Table 6-24: DEBT- EQUITY RATIO OF CAPITALIZATION APPROVED BY THE COMMISSION (Rs. Crore)	131
Table 6-25: GROSS DEPRECIATION FOR ASSETS UPTO 31.03.2020 (PART-A) SUBMITTED BY PETITIONER (Rs. Crore)	131
Table 6-26: GROSS DEPRECIATION FOR ASSETS FROM 01.04.2020 (PART-B) SUBMITTED BY PETITIONER (Rs. Crore)	132
Table 6-27: NET DEPRECIATION (PART-A + PART-B) SUBMITTED BY PETITIONER (Rs. Crore)	132
Table 6-28: DEPRECIATION ON GFA UPTO 31.03.2020 (PART-A) APPROVED BY THE COMMISSION IN TARIFF ORDER FOR FY 2021-22 DATED JUNE 29, 2021 (Rs. Crore)	136
Table 6-29: GROSS DEPRECIATION FOR ASSETS UPTO 31.03.2020 (PART-A) APPROVED BY THE COMMISSION (Rs. Crore)	137
Table 6-30: GROSS DEPRECIATION FOR ASSETS FROM 01.04.2020 ONWARDS (PART-B) APPROVED BY THE COMMISSION (Rs. Crore)	137
Table 6-31: NET DEPRECIATION (PART-A + PART-B) APPROVED BY THE COMMISSION (Rs. Crore)	138
Table 6-32: INTEREST ON LONG TERM LOANS SUBMITTED BY PETITIONER (Rs. Crore)	138
Table 6-33: INTEREST ON LONG TERM LOANS COMPUTED BY COMMISSION FOR FY 2022-23 PROVISIONALLY (Rs. Crore)	140
Table 6-34: INTEREST ON LONG TERM LOAN APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)	141
Table 6-35: INTEREST ON WORKING CAPITAL SUBMITTED BY PETITIONER (Rs. Crore)	142
Table 6-36: INTEREST ON WORKING CAPITAL APPROVED BY THE COMMISSION (Rs. Crore)	143
Table 6-37: RETURN ON EQUITY SUBMITTED BY PETITIONER (Rs. Crore)	144
Table 6-38: RETURN ON EQUITY PROVISIONALLY COMPUTED BY COMMISSION FOR FY 2022-23 (Rs. Crore)	145
Table 6-39: RETURN ON EQUITY APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)	146
Table 6-40: NON-TARIFF INCOME SUBMITTED BY PETITIONER (Rs. Crore)	147
Table 6-41: NON-TARIFF INCOME APPROVED BY THE COMMISSION (Rs. Crore)	148
Table 6-42: INCOME FROM OTHER BUSINESS SUBMITTED BY PETITIONER (Rs. Crore)	149
Table 6-43: INCOME FROM OTHER BUSINESS AS SUBMITTED BY PETITIONER FOR FY 2023-24 (Rs. Crore)	153
Table 6-44: INCOME FROM OTHER BUSINESS AS PER COMMISSION'S ORDER DATED NOVEMBER 02, 2022 IN PETITION No. 1848 OF 2022 (Rs. Crore)	153
Table 6-45: INCOME FROM OTHER BUSINESS APPROVED BY THE COMMISSION (Rs. Crore)	154
Table 6-46: UPSLDC ARR FOR FY 2023-24 SUBMITTED BY PETITIONER (Rs. Crore)	155
Table 6-47: SUMMARY OF ARR SUBMITTED BY PETITIONER (Rs. Crore)	156
Table 6-48: SUMMARY OF ARR APPROVED BY THE COMMISSION (RS. CRORE)	157
Table 6-49: ENERGY PROJECTIONS BY PETITIONER FOR FY 2023-24 (MUs)	157
Table 6-50: TRANSMISSION TARIFF FOR FY 2023-24 AS PROJECTED BY PETITIONER (RS. /KWh)	158





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Table 6-51: REVISED ENERGY PROJECTIONS BY PETITIONER VIDE LETTER DATED 15.02.2023 FOR FY 2023-24 (MUs).....	159
Table 6-52: REVISED TRANSMISSION TARIFF FOR FY 2023-24 AS PROJECTED BY PETITIONER VIDE LETTER DATED 15.02.2023 (Rs. / kWh).....	160
Table 6-53: ENERGY PROJECTIONS APPROVED BY THE COMMISSION FOR FY 2023-24 (MUs)....	160
Table 6-54: TRANSMISSION TARIFF APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. / kWh).....	161
Table 6-55: INTRA STATE OPEN ACCESS CHARGES PROPOSED BY PETITIONER FOR FY 2023-24 (Rs. / kWh).....	161
TABLE 6-56: INTRA STATE OPEN ACCESS TRANSMISSION CHARGES APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. / kWh).....	162
Table 7-1: STATUS OF COMPLIANCE/ PETITIONER'S REPLY TO COMMISSION'S DIRECTIVES.....	163



by

*

20



BEFORE

UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

Petition No.: 1907 of 2022

In the matter of:

Determination of Annual Revenue Requirement (ARR) for the FY 2023-24, Annual Performance Review (APR) for FY 2022-23 and True-up for the FY 2021-22 (Petition No. 1907 of 2022) of Uttar Pradesh Power Transmission Corporation Limited, Lucknow (UPPTCL)

And

In the matter of:

Uttar Pradesh Power Transmission Corporation Limited, Lucknow (UPPTCL)

Order

The Commission, having deliberated upon the Petition for determination of Annual Revenue Requirement (ARR) for the FY 2023-24, Annual Performance Review (APR) for FY 2022-23 and True-up for FY 2021-22 filed by UPPTCL and also the subsequent filings by the Petitioner, during the course of Proceedings after the Petition thereafter admitted on February 28, 2023 and having considered the views / comments / suggestions / objections / representations received from the stakeholders in writing and during the Public Hearing held on April 21, 2023 and SAC meeting held on May 08, 2023, in exercise of powers vested under Sections 61, 62, 64 and 86 of the Electricity Act, 2003 (hereinafter referred to as 'the Act'), hereby passes this Order.

The Licensee, in accordance with Regulation 5.10 of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019, shall publish the Tariff approved by the Commission in at least two (2) English and two (2) Hindi daily newspapers having wide circulation in the area of supply and shall put up the approved Tariff on its internet website.

The Tariff so published shall be in force after seven days from the date of such publication of the Tariff and shall, unless amended or revised, continue to be in force for such period as may be

by





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

stipulated therein. The Commission may issue clarification / corrigendum / addendum to this Order as it deems fit from time to time with the reasons to be recorded in writing.

by

X



2



1 BACKGROUND AND PROCEDURAL HISTORY

1.1 BACKGROUND

1.1.1 The Uttar Pradesh Electricity Regulatory Commission (hereinafter referred to as the 'UPERC' or 'the Commission') was formed under U.P. Electricity Reform Act, 1999 by Government of Uttar Pradesh (GoUP) in one of the first steps of reforms and restructuring process of the power sector in the State. Therefore, in pursuance of the reforms and restructuring process, the erstwhile Uttar Pradesh State Electricity Board (UPSEB) was unbundled into the following three separate entities through the first reforms Transfer Scheme dated January 14, 2000:

- Uttar Pradesh Power Corporation Limited (UPPCL): vested with the function of Transmission and Distribution within the State;
- Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL): vested with the function of Thermal Generation within the State;
- Uttar Pradesh Jal Vidyut Nigam Limited (UPJVNL): vested with the function of Hydro Generation within the State.

1.1.2 Through another Transfer Scheme dated January 15, 2000, assets, liabilities and personnel of Kanpur Electricity Supply Authority (KESA) under UPSEB were transferred to Kanpur Electricity Supply Company Limited (KESCO), a Company registered under the Companies Act, 1956.

1.1.3 After the enactment of the Electricity Act, 2003 (EA 2003), the need was felt for further unbundling of UPPCL (responsible for both Transmission and Distribution functions) along functional lines. Therefore, the following five new Distribution Companies (hereinafter collectively referred to as 'Discoms') were created vide Uttar Pradesh Transfer of Distribution Undertaking Scheme, 2003 dated August 12, 2003, to undertake distribution and supply of electricity in the areas under their respective zones specified in the Scheme:

- Dakshinanchal Vidyut Vitran Nigam Limited (Agra Discom or DVVNL)
- Madhyanchal Vidyut Vitran Nigam Limited (Lucknow Discom or MVVNL)
- Pashchimanchal Vidyut Vitran Nigam Limited (Meerut Discom or PVVNL)
- Purvanchal Vidyut Vitran Nigam Limited (Varanasi Discom or PuVVNL)
- Kanpur Electricity Supply Company (Kanpur Discom or KESCO)





- 1.1.4 Under this Scheme, the role of UPPCL was specified as "Bulk Supply Licensee" as per the Licence granted by the Commission and as "State Transmission Utility" under sub-section (1) of Section 27-B of the Indian Electricity Act, 1910.
- 1.1.5 Subsequently, Uttar Pradesh Power Transmission Corporation Limited (UPPTCL), a Transmission Company (TRANSCO), was incorporated under the Companies Act, 1956 by an amendment in the 'Object and Name' clause of the Uttar Pradesh Vidyut Vyapar Nigam Limited. The TRANSCO started functioning with effect from July 26, 2006 and is entrusted with the business of transmission of electrical energy to various Utilities within the State of Uttar Pradesh. This function was earlier vested with UPPCL. Further, Government of Uttar Pradesh (GoUP), in exercise of powers vested under Section 30 of the Electricity Act, 2003, vide notification No. 122/U.N.N.P/24-07 dated July, 18, 2007 notified Uttar Pradesh Power Transmission Corporation Limited as the "State Transmission Utility" (STU) of Uttar Pradesh. Subsequently, on December 23, 2010, the Government of Uttar Pradesh notified the Uttar Pradesh Electricity Reforms (Transfer of Transmission and Related Activities Including the Assets, Liabilities and Related Proceedings) Scheme, 2010, which provided for the transfer of assets and liabilities from UPPCL to UPPTCL with effect from April 01, 2007.
- 1.1.6 Thereafter, on January 21, 2010, as the successor Distribution Companies of UPPCL (a Deemed Licensee), the Discoms created through the notification of the UP Power Sector Reforms (Transfer of Distribution Undertakings) Scheme, 2003 were issued fresh Distribution Licences, which replaced the UP Power Corporation Ltd (UPPCL) Distribution, Retail & Bulk Supply Licence, 2000.
- 1.1.7 UPPTCL is entrusted with the responsibilities of planning and development of an efficient and economic intra-State transmission system, providing connectivity and allowing open access for use of the intra-State transmission system in coordination, among others, Licensees and Generating Companies. In doing so, it is guided by the provisions of the U.P. Electricity Grid Code, 2007, UPERC (Terms and Conditions for Open Access) Regulations, 2004, and UPERC (Grant of Connectivity to intra-State Transmission System) Regulations, 2010 as amended from time to time.
- 1.1.8 The Government of Uttar Pradesh (GoUP), in exercise of the powers vested under Section 31 of the Electricity Act, 2003, vide Notification No. 78/24-U.N.N.P.-11-525/08 dated January 24, 2011 notified the "Power System Unit" as the "State Load Despatch Centre" of Uttar Pradesh for the purpose of exercising the powers and discharging the functions

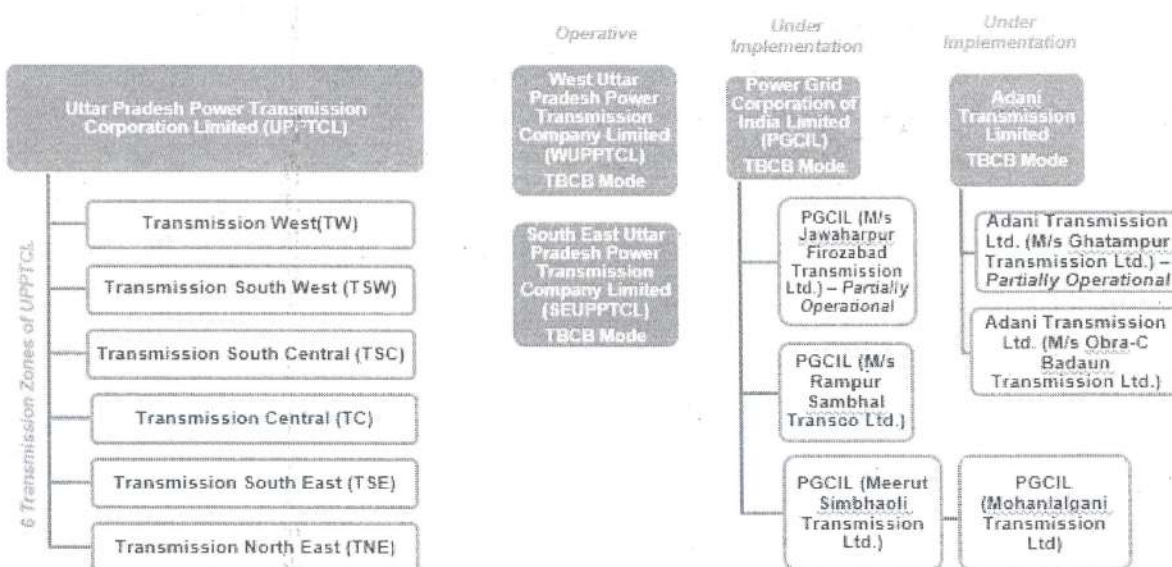




under Part V of the Electricity Act, 2003. UPSLDC is operating as a part of the Uttar Pradesh Power Transmission Corporation Ltd., in its capacity as the State Transmission Utility. UPSLDC is the apex body to ensure integrated operation of the power system in the State. However, the Commission has directed UPPTCL from time to time to expedite the process to separate the UPSLDC from UPPTCL in order to make UPSLDC as an independent Organization. Also, UPSLDC shall ensure to file its ARR Petition in accordance with UPERC (Fees & Charges of State Load Despatch Centre and other related matters) Regulations, 2020.

1.1.9 The table below detail the Transmission Licensees in Uttar Pradesh are as shown below:

Transmission Licensees in Uttar Pradesh



1.1.10 Network Details of the Transmission Licensees in the State of Uttar Pradesh upto March 31, 2022 is as shown below:

Voltage Level (kV)	132 KV	220 KV	400 KV	765 KV	Total
UPPTCL	451	136	25	2	614
SEUPPTCL	0	1	1	1	3
WUPPTCL	0	0	5	2	7
GTL	0	0	0	0	0
PJFTL	0	0	1	0	1
ORTL	0	0	1	0	1
Total	451	137	33	5	626



**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Voltage Level (kV)		132 KV	220 KV	400 KV	765 KV	Total
Transformation Capacity (MVA)	UPPTCL	57906	50660	23775	6000	138341
	SEUPPTCL	0	200	630	1,000	1830
	WUPPTCL	0	560	5,660	6,000	12220
	GTL	0	0	0	0	0
	PJFTL	0	320	1,000	0	1320
	OBTL	0	320	1000	0	1320
	Total	57906	52060	32065	13000	155031
Transmission Lines (Ckt. Km)	UPPTCL	26,387	13,848	6,621	1,511	48,367
	SEUPPTCL			541	569	1,110
	WUPPTCL			229	65	294
	PJFTL	105	22	26	0	153
	GTL			141	387	528
	OBTL	70	39	170		279
	Total	26,562	13,909	7,728	2,532	50,731

1.1.11 The State's Transmission Network Growth in last 6 Years (FY 2016-17 to FY 2021-22) is shown below:

Voltage Level (kV)	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	Growth in Last 5 Years (%)
No. of Sub-stations							
132	373	399	414	426	442	451	3.87%
220	97	107	118	126	131	137	7.15%
400	19	26	27	28	30	33	11.67%
765	4	5	5	5	5	5	4.56%
Total	493	537	564	585	608	626	4.89%
Transformation Capacity (MVA)							
132	40,297	44,488	48,001	50,410	53,747	57,906	7.52%
220	30,760	36,250	40,050	45,660	48,180	50,060	11.10%
400	15,415	22,770	24,190	27,110	29,090	32,065	15.78%
765	9,000	13,000	13,000	13,000	13,000	13,000	7.63%
Total	95,472	1,16,508	1,25,241	1,36,180	1,44,017	1,55,031	10.18%
Line Length (ckm)							
132	16,836	18,613	21,658	23,732	25,006	26,595	9.58%
220	9,944	10,566	11,900	12,985	13,455	13,909	6.94%
400	5,151	6,467	6,842	7,012	7,189	7,728	8.45%
765	1,139	1,720	1,720	1,720	1,720	2,532	17.32%
Total	33,070	37,366	42,120	45,449	47,370	50,731	8.94%

by



20



1.2 TRANSMISSION TARIFF REGULATIONS

- 1.2.1 The Uttar Pradesh Electricity Regulatory Commission (Multi Year Transmission Tariff) Regulations, 2014 were notified on May 12, 2014. These Regulations were applicable for determination of tariff in all cases covered under these Regulations from April 01, 2015 to March 31, 2020, unless otherwise extended by Commission. Embarking upon the MYT framework, the Commission has divided the period of five years (i.e., April 01, 2015 to March 31, 2020) into two periods namely –
- Transition period (April 01, 2015 to March 31, 2017)
 - Control period (April 01, 2017 to March 31, 2020)
- 1.2.2 As per the provisions stipulated in Regulation 12 of Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff Transmission) Regulations, 2014 (hereinafter referred to as “MYT Regulations, 2014”), the petition for determination of Aggregate Revenue Requirement (ARR) and tariff, Annual Performance Review (APR) and True Up, complete in all respect have to be filed by the Transmission Licensee each year of the control period (FY 2017-18 to FY 2019-20).
- 1.2.3 Subsequently, the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution and Transmission) Regulations, 2019 were notified on September 23, 2019 (hereinafter referred to as “MYT Regulations, 2019”) which shall be applicable for determination of tariff from April 01, 2020 onwards up to FY 2024-25 [i.e., till March 31, 2025] unless extended by the Commission.
- 1.2.4 These Regulations are applicable for the purposes of submission of Business Plan Petition, True-Up, Annual Performance Review (APR) and Annual Revenue Requirement (ARR) and Tariff Petition of all the distribution and transmission licensees within the State of Uttar Pradesh.





2 PROCEDURAL HISTORY

2.1 DETAILS OF PREVIOUS YEARS TARIFF ORDERS / BUSINESS PLAN ORDERS

- 2.1.1 The Commission, vide its Order dated November 30, 2017, approved the Business Plan, ARR and Transmission Tariff of the Petitioner for MYT Control Period from FY 2017-18 to FY 2019-20 including true up for FY 2014-15.
- 2.1.2 The Commission, vide its Order dated November 10, 2020, approved the ARR and Transmission Tariff for FY 2020-21 for UPPTCL and the Annual Performance Review (APR) for FY 2019-20. In the said Order, the Commission also approves the True-Up for FY 2017-18 and FY 2018-19.
- 2.1.3 The Commission vide its Order dated June 29, 2021 approved the Truing-up for FY 2019-20, Annual Performance Review for FY 2020-21 and determination of Annual Revenue Requirement and Tariff for FY 2021-22 of the Petitioner.
- 2.1.4 The Commission vide its Order dated July 20, 2022 approved the Truing-up for FY 2020-21, Annual Performance Review for FY 2021-22 and determination of Annual Revenue Requirement and Tariff for FY 2022-23 of the Petitioner.

2.2 DETERMINATION OF APR FOR FY 2022-23, ARR FOR FY 2023-24 AND TRUE-UP FOR FY 2021-22

- 2.2.1 As per provisions of MYT Regulations, 2019, the Transmission Licensees were required to file their ARR / Tariff Petitions before the Commission latest by November 30th of each year so that the Tariff can be determined and be made applicable for the subsequent financial year.
- 2.2.2 The True-Up Petition for FY 2021-22, Annual Performance Review for FY 2022-23 and Aggregate Revenue Requirement for FY 2023-24 was filed by UPPTCL (hereinafter referred to as the 'Licensee' or the 'Petitioner') under Section 64 of Electricity Act, 2003 on November 23, 2022 (Petition No. 1907/2022).

2.3 PRELIMINARY SCRUTINY OF THE PETITION

- 2.3.1 A preliminary analysis was conducted of the Petition, wherein various deficiencies were observed in the Petition and the deficiencies were communicated to the Petitioner vide letter dated January 05, 2023 and Technical Validation Section (TVS) Minutes of Meeting (MOM) dated February 03, 2023.





- 2.3.2 UPPTCL submitted their response to the deficiencies in respect to True-Up Petition for FY 2021-22, Annual Performance Review for FY 2022-23 and Aggregate Revenue Requirement for FY 2023-24. The Technical Validation Session covering all the Petition was conducted on February 03, 2023 which was attended by senior officials of UPPTCL and during the Technical Validation Session, UPPTCL explained the various issues raised in the deficiencies.
- 2.3.3 The Petitioner submitted its response to the aforesaid letters and furnished additional data/ information to the Commission vide letters dated January 30, 2023.
- 2.3.4 The Commission has scrutinized the Petition along with additional data/ information and supporting documents as submitted by the Petitioner in response to the discrepancies identified and has considered the same while passing this Order.

2.4 ADMITTANCE OF THE PETITION

- 2.4.1 The Commission admitted the Petition vide its Order dated February 28, 2023 (Annexed as: **Annexure-1**) and directed the Petitioner to publish a Public Notice consisting of the summary and highlights of the proposed ARR and Tariff for FY 2023-24, APR for FY 2022-23 and True-up for FY 2021-22 in at least two (2) English and two (2) Hindi daily newspapers having wide circulation in its licence area, inviting suggestions and objections within 15 days from the date of publication of the Public Notice(s) from the stakeholders and public at large. The Petitioner was also directed to upload, on its website the Public Notice, Petitions filed before the Commission along with all regulatory filings, information, particulars and related documents.

2.5 PUBLICITY OF THE PETITION

- 2.5.1 The Petition is uploaded on UPPTCL's official website (<https://upptcl.org/upptcl/en/article/arr-tariff-order>). In addition to above, the Public Notice was subsequently issued by the Petitioner in various newspapers and a period of fifteen days (15) days was given to the members of the general public for submitting their comments/suggestions.

Table 2-1: LIST OF NEWSPAPERS AND DATES OF PUBLICATION OF PUBLIC NOTICE BY PETITIONER

Newspaper	Date of Publication
Times of India (English) - Lucknow & Delhi edition	March 03, 2023
Hindustan Times (English) - Delhi edition	March 03, 2023
Amar Ujala (Hindi) - All editions of U.P.	March 03, 2023
Hindustan (Hindi) - All editions of U.P.	March 03, 2023





3 PUBLIC HEARING PROCESS

3.1 OBJECTIVE

- 3.1.1 The Commission in order to achieve the twin objectives i.e., to observe transparency in its proceedings and functions and to protect interest of consumers, has always attached importance to the views / comments / suggestions / objections / representations of the public on the true up and ARR / Tariff determination process. The process gains significant importance in a “cost plus regime”, wherein the entire cost allowed to the Petitioner gets transferred to the consumer.
- 3.1.2 The comments of the stakeholders play an important role in the determination of Tariff. Factors such as quality of electricity supply and the service levels need to be considered while determining the Tariff.
- 3.1.3 The Commission in order to have participation and views / comments / suggestions / objections from the public at large and all stakeholders has uploaded the Notice dated March 21, 2023 for Public hearing on its website (www.uperc.org) and the same was also published in the following daily newspapers:

Newspaper	Date of Publication
Amar Ujala (Hindi) UP Edition	March 28, 2023
The Times of India (English) Lucknow Edition	March 28, 2023
Dainik Jagran (Hindi) UP Edition	March 28, 2023
Hindustan Times (English) Delhi Edition	March 28, 2023

- 3.1.4 The Commission, held the “Public Hearing” for UPPTCL on April 21, 2023 after informing all the stakeholders and public at large through advertisements in newspaper and in Commission website (**Annexure-2**). In the Public Hearing, various stakeholders as well as the public were provided a platform where they were able to share their views / comments / suggestions / objections / representations on the Proceedings on True up of ARR for FY 2021-22, APR for FY 2022-23 and ARR for FY 2023-24. This process also enables the Commission to adopt a transparent and participative approach in the process of its proceedings.
- 3.1.5 The meeting of the State Advisory Committee (SAC) was conducted by the Commission on May 08, 2023. The views / comments / suggestions given by the members of the SAC have also been considered by the Commission and have been taken into consideration while finalizing this Tariff Order.

3.2 VIEWS / COMMENTS / SUGGESTIONS / OBJECTIONS / REPRESENTATIONS ON DETERMINATION OF APR FOR FY 2022-23, ARR FOR FY 2023-24 AND TRUE UP OF ARR FOR FY 2021-22.





- 3.2.1 The Commission has considered the submission made during Public hearing and written comments/ suggestions offered by various stakeholders and public at large on the Petition filed by UPPTCL on True up of ARR for FY 2021-22, APR for FY 2022-23 and ARR for FY 2023-24 and also the response of the Petitioner thereon. The comments/ suggestions of various stakeholders, the replies/response by the Petitioner and the views of the Commission thereon are summarized below.

TRANSMISSION LOSS

Comment/Suggestion of the stakeholders

- 3.2.2 Shri. Avadhesh Kumar Verma, Chairman U.P. Rajya Vidyut Upbhohta Parishad (UPRVUP) submitted that the transmission loss proposed at 3.22% for FY 2023-24 should not be more than 2.97% under any circumstances.

Petitioner's Response

- 3.2.3 The Petitioner submitted that the transmission losses claimed for FY 2023-24 i.e. 3.22% which is in line with the losses approved by the Commission in the Business Plan Order dated October 15, 2020. Further, the actual transmission losses for FY 2021-22 were 3.33% which has reduced with respect to the past year loss level i.e. 3.37% (for FY 2020-21), due to consistent efforts of the Petitioner.
- 3.2.4 It is further submitted that the actual transmission losses are variable & dynamic in nature and for a particular year largely depend on the quantum and direction of energy flow from generation point to load point and also on types of load, type of generation despatch voltage, reactive power compensation, voltage profile, seasonal variation etc. The Commission is also aware that the quantum of generation & load are source decisions and do not fall within the domain of UPPTCL.
- 3.2.5 It is further apprise that UPPTCL has also undertaken number of steps such as Reactive power management, by installation of capacitors, up-gradation of conductors, substations and other system strengthening to eliminate overloading of lines & transformers (if any), which will result in further reduction of transmission losses.

Commission's View

- 3.2.6 The Commission has noted the comments of the Stakeholder and reply of the Petitioner. The Commission observed that Petitioner had proposed the transmission loss for FY 2023-24 i.e. 3.22% which is in line with the losses approved by the Commission in the Business Plan Order dated October 15, 2020. The transmission loss approved for FY 2023-24 is detailed in the subsequent sections of this Order.





TRANSMISSION ARR AND TRANSMISSION TARIFF HIKE

Comment/Suggestion of the stakeholders

- 3.2.7 Shri. Avadhesh Kumar Verma, Chairman (UPRVUP) submitted that UPPTCL has projected the ARR for FY 2023-24 as Rs. 4641.38 Crore against the approved value of Rs. 3147.17 Crore for FY 2022-23 by the Commission vide its Tariff Order dated 20.07.2022. The increase in ARR is not reasonable and requested the Commission to review such increase in ARR. Shri. Avadhesh Kumar Verma further submitted that UPPTCL has claimed the transmission charges of Rs. 0.32/ kWh for FY 2023-24 against the transmission charges of Rs. 0.24/ kWh for FY 2022-23. The increase of 33% in the existing tariff is not justified.

Petitioner's Response

- 3.2.8 The Petitioner submitted that Petitioner has claimed the ARR of Rs. 4,641.38 Crore for FY 2023-24 in line with the provisions of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Transmission Tariff) Regulations 2019. Further, the transmission tariff of Rs. 0.3203/kWh as claimed by UPPTCL for FY 2023-24 is derived on the basis of ARR and projected energy of 1,43,475.37 MU to be handled during the FY 2023-24.
- 3.2.9 The Commission vide tariff order dated July 20, 2022 had allowed the transmission tariff of Rs. 0.2465/kWh for FY 2022-23. It is again pointed out that the Commission in the above said order has made significant disallowance in the O&M expenses for the true-up in the past years i.e. for FY 2017-18 to FY 2020-21 thereby reducing the O&M expenses of the base year for computation of the O&M expenses for the subsequent years. The Petitioner has considered the O&M expenses for FY 2015-16 to FY 2016-17 as allowed by UPERC while true-up. Whereas for FY 2017-18 to FY 2019-20, the Petitioner has considered the O&M Expenses as per the True-up Petitions for arriving at the average true-up O&M expenses. Further, the Commission has also disallowed 25% of the actual capital expenditure done during FY 2017-18 to FY 2019-20, which has resulted in significant reduction in the GFA, depreciation, loan and equity balances in the subsequent years as per the tariff orders dated November 10, 2020, June 29, 2021 and July 20, 2022. UPPTCL has already challenged the said Tariff Orders before the Hon'ble APTEL.
- 3.2.10 Further, in the current APR petition for FY 2022-23 the transmission tariff comes out to be Rs. 0.3167/KWh and the tariff claimed for FY 2023-24 is 0.3203/KWh. Thus, the increase in the transmission tariff is only 1.14% and the overall increase in the





allowable ARR for FY 2023-24 with respect to the APR petition for FY 2022-23 is ~5.31% as mentioned below: -

Particulars	Unit	FY 2021-22	FY 2022-23	FY 2023-24
		Claimed as per the True-up Petition	Claimed as per the APR Petition	Claimed as per the ARR Petition
Annual Revenue Requirement	Rs. Crore	4,166.75	4,363.35	4,594.93
Energy Handled	MU	1,24,074.64	1,37,796.71	1,43,475.37
Transmission Charges	Rs./kWh	0.3358	0.3167	0.3203
Increase (%) in ARR	%	-	4.72%	5.31%
Increase (%) in Transmission Charges	%	-	-5.69%	1.14%

Commission's View

3.2.11 The Commission has noted the comments of the Stakeholder and reply of the Petitioner. It is pertinent to mention that each component of ARR is considered in line with MYT Regulations, 2019. The Commission has already provided the trajectory of the transmission loss in Business Plan Order dated October 15, 2020 for FY 2020-21 to FY 2024-25. Accordingly, the transmission losses is considered and the transmission tariff is determined based on the approved energy wheeled for FY 2023-24. The Commission's decisions on the various components of the ARR and the Transmission Tariff for FY 2023-24 are detailed in the subsequent sections of this Order.

O&M EXPENSES

Comment/Suggestion of the stakeholders

3.2.12 Shri. Avadhesh Kumar Verma, Chairman (UPRVUP) submitted that UPPTCL has projected the O&M Expenses for FY 2023-24 as Rs.1640.90 Crore against the approved value of Rs. 1160.71 Crore for FY 2022-23 by Commission vide its tariff order dated 20.07.2022. Similarly, the Petitioner has projected the Employee Expenses as Rs. 1142.16 Crore for FY 2023-24 against the approved value of Rs. 655.95 Crore for FY 2022-23, which is un-justifiable. Shri. Avadhesh Kumar Verma requested the Commission to review such drastic increase in O&M Expenses and approve the same as per norms stipulated in the Regulations.

Petitioner's Response

3.2.13 The Petitioner submitted that the Petition for True-up of FY 2021-22, APR of FY 2022-23 and ARR/Tariff for FY 2023-24 has been filed as per Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution and Transmission) Regulations, 2019 (MYT Regulations 2019).





3.2.14 However, in the past tariff orders dated 10th November 2020, 29th June 2021 and 20th July 2022 the Hon'ble Commission, while determining the true up O&M expenses for FY 2017-18, FY 2018-19, FY 2019-20 and FY 2020-21 of the Petitioner, had approved the lower of normative or actual for each element of O&M, i.e. Employee Expense, R&M & A&G. Thereby, reducing the base year O&M expenses, which has translated into lower O&M expenses for the FY 2022-23. UPPTCL has challenged said approach of the Hon'ble UPERC in respect of the O&M expenses in the afore-mentioned tariff orders before the Hon'ble APTEL. Accordingly, UPPTCL while computing the base year expenses has considered the normative O&M expenses as per the true-up petitions and has claimed the normative O&M expenses for the FY 2023-24. Thus, the increase in the O&M expenses in the FY 2022-23 & FY 2023-24 as claimed by UPPTCL is only 5% to 6% as mentioned below: -

Particulars	FY 2021-22	FY 2022-23	FY 2023-24
	Claimed as per the True-up Petition	Claimed as per the APR Petition	Claimed as per the ARR Petition
Gross O&M Expenses (Rs. Crore)	1,470.66	1,548.52	1,640.91
Increase (%)	-	5.29%	5.97%

Commission's View

3.2.15 The Commission has considered the objections / suggestions made by the stakeholder and the reply of the Petitioner. The O&M Expenses are computed as per Regulations and accordingly the same is approved. The Commission's decisions on the various components of the ARR and the Transmission Tariff for FY 2022-23 are detailed in the subsequent sections of this Order.

UPPTCL SYSTEM STRENGTHENING

Comment/Suggestion of the stakeholders

3.2.16 Shri. Avadhesh Kumar Verma, Chairman (UPRVUP) submitted that in FY 2023-24, there is around 3,52,98,672 electricity consumers and if their category- wise total load is taken out, then the total combined load of electricity consumers of the state is about 7,47,59,332 kW whereas, if the total capacity of 132 kV substations of UPPTCL is considered till March 2022, about 57906 MVA, which comes to approximately to 5,21,15,400 kW. It is noted that during the peak season, consumer may go for full load due to their increase in demand / load during the season. Therefore, there is a mismatch between the connected load and system capacity, that too will increase of 17%-20% on account of electricity theft. e diversity factor may reach to 1:1 which will result in low quality electricity supply in the peak hours during the summers.





Therefore, there is a need to strengthen and increase the system capacity in the State. Accordingly, Licensee need to work at war footing to balance the system.

Petitioner's Response

3.2.17 The transmission system is generally planned for the following:

- For evacuation of power from generating stations within the state;
- To handle the expected peak demand of Discoms and Long Term Open Access consumers;
- System augmentation considering the operational constraints in the transmission system and to improve the overall performance in respect of reliability, resistance and safety/stability of the grid.

UPPTCL plans the State transmission network as per CEA Transmission Planning Criteria which provides for creation of transmission infrastructure to sustain even during contingencies. Further, the transmission capacity is planned and developed as per the projected peak demand of discoms and not for the connected load. UPPTCL has met the peak demand of the state in the past years as mentioned below:

FY	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24 (Projected)
Peak Demand Met (MW)	14503	16110	18061	20062	21632	23868	24795	26589	27531

As observed from the above table the peak demand handled has increased ~83% during the FY 2015-16 to FY 2022-23. The planned capacity of UPPTCL's network is required to be increased suitably to meet the projected peak demand of 27531 MW for FY 2023-24. Thus, to meet the increase in demand along with evacuation requirement of power from generating stations, drawing of power from ISTS, augmentation works considering the operational constraints and to sustain even during contingencies, UPPTCL has planned the capital expenditure for FY 2023-24.

In regard to system mismatch and connected load data, the Petitioner submitted that Discoms project their peak demand by considering the existing connected load as well as load growth, taking into account of diversity factor, load factor, supply hours etc. It is also pointed out that the transmission network is planned in accordance with peak demand projections provided by the Discoms. Further the Discom's installed MVA capacity at the 33 kV for the State in FY 2021-22 was 57,815 MVA, through which UPPTCL has adequately handled the peak demand during the year and in past years without any significant peak/energy deficit.



Further, if the transformation capacity of UPPTCL at 132/33 kV is set-up equivalent to the connected load at Discom level i.e. upto 75000 MW as submitted by Shri. Avadhesh Kumar Verma, this will require extra investment towards such additional capacity by both Discoms and UPPTCL and will also impose additional burden on the consumers due to increase in the transmission/retail tariff and also the part of the transformation capacity at the 132/33 kV level will remain un-utilised for most of the off-peak period.

Commission's View

3.2.18 The Commission has noted the comments of the Stakeholder and reply of the Petitioner. STU plan the transmission network for the State in accordance with the CEA Transmission Planning Criteria under Section 73(a) of the Electricity Act, 2003, taking into consideration various parameters including requirement of Discoms, transmission capacity at different voltage level etc. Further, development is ensured by the transmission licensee / STU as per Section 39 & 40 of EA, 2003 and as per regulatory framework which is among others UPGEC, Connectivity Regulations and Open Access Regulations etc. The EA 2003 and framework enacted thereunder cast duty of transmission licensee / STU to plan and develop the robust intra-state transmission network in timely manner for reliable and efficient transmission of electricity. Accordingly, UPPTCL shall ensure planning, development and strengthening of transmission network in coordinated and economical manner in term of various framework / regulatory norms/ guidelines applicable.

3.2.19 The list of consumers, who attended the Public Hearing, is appended at **Annexure-3**.





4 TRUE-UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2021-22

4.1 INTRODUCTION

- 4.1.1 The Commission in its Tariff Order for FY 2021-22 dated June 29, 2021 in Petition No. 1656 of 2020 carried out the Truing-Up for FY 2019-20, Annual Performance Review (APR) for FY 2020-21 and Aggregate Revenue Requirement (ARR) and Tariff for FY 2021-22. The Petitioner had filed an appeal (DFR No. 214 of 2022, I.A. No. 841, 842 & 843 of 2022) before the Hon'ble APTEL challenging this Tariff Order.
- 4.1.2 Further, the Commission, in its Tariff Order for FY 2022-23 dated July 20, 2022 in Petition No. 1839 of 2022 approved the True-Up of ARR for FY 2020-21, APR for FY 2021-22 and ARR and Tariff for FY 2022-23 of UPPTCL. The Petitioner had filed an appeal (Appeal No. 131 of 2023) before the Hon'ble APTEL challenging this Tariff Order.
- 4.1.3 The Petitioner has now sought approval for True-Up for FY 2021-22 based on the audited accounts taking into consideration the provisions of MYT Regulations, 2019.
- 4.1.4 The Commission, based on the provisions of the MYT Regulations, 2019, has now carried out the True-Up for FY 2021-22 taking in account the following:
- (a) Audited accounts for FY 2021-22;
 - (b) MYT Regulations, 2019;
 - (c) Materials placed before the Commission;
 - (d) Methodology adopted by the Commission in its earlier Orders.
- 4.1.5 The component-wise description of the Petitioner's submission and the Commission's analysis on the same is detailed in the subsequent paragraphs.

4.2 TRANSMISSION SYSTEM AVAILABILITY

Petitioner's Submission

- 4.2.1 The Petitioner submitted that as per Regulations 2019, the Transmission System Availability Factor for a Calendar Month (TAFM) shall be calculated by the respective Transmission Licensee, got verified and certified by UPSLDC and separately for each A.C. Transmission System and grouped according to sharing of transmission charges. Further, TAFM (%) shall be equal to $(100 - 100 \times \text{NAFM})$, where NAFM is the non-availability factor in per unit for the month, for the Transmission System / sub-system. The formula for NAFM for A.C. systems / sub-systems shall be equal to:

$$= \frac{[\sum_{l=1}^L (OH_l \times Cktkm_l \times NSC_l) + \sum_{t=1}^T (OH_t \times MVA_t \times 2.5) + \sum_{r=1}^R (OH_r \times MVAR_r \times 4)]}{THM \times [\sum_{l=1}^L (Cktkm_l \times NSC_l) + \sum_{t=1}^T (MVA_t \times 2.5) + \sum_{r=1}^R (MVAR_r \times 4)]}$$

Where,

I = identifies a transmission line circuit;

t = identifies a transformer / Inter connecting transformer (ICT);

r = identifies a bus reactor, switchable line reactor or Static VAR Compensation (SVC);

L = total number of line circuits;

T = total number of bus reactors, switchable line reactors and SVCs;

R = total number of bus reactors, switchable line reactors and SVCs;

OH = Outage hours or hours of non-availability in the month, excluding the duration of outages not attributable to the Transmission Licensee,

Ckt. km = Length of a transmission line circuit in km;

NSC = Number of sub-conductors per phase;

MVA = MVA rating of a transformer / ICT;

MVAR = MVAR rating of a bus reactor switchable line reactor or an SVC (in which case it would be the sum of inductive and capacitive capabilities);

THM = Total hours in the month;

- 4.2.2 The Petitioner vide its additional submission dated February 15, 2023 claimed the actual transmission availability for UPPTCL's Transmission System as 99.52% for FY 2021-22.

Table 4-1: NORMATIVE & ACTUAL ANNUAL TRANSMISSION SYSTEM AVAILABILITY FACTOR SUBMITTED BY PETITIONER (%)

Particulars	FY 2021-22 (True up)	
	Business Plan Order dated 15.10.2020 & as per Regulation 33.1.1 of MYT Regulations, 2019	Petition (True up)
Normative Annual Transmission System Availability factor	98.00%	98.00%
Actual Annual Transmission System Availability factor	-	99.52%

Commission's Analysis

- 4.2.3 Regulation 33.1.1 of MYT Regulations, 2019 specifies the Normative Annual Transmission System Availability factor (NATSAF) for AC system as 98% as quoted below:

Quote

33.1 Target availability

33.1.1 Normative Annual Transmission System Availability factor (NATSAF) shall be as under:

- 1) AC System: 98%;
- 2) HVDC bi-pole links and back-to-back Stations: 95%

Unquote

- 4.2.4 The Commission vide its letter dated January 05, 2023 directed the Petitioner to submit the actual transmission availability for FY 2021-22 duly certified by UPSLDC. In compliance to the Commission's direction, the Petitioner vide additional submission dated February 15, 2023 submitted the actual transmission availability for FY 2021-22 as 99.52% duly certified by Director (Operations) UPPTCL.
- 4.2.5 The Commission has gone through the details submitted by the Petitioner and accordingly approves the actual transmission availability for FY 2021-22 as 99.52% as shown below:

Table 4-2: NORMATIVE & ACTUAL ANNUAL TRANSMISSION SYSTEM AVAILABILITY FACTOR APPROVED BY THE COMMISSION (%)

Particulars	FY 2021-22 (True up)		
	Business Plan Order dated 15.10.2020 & as per Regulation 33.1.1 of MYT Regulations, 2019	Petition (True up)	Approved (True up)
Normative Annual Transmission System Availability factor	98.00%	98.00%	98.00%
Actual Annual Transmission System Availability factor	-	99.52%	99.52%

4.3 INTRA-STATE TRANSMISSION LOSS

Petitioner's Submission

4.3.1 The Petitioner submitted that UPSLDC issues energy account at (T-D) interface point (i.e. actual drawl by Distribution Licensee from intra-state transmission system) on the basis of MRI data of energy meter at these interface points through processing the same in EASS software at UPSLDC. The same is compiled from the data of energy statements prepared on the basis of the joint monthly manual reading of various energy meters at grid sub-station level.

4.3.2 It is further submitted that presently actual Injected energy at G-T interface points for the generators (intra-state entity) under the scheduling regime and actual energy at inter-state interface points is only available through EASS software. Actual injected



energy data of co-gen, solar generating stations which is not provided in EASS is accounted from the data provided by the transmission zones energy accounts.

- 4.3.3 UPSLDC is providing the intra-state transmission loss on the basis of injected & drawl energy data available in EASS software only.
- 4.3.4 The Petitioner submitted the actual Intra-State Transmission loss as 3.33% against the approved value of 3.33% as shown below.

Table 4-3: INTRA-STATE TRANSMISSION LOSS SUBMITTED BY PETITIONER (%)

Particulars	FY 2021-22 (True up)	
	Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
Intra-State Transmission loss	3.33%	3.33%

Commission's Analysis

- 4.3.5 Regulation 38 of MYT Regulations, 2019 related to Transmission Losses is reproduced below:

Quote

38 Transmission Losses

The energy losses in the Intra-State Transmission System, as determined by the State Load Despatch Centre and approved by the Commission, shall be borne by the Transmission System Users in proportion to their usage of the Intra-State Transmission System.

Unquote

- 4.3.6 The past trends of actual Intra-State transmission losses are shown below:

Table 4-4: ACTUAL INTRA-STATE TRANSMISSION LOSS FROM FY 2008-09 TO FY 2013-14 (%)

Particulars	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Intra-State Transmission loss	4.11%	3.98%	3.56%	3.63%	4.08%	4.10%

Table 4-5: ACTUAL INTRA-STATE TRANSMISSION LOSS FROM FY 2014-15 TO FY 2020-21 (%)

Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Intra-State Transmission loss	3.67%	3.59%	3.55%	3.56%	3.56%	3.43%	3.37%

- 4.3.7 The Intra-State transmission losses has been considered as per joint statement signed by UPPTCL and UPSLDC for FY 2021-22. The Commission observes that the Petitioner was able to achieve Intra State Transmission Loss within the target.





Table 4-6: INTRA-STATE TRANSMISSION LOSS APPROVED BY THE COMMISSION (%)

Particulars	FY 2021-22 (True up)		
	Tariff Order FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
Intra-State Transmission loss	3.33%	3.33%	3.33%

4.4 OPERATION AND MAINTENANCE EXPENSES (O&M)

Petitioner's Submission

- 4.4.1 The Petitioner submitted that in accordance with Regulations 34(b) and 34(c) of MYT Regulations, 2019, they have worked out the base year O&M expenses i.e., for FY 2019-20 by considering the trued-up value of each component of O&M expenses as approved by the Commission for FY 2015-16 and FY 2016-17 and normative O&M expenses as submitted in the true-up Petitions for the period from FY 2017-18 to FY 2019-20.
- 4.4.2 The Petitioner further added that the Commission while truing-up the O&M expenses for FY 2017-18 & FY 2018-19 vide its Tariff Order for FY 2020-21 dated November 10, 2020 and true up for FY 2019-20 vide Tariff Order of FY 2021-22 dated June 29, 2021 had considered the lower of normative and actual value instead of normative. The Petitioner had also filed a review Petition in this regard (Review Petition No. 1682 of 2021 against the Commission Tariff Order for FY 2020-21 dated November 10, 2020 and Review Petition No. 1776 of 2021 against the Commission Tariff Order for FY 2021-22 dated June 29, 2021) before the Commission. In light of above-mentioned reasons, the Petitioner has considered the normative O&M Expenses as per the true-up Petitions for the period from FY 2017-18 to FY 2019-20 and escalation factors as per Regulation 34(c) for arriving at Base Year norms i.e., FY 2019-20.

Table 4-7: BASE YEAR (FY 2019-20) O&M EXPENSES SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Normative Expenses (upto Base Year)		
						FY 2017-18 (Mid-Year)	FY 2018-19	FY 2019-20 (Base-Year)
Employee Expenses	473.99	513.86	848.56	1054.67	1227.95	823.80	866.63	920.06
A&G Expenses	28.35	62.51	38.14	37.81	54.16	44.20	46.49	49.36
R&M Expenses	167.81	205.35	344.94	423.70	495.72	327.50	344.53	365.77
O&M Expenses	607.15	781.72	1,231.64	1,516.18	1,777.83	1,195.5	1,257.65	1,335.19
WPI & CPI Combined Inflation Rate Considered (%)	-	-	-	-	-	-	5.20%	6.17%

- 4.4.3 The Petitioner submitted that they have segregated each component of O&M expenses. The Petitioner has calculated the normative Employee Expenses for



FY 2020-21 based on normative Employee Expenses derived for Base Year i.e., for FY 2019-20 in the Petition and escalated the same based on average of actual Consumer Price Index (CPI) for immediately preceding three financial years (5.30%) in accordance with Regulation 34.1 of MYT Regulations, 2019. The computed Employee Expenses for FY 2020-21 is further escalated based on average of actual Consumer Price Index (CPI) for immediately preceding three financial years (6.00%) to derive the normative value for FY 2021-22. The Employee Expense capitalisation for FY 2021-22 on actuals as per annual accounts for FY 2021-22.

- 4.4.4 Similarly, the Petitioner has projected the normative R&M Expenses for FY 2021-22 based on normative value of R&M Expenses derived for FY 2020-21 in the Petition and escalated the same based on average of actual Wholesale Price Index (WPI) for immediately preceding three financial years (2.41%) in accordance with Regulation 34.2 of MYT Regulations, 2019.
- 4.4.5 To calculate the normative A&G Expenses for FY 2021-22, the Petitioner has considered the normative value of A&G Expenses derived for FY 2020-21 in the Petition and escalated the same based on average of actual Wholesale Price Index (WPI) for immediately preceding three financial years (2.41%) in accordance with Regulation 34.3 of Tariff Regulations, 2019. The Petitioner has additionally claimed Rs. 5.94 Crore and Rs. 0.06 Crore towards Licensee Fee and Finance Charges respectively over and above the normative A&G Expenses.
- 4.4.6 The Petitioner submitted that the approach of the Commission in Tariff Order dated November 10, 2020 for FY 2020-21, Tariff Order dated June 29, 2021 for FY 2021-22 and Tariff Order dated July 20, 2022 for FY 2022-23 deviates from the approach stipulated in MYT Regulations, 2014, which had been consistently followed in past Tariff Orders of the Petitioner dated November 30, 2017, January 08, 2019 and August 27, 2019. Moreover, the State Distribution Licensees have challenged the new approach of the Commission vide an appeal before the Hon'ble APTEL against the Tariff Order of State-Owned Distribution Licensees for FY 2019-20 dated September 03, 2019 in Appeal No. 389 of 2019. The Petitioner has also challenged Commission's Tariff Order dated November 10, 2020 and June 29, 2021 before the Hon'ble APTEL. Further, the Petitioner is also in the process of challenging the Commission's Tariff Order dated July 20, 2022 before the Hon'ble APTEL.
- 4.4.7 The Petitioner prayed that the normative O&M Expenses may be considered for the period from FY 2017-18 to FY 2019-20 to arrive at Base Year value i.e., FY 2019-20 and requested the Commission to allow the O&M Expenses on normative basis.





4.4.8 The Petitioner also emphasised that normative R&M Expenses i.e. Rs. 385.68 Crore is lower than actual R&M Expenses of Rs. 391.04 Crore for FY 2021-22. Similarly, the normative A&G Expenses are also lower than the actual A&G Expenses for FY 2021-22.

Table 4-8: NORMATIVE O&M EXPENSES SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Actual (Audited Accounts)	Petition (True-up)
Employee Expenses	A	671.58	714.49	1,026.93
Less: Employee Expenses Capitalised	B	406.64	192.89	192.89
Net Employee Expenses	C=A-B	264.94	512.0	834.04
A&G Expenses	D	52.80	79.41	58.05
Add: Licensee Fee	E			
Add: Finance Charges	F			
Net A&G Expenses	G=D+E+F	52.80	79.41	58.05
R&M Expenses	H	378.45	391.04	385.68
Normative O&M Expenses	I=C+G+H	696.19	992.06	1,277.77

Commission's Analysis

4.4.9 Regulation 34 of MYT Regulations, 2019 specifies the norms for calculation of O&M Expenses for Base Year (FY 2019-20) as reproduced below:

Quote

34 Operation and Maintenance Expenses

- The Operation and Maintenance expenses for the Transmission Business shall be computed as stipulated in with these Regulations.
- The Operation and Maintenance expenses shall be derived on the basis of the average of the Trued-Up values (without efficiency gain / loss) for the last five (5) financial years ending March 31, 2019 subject to prudence check by the Commission. However, if Trued-Up values (without efficiency gain / loss) are not available for FY 2018-19, then last five (5) available Trued-Up values (without efficiency gain / loss) will be considered and subsequently when the same are available the base year value (i.e. FY 2019-20) will be recomputed.
- The average of such operation and maintenance expenses shall be considered as Operation and Maintenance expenses for the middle year and shall be escalated year on year with the escalation factor considering CPI and WPI of respective years in the ratio of 60:40, for subsequent years up to FY 2019-20.
- The One-time expenses such as expense due to change in accounting policy, wage arrears paid due to Pay Commissions, etc., and the expenses beyond the control of the Transmission

Licensee such as dearness allowance, terminal benefits, etc., in Employee cost, may be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check.

- e) At the time of Truing-up of the O&M expenses, the actual point to point inflation over Wholesale Price Index numbers as per Office of Economic Advisor of Government of India and the actual Consumer Price Index for Industrial Workers (all India) as per Labour Bureau, Government of India, in the concerned year shall be considered.

Unquote

4.4.10 The Petitioner had filed a review Petition (Petition No. 1682 of 2021) before the Commission to review the Commission's Tariff Order dated November 10, 2020 passed in Petition No. 1515 of 2020 & 1571 of 2020 limited to true up period of FY 2017-18 and FY 2018-19 on the following grounds:

- To approve the O&M Expenses on normative value against as approved value based on lower of normative or actual for each element of O&M Expenses as per MYT Regulations, 2014;
- To allow 25% capital investments which is disallowed during truing up.

4.4.11 The Petitioner on the similar grounds also filed review Petition (Petition No. 1776 of 2021) against the Commission's Tariff Order dated June 29, 2021 limited to Truing-Up of FY 2019-20.

4.4.12 The Commission after hearing the Petitioner disposed both the above said Petitions on the grounds of maintainability. The relevant extracts are reproduced below:

Relevant extract of Order dated March 07, 2022 in Petition No. 1682 of 2021:

Quote

Commission's view

.....
18. In view of foregoing, it is pertinent to mention that the Commission has decided the issues after careful consideration of facts of the case and the reasonings have been provided in the Tariff Order itself. Therefore, the Commission is of view that the Petitioner has not been able to establish as how this Petition was coming under the scope of review. Either a ground that "Presentation of a fact which was existing at the time of passing the initial Order but which could not be placed before the court despite the due diligence of review applicant and which has potential to alter the course judgment" or "an order where an inadvertent error has crept in" are the only two grounds, which can be taken for invoking the review jurisdiction of the court. The Petitioner's

grounds of review are associated with the approach that has been applied and not of any error apparent in calculation of O&M expenses and allowance of capital expenditure. Further, the Commission issued speaking order while allowing the O&M expenses and capital expenditure. The Commission is of the view that such matters, which will require a change in approach, cannot be addressed through a Review Petition, which is meant to cure only those defects or apparent errors which can be pinpointed without any elaborate argument.

19. In fact, Hon'ble Supreme Court in catena of judgments has already held that: A review is by no means an appeal in disguise whereby an erroneous decision is reheard and corrected but lies only for patent error [Tungabhadra & c v. Govt, A 1964 SC 1372; Shiv Ganesh v. State of UP., AIR 2005 All 412 (415,416)]. It has also been clearly laid down by the Hon'ble Supreme Court that: The scope of review is for review of "error apparent" only and not to review the judgment/order, even if the parties are in a position to satisfy the Court that the order under review is an erroneous order [Sharada Devi v. Bank of India, (2001), 2 BLJR 967 (969) (Pat); Ahmedabad Electricity Co. Ltd v. State of Gujarat, AIR 2003 Guj 157 (159) (DB)]. Hon'ble Supreme Court has also held that: Decision wrong in law is not error apparent on the face of record [Bardhan v. Sarkar, 53 CWN 869]. In face of above judgments of Hon'ble Supreme Court the grounds taken by review applicant prima facie does not fall stricto sensu within the scope of review.

Unquote

Relevant extract of Order dated March 09, 2022 in Petition No. 1776 of 2021:

Quote

Commission's view

14. The Commission regarding issue of Operation & Maintenance Expenses observed that, the Commission has taken a considered view to allow O&M expenses as actual or normative whichever is lower. The Commission deliberated upon the issue in detail and the justification so made in the Tariff Order for FY 2021-22 dated 29.06.2021 is reproduced here below: -

"-----

4.7.17 The Commission, vide Tariff Order dated 10.11.2020 in the matter of True-up Order of FY 2018-19 of UPPTCL had decided to allow lower of normative or actual expenses for each component of O&M. The relevant extract of the same is reproduced below:

Quote

5.6.19 The Commission, vide order dated 03.09.2019 in the matter of True-up Order of FY 2018-19 for State owned Discoms was of the view that there is a wide variation between normative and actual parameters of O&M expenses, which



cannot be on the account of efficiency of the Petitioners. The relevant extracts are as under:

"4.5.10 The Commission observed that there is a large variation in the normative and actual O&M Expenses. It should be noted that the Business Plan for the MYT Control Period was prepared taking into consideration, higher sales, power purchase, O&M etc. In its current filings the Licensees have shown considerable reduction in all the components, like lower sales, power purchase, O&M expenses etc. which resulted in vast variation in all the parameters. The sharing of gains is allowed for incentivisation of efficiency. It is for sure that such wide variations cannot be on account of the efficiency of the licensees. Hence, the Commission is not allowing the sharing of O&M Expenses. Further, the Commission directs the Licensees to submit the detailed explanation for this variation in its next filings.

4.5.11 The Petitioners have considered lower of the total O & M expenses as per normative or Audited Accounts. However, the Commission while allowing the O&M expenses, has considered the "lower of normative or actual for each element of O&M, i.e. Employee Expense, R&M & A&G" otherwise the purpose of having individual norms of Employee Expenses, A&G Expenses, and R&M Expenses will be affected."

5.6.20 As per above, the Commission has taken a view to allow the "lower of normative or actual for each element of O&M, i.e. Employee Expense, R&M & A&G". It is further pertinent to mention, that the above approach of the Commission is sub judice before Hon'ble APTEL. Since, the provisions applicable for O&M expenses are same for both State owned Discoms and UPPTCL under both the MYT Regulations 2014, therefore it would be prudent to consider the same approach for UPPTCL also.

Unquote

-----"

15. It can be seen from the above that the Commission has taken a conscious view in the matter reasoning that as the said approach was sub judice in Hon'ble APTEL in Appeal No. 389 of 2019 in the matter of Tariff Order of FY 2019-20 dt. 03.09.2019 of the UP State Discoms, therefore it would be prudent to consider the same approach for UPPTCL also.

16. Further, regarding disallowance of sharing of gains, the Commission observed in Tariff Order for FY 2021-22 dated 29.06.2021 as follows:

"-----"





4.7.20 In line with previous view, the Commission from above observes that there is a large variation between normative and actual O&M Expenses of UPPTCL. It is pertinent to mention that the norms in the Business Plan for the MYT Control Period was prepared taking into consideration line length (ckt kms), no. of bays, no. of employees, energy handled, etc. over the past years and the O&M expenses were allowed considering the projections of line length (ckt kms), no. of bays, energy handled by the Petitioner. It is observed that in its current true-up filings, the actual expenses as per audited account are very low, compared to normative figures, which has resulted in vast variation in the parameters.

4.7.21 The Commission is of the view that the sharing of gains is allowed only for the purpose of Incentivisation of efficiency. It is for sure that such wide variations cannot be on account of the efficiency of the licensee. Hence, the Commission is not allowing the sharing gain/loss of O&M Expenses in line with the view taken in the previous Tariff Order in case of True up of FY 2017-18 & FY 2018-19 dated 10.11.2020.

-----"

17. Further, regarding issue of disallowance of capital expenditure, it was observed that the Commission after considering all the facts took a conscious decision to disallow 25% of capital investment. The relevant extract of the Tariff Order for FY 2021-22 dated 29.06.2021 is reproduced as below: -

"-----

4.3.17 Further the Petitioner has not submitted the supporting document required to be submitted and the Petitioner cannot take recourse of the Tariff Petition to approve the schemes that were to be submitted for prior approval of the Commission before the commencement of the work through separate proceedings. Hence the same cannot be considered.

4.3.18 Further, in the True-of FY 2018-19 Order dated 10.11.2021, the Commission in this regard had observed as under:

Quote

5.2.14 From the above, it is observed, that the Commission in its Tariff Orders and further proceedings, kept reminding the Petitioner to submit the Capital investment plan and take prior approval of the schemes greater than INR 10 Crore as per Regulation 19A of the UPERC MYT Regulations 2014. **However, the Petitioner did not take prior approval for the Commission for any of the schemes with capital expenditure greater than INR 10 Crore. Accordingly, the Commission has decided to**





disallow 25% of the Capital investment for FY 2018-19 due to repeated non-compliance of the Commission's orders.

Unquote

4.3.19 Thus, in view of the above discussion the Commission is of opinion that since the Petitioner has not taken prior approval of the Commission for any of the schemes with the capital expenditure greater than 10 Crore in accordance with UPERC (Multi Year Transmission Tariff) Regulations, 2014, hence it is decided to disallow 25% of the Capital investment for FY 2019-20 due to repeated non-compliance of the Commission's Orders, in line with the True-Up Order of FY 2018-19 dated 10.11.2021.

-----"

18. In view of foregoing, it is pertinent to mention that the Commission has decided the issues after careful consideration of facts of the case and the reasonings have been provided in the Tariff Order itself. Therefore, the Commission is of view that the Petitioner has not been able to establish as how this Petition was coming under the scope of review. Either a ground that "Presentation of a fact which was existing at the time of passing the initial Order but which could not be placed before the court despite the due diligence of review applicant and which has potential to alter the course judgment" or "an order where an inadvertent error has crept in" are the only two grounds, which can be taken for invoking the review jurisdiction of the court. The Petitioner's grounds of review are associated with the approach that has been applied and not of any error apparent in calculation of O&M expenses and allowance of capital expenditure. Further, the Commission issued speaking order while allowing the O&M expenses and capital expenditure. The Commission is of the view that such matters, which will require a change in approach, cannot be addressed through a Review Petition, which is meant to cure only those defects or apparent errors which can be pinpointed without any elaborate argument.

19. In fact, Hon'ble Supreme Court in catena of judgments has already held that: A review is by no means an appeal in disguise whereby an erroneous decision is reheard and corrected but lies only for patent error [Tungabhadra & c v. Govt, A 1964 SC 1372; Shiv Ganesh v. State of UP., AIR 2005 All 412 (415,416)]. It has also been clearly laid down by the Hon'ble Supreme Court that: The scope of review is for review of "error apparent" only and not to review the judgment/order, even if the parties are in a position to satisfy the Court that the order under review is an erroneous order [Sharada Devi v. Bank of India, (2001), 2 BLJR 967 (969) (Pat); Ahmedabad Electricity Co. Ltd v. State of Gujarat, AIR 2003 Guj 157 (159) (DB)]. Hon'ble Supreme Court has also held that: Decision wrong in law is not error apparent on the face of record [Bardhan v. Sarkar, 53 CWN 869]. In face of above judgments of Hon'ble Supreme



*Court the grounds taken by review applicant prima facie does not fall
stricto sensu within the scope of review.*

Unquote

- 4.4.13 The Commission observes that the Petitioner instead of considering the average of Trued-Up values (without efficiency gain / loss) for the last five financial years, considered the Trued-Up values of FY 2015-16 & FY 2016-17 and normative values for the period from FY 2017-18 to FY 2019-20 as claimed in its earlier Tariff Petitions, which is not as per MYT Regulations, 2019. Further, the inflation index considered by Petitioner is not in line with the WPI and CPI (Inflation index) issued by Government of India. Thus, the Commission has accordingly computed the mid-year value (FY 2017-18) to derive the O&M Expenses for Base year value (FY 2019-20).
- 4.4.14 The Commission has computed the mid-year value (FY 2017-18) taking into account the trued-up value for the last five financial years (FY 2015-16 to FY 2019-20) as per Regulation 34(b) of MYT Regulations, 2019. Further, for computing normative values for FY 2019-20, the mid-year value (FY 2017-18) is escalated on yearly basis with the escalation factor considering actual CPI and WPI of respective years in the ratio of 60:40, for subsequent years up to FY 2019-20 in line with Regulation 34(c) of MYT Regulations, 2019.
- 4.4.15 Further, the Commission has considered the WPI and CPI inflation rate notified by Labour Bureau, Govt. of India (GoI) (http://labourbureau.gov.in/LBO_indexes.htm) and Economic Advisor Govt. of India (<https://eaindustry.nic.in/>) respectively for different years as shown in the Table below:

Table 4-9: INFLATION INDEX FOR FY 2021-22 CONSIDERED BY THE COMMISSION (%)

FY	INDEX		INFLATION RATE		Average of Last 3 Years	
	WPI	CPI	WPI	CPI	WPI	CPI
FY 2013-14	112.46	236.00	5.20%	9.68%		
FY 2014-15	113.88	250.83	1.26%	6.29%		
FY 2015-16	109.72	265.00	-3.65%	5.65%		
FY 2016-17	111.62	275.92	1.73%	4.12%		
FY 2017-18	114.88	284.42	2.92%	3.08%		
FY 2018-19	119.79	299.92	4.28%	5.45%		
FY 2019-20	121.80	322.50	1.68%	7.53%		
FY 2020-21	123.38	338.69	1.29%	5.02%	2.96%	5.35%
FY 2021-22	139.41	356.06	13.00%	5.13%	2.42%	6.00%
FY 2022-23	153.02	374.03	9.77%	5.05%	5.32%	5.89%

- 4.4.16 The escalation factor for FY 2018-19 and FY 2019-20 is computed as per Regulation 34 (c) of MYT Regulations, 2019 which is as follows: -



Table 4-10: ESCALATION FACTOR FOR FY 2018-19 & FY 2019-20 AS COMPUTED BY THE COMMISSION (%)

FY	INDEX		INFLATION RATE	Escalation Factor
	WPI	CPI		
	(A)	(B)	(C)=40%*(A)+60%*(B)	(D)=Current Year/Previous Year
FY 2017-18	114.88	284.42	216.60	-
FY 2018-19	119.79	299.92	227.87	5.20% = {(227.87/216.60)-1}%
FY 2019-20	121.80	322.50	242.22	6.30% = {(242.22/227.87)-1}%

Table 4-11: O&M EXPENSES FOR BASE YEAR (FY 2019-20) APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	Normative Expenses (upto Base Year)		
						FY 2017-18 (Mid-Year)	FY 2018-19	FY 2019-20 (Base-Year)
Employee Expenses	473.99	513.86	507.06	553.70	640.21	537.76	565.74	601.37
A&G Expenses	28.35	62.51	39.00	38.25	53.41	44.79	47.12	50.08
R & M Expenses	167.81	205.35	341.83	413.44	460.19	317.72	334.25	355.30
O&M Expenses	671.41	782.88	887.88	1,005.39	1,153.81	900.27	947.10	1,006.76
Weighted Average Inflation Index (40%*WPI+60%*CPI)	-	-	-	-	-	-	5.20%	6.30%

4.4.17 The table below shows the variation in the base year (FY 2019-20) value of O&M Expenses as claimed by Petitioner with respect to approved value by Commission.

Table 4-12: DIFFERENCE BETWEEN PETITIONER AND COMMISSION IN BASE YEAR (FY 2019-20) VALUE OF O&M EXPENSES (Rs. Crore)

Particulars	Derivation	Claimed by Petitioner			Approved by the Commission		
		FY 2017-18 (Mid-Year)	FY 2018-19	FY 2019-20 (Base-Year)	FY 2017-18 (Mid-Year)	FY 2018-19	FY 2019-20 (Base-Year)
Employee Expenses	A	823.80	866.63	920.06	537.76	565.74	601.37
A&G Expenses	B	44.20	46.49	49.36	44.79	47.12	50.08
R & M Expenses	C	327.50	344.53	365.77	317.72	334.25	355.30
O&M Expenses	D=A+B+C	1,195.50	1,257.65	1,335.19	900.27	947.10	1,006.76
Weighted Average Inflation Index (40%*WPI+60%*CPI)	-	-	5.20%	6.17%	-	5.20%	6.30%

4.4.18 Thus, it is observed that the normative A&G Expenses computed by the Commission for FY 2019-20 (Base year) is more than the claimed value by Petitioner.

4.4.19 Regulation 34.1, 34.2 and 34.3 of MYT Regulations, 2019 specifies the methodology to compute each component of O&M Expenses as stated below:

Quote

34.1 Employee Cost

Employee cost shall be computed as per the following formula escalated by consumer price index (CPI), adjusted by provisions for expenses beyond the control of the Licensee and one-time expected expenses, such as recovery/adjustment of terminal benefits, implications of Pay Commission, arrears, Interim Relief, etc.,

$$EMP_n = EMP_{n-1} (1 + \text{CPI inflation})$$

Where:

EMP_n : Employee expense for the n th year;

EMP_{n-1} : Employee expense for the $(n-1)$ th year;

CPI inflation is the average of Consumer Price Index (CPI) for immediately preceding three Financial Years.

34.2 Repairs and Maintenance Expense

Repair and Maintenance expense shall be calculated as per the following formula:

$$R\&M_n = R\&M_{n-1} (1 + \text{WPI inflation})$$

Where:

$R\&M_n$: Repairs & Maintenance expense for n th year;

$R\&M_{n-1}$: Repairs & Maintenance expense for the $(n-1)$ th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years.

34.3 Administrative and General Expenses

A&G expense shall be computed as per the following formula escalated by the Wholesale Price Index (WPI) and adjusted by provisions for confirmed initiatives (IT, etc., initiatives as proposed by the Transmission Licensee and validated by the Commission) or other expected one-time expenses:

$$A\&G_n = A\&G_{n-1} (1 + \text{WPI inflation})$$

Where:

$A\&G_n$: A&G expense for the n th year;

$A\&G_{n-1}$: A&G expense for the $(n-1)$ th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years:

Provided that Interest and Finance charges such as Credit Rating charges, collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges shall be a part of A&G expenses.

Illustration: For FY 2020-21, $(n-1)$ th year will be FY 2019-20 which is also the base year.

Unquote

4.4.20 The Commission has calculated the normative Employee Expenses for FY 2020-21 by escalating the normative Employee Expenses for FY 2019-20 derived above, with inflation factor (5.35%) i.e., Consumer Price Index (CPI) as per Regulations 34.1 of MYT



Regulations, 2019. Further, the normative Employee Expenses for FY 2021-22 is computed by escalating the normative Employee Expenses for FY 2020-21, with inflation factor (5.13%) i.e., actual point to point inflation factor i.e. Consumer Price Index (CPI) for FY 2021-22 as per Regulations 34 (e) and 34.1 of MYT Regulations, 2019.

4.4.21 The Commission has calculated the normative R&M Expenses for FY 2020-21 by escalating the normative R&M Expenses for FY 2019-20 derived above, with inflation factor (2.96%) i.e. Wholesale Price Index (WPI) as per Regulations 34.2 of MYT Regulations, 2019. Further, the Commission has computed the normative R&M Expenses for FY 2021-22 by escalating the normative R&M Expenses for FY 2020-21, with inflation factor (13.00%) i.e. Wholesale Price Index (WPI) for FY 2021-22 as per Regulations 34 (e) and 34.2 of MYT Regulations, 2019.

4.4.22 The Commission observes that the Petitioner has claimed the Licensee Fee and Finance Charge over and above the normative value, whereas the Commission has considered the Licensee Fee and Finance Charge as a part of A&G Expenses while deriving the Mid-Year value (FY 2017-18) and Base-Year value (FY 2019-20). Hence, the claim of Petitioner for allowing Licensee Fee and Finance Charge separately over and above the normative value cannot be considered as the same has been taken into consideration while deriving the normative value of A&G Expenses for FY 2021-22.

4.4.23 The Commission has calculated the normative A&G Expenses for FY 2020-21 by escalating the normative A&G Expenses (A&G Expenses including Licensee Fee and Finance Charge) for FY 2019-20 derived above, with inflation factor (2.96%) i.e. Wholesale Price Index (WPI) as per Regulations 34.3 of MYT Regulations, 2019. Further, the Commission has computed the normative A&G Expenses for FY 2021-22 by escalating the normative A&G Expenses (A&G Expenses including Licensee Fee and Finance Charge) for FY 2020-21, with inflation factor (13.00%) i.e. Wholesale Price Index (WPI) for FY 2021-22 as per Regulations 34 (e) and 34.3 of MYT Regulations, 2019.

4.4.24 The inflation indices considered by the Commission is shown in the Table below:

Particulars	Whole Sale Price Index				Consumer Price Index			
	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
April	121.10	119.20	132.00	152.30	312.00	329.00	345.89	367.78
May	121.60	117.50	132.90	155.00	314.00	330.00	347.33	371.52
June	121.50	119.30	133.70	155.40	316.00	332.00	350.50	372.10
July	121.30	121.00	135.00	154.00	319.00	336.00	353.66	374.11
August	121.50	122.00	136.20	153.20	320.00	338.00	354.24	374.98





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Particulars	Whole Sale Price Index				Consumer Price Index			
	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
September	121.30	122.90	137.40	151.90	322.00	340.13	355.10	378.14
October	122.00	123.60	140.70	152.90	325.00	344.16	359.71	381.60
November	122.30	125.10	143.70	152.50	328.00	345.31	362.02	381.60
December	123.00	125.40	143.30	150.50	330.00	342.14	361.15	381.02
January	123.40	126.50	143.80	150.70	330.00	340.42	360.29	382.46
February	122.20	128.10	145.30	150.90	328.00	342.72	360.00	382.18
March	120.40	129.90	148.90	150.90	326.00	344.45	362.88	383.90
Average	121.80	123.38	139.41	152.52	322.50	338.69	356.06	377.62
Calculation of Inflation	-	1.29%	13.00%	9.40%	-	5.02%	5.13%	6.05%

4.4.25 The Normative O&M Expenses is calculated based on the methodology discussed above is summarised in the table below:

Table 4-13: NORMATIVE O&M EXPENSES COMPUTED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2020-21	Actual CPI and WPI of FY 2021-22		FY 2021-22
		Normative (Computed)	WPI	CPI	Normative (Computed)
		(A)	(B)	(C)	(D) = (A)*(1+C) or (D) = (A)*(1+B)
Employee Expenses	A	633.57	-	5.13%	666.06
Less: Employee Expenses Capitalised	B	240.26	-	-	192.89
Net Employee Expenses	C=A-B	393.31	-	-	473.17
Net: A&G Expenses	D	51.57	13.00%	-	58.27
Net R&M Expenses	E	365.82	13.00%	-	413.36
O&M Expenses	F=C+D+E	810.69	-	-	944.80

4.4.26 The actual O&M Expenses for FY 2021-22 as per audited accounts for FY 2021-22 is as follows:

Table 4-14: ACTUAL O&M EXPENSES AS PER AUDITED ACCOUNTS (Rs. Crore)

Particulars	Derivation	FY 2021-22 (Actual)
Employee Expenses	A	714.49
Less: Employee Expenses Capitalised	B	192.89
Net Employee Expenses	C=A-B	521.60
A&G Expenses	D	79.41
Add: Licensee Fee	E	
Add: Finance Charges	F	
Net: A&G Expenses	G=D+E+F	79.41
Net R&M Expenses	H	391.04
O&M Expenses	I=C+G+H	992.06





4.4.27 Further, variation in O&M Expenses is considered as Controllable Factor as per Regulation 8.2 of MYT Regulations, 2019 and treatment of gain / (loss) on account of Controllable factor is governed as per Regulation 10 of MYT Regulations, 2019 as reproduced below:

Quote

8.2 The "Controllable Factors" shall include, but shall not be limited to the following:

(i) Variation in Operation & Maintenance expenses

10 Treatment of Gains or Losses on account of Controllable Factors

10.1 Lower of the value as approved in ARR or actual value as per the True-Up shall be allowed by the Commission.

Unquote

4.4.28 Thus, the Commission considers the net approved O&M Expenses for FY 2021-22 based on lower of actual or normative value of each component of O&M Expenses. Accordingly, the Commission approves the O&M Expenses for FY 2021-22 as shown in the table below:

Table 4-15: O&M EXPENSES APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)				
		Tariff Order for FY 2021-22 dated 29.06.2021	Audited Accounts	Petition (True-up)	Computed (Normative)	Approved (True up)
		(A)	(B)	(C)	(D)	(E) = Lower of (B) & (D)
Employee Expenses	A	671.58	714.49	1026.93	666.06	666.06
Less: Employee Expenses Capitalised	B	406.64	192.89	192.89	192.89	192.89
Net Employee Expenses	C=A-B	264.94	521.60	834.04	473.17	473.17
Net A&G Expenses	D	52.80	79.41	58.05	58.27	58.27
Net R&M Expenses	E	378.45	391.04	385.68	413.36	391.04
Total O&M Expenses	F=C+D+E	696.19	992.06	1277.77	944.80	922.48

4.4.29 It is observed that the approved value of A&G Expenses is more than the claimed value by Petitioner because the Petitioner has wrongly computed the base year value of A&G Expenses. In regard to R&M Expenses, the Petitioner has claimed the inflation index (WPI) as 2.41% instead of actual value of 13.00%. Thus, the normative value computed by the Commission is higher than the normative value claimed by the Petitioner, which is derived by the Commission based on actual WPI and CPI issued by Government of India as shown above.





4.5 CAPITAL WORK IN PROGRESS & GROSS FIXED ASSET

Petitioner's Submission

- 4.5.1 The Petitioner submitted that they have considered the Opening and Closing Capital Work in Progress (CWIP) as per Balance Sheet for FY 2021-22. The assets transferred to Gross Fixed Asset (GFA) are considered based on the audited accounts statement for FY 2021-22. Further, Employee Expenses capitalisation and Interest Capitalisation on Long Term Loans are claimed as per audited accounts.
- 4.5.2 The Petitioner further added that the Commission in its Tariff Order of FY 2020-21 dated November 10, 2020 and Tariff Order of FY 2021-22 dated June 29, 2021 had disallowed 25% of capital investment while truing up of FY 2017-18 & FY 2018-19 and FY 2019-20 respectively, citing that the Petitioner had not taken prior approval of capital expenditure in accordance with Regulation 19A of MYT Regulations, 2014. Subsequently, the Commission had also disallowed the Gross Fixed Asset (GFA) and Capital Work in Progress (CWIP) for the period from FY 2017-18 to FY 2019-20. Being aggrieved by the above, the Petitioner had filed a Review Petition seeking review of the disallowance in Capital Investment in the above said true up Orders. The CWIP and GFA for FY 2021-22 as submitted by the Petitioner is shown below:

Table 4-16: CAPITAL EXPENDITURE SUBMITTED BY PETITIONER (Rs. Crore)

Particular	Derivation	FY 2021-22 (True up)	
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True-up)
Opening CWIP as on 01.04.2021	A	8,315.33	7,958.32
Investments during FY 2021-22	B	5,123.22	2,514.07
Employee Expenses Capitalisation	C	406.64	192.89
A&G Expenses Capitalisation	D	180.94	174.63
Interest Capitalisation on Interest on Long Term Loans	E	14,026.13	10,839.90
Total Investments	F= A+B+C+D+E	3,506.53	3,888.09
Transferred to GFA (Total Capitalisation)	G	10,519.60	6,951.81
Closing CWIP as on 31.03.2022	H= F-G	8,315.33	7,958.32

Table 4-17: GFA AS SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)	
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
Opening GFA as on 01.04.2021	A	29,690.36	31,879.58
GFA Addition during FY 2021-22	B	3,506.53	3,888.09
Decapitalisation/ Deduction during FY 2021-22	C	214.77	188.94
Closing GFA as on 31.03.2022	D=A+B-C	3,2982.12	3,5578.74



Commission's Analysis

- 4.5.3 The relevant Regulation related to Capital Investment Plan as in MYT Regulations, 2019 is reproduced below:

Quote

32 Capital Investment Plan

32.1 The Transmission Licensee shall submit a detailed capital investment plan, financing plan and physical targets for each year of the Control Period for strengthening and augmentation of the Intra-State Transmission System of the Transmission Licensee, meeting the requirement of load growth, improvement in quality of supply, reliability, metering, reduction in congestion, etc., to the Commission for approval:

Provided that in case of non-submission of the Capital Investment Plan by the Transmission Licensee for a year of the Control Period, the Commission may disallow the Capital expenditure for that year.

32.2 The Capital Investment Plan shall be a least cost plan for undertaking investments. However, all capital expenditure projects of 220 kV and above and other capital expenditure of value exceeding Rs. Twenty Crore, must have prior approval of the Commission on quarterly basis, and will be subject to prudence check.

Unquote

- 4.5.4 The Commission in its Tariff Order for FY 2020-21 dated November 10, 2020 in Petition No. 1515 of 2020 (True-up for FY 2017-18) & 1571 of 2020 (True-up for FY 2018-19, APR for FY 2019-20, ARR for FY 2020-21) directed the Petitioner to submit the complete capital investment plan at the earliest and take separate approval(s) for projects above 20 Crores and 220 kV in compliance to Regulation 32.2 of MYT Regulations, 2019. The relevant extract of above said Order dated November 10, 2020 is as below:

Quote

7.3.6 The Commission observes that the Petitioner has submitted some DPRs or details for approval and the scrutiny of the same is under process. However, the 1st & 2nd quarter of the year has already passed. Therefore, the Commission has allowed 100% of the Capital Expenditure as claimed by the Petitioner for FY 2020-21.

7.3.7 However, the Commission directs the Petitioner to submit the complete capital investment plan at the earliest and take separate approval(s) for projects above 20 Crores and 220 kV in terms of Regulation 32.2 of UPERC MYT Regulations, 2019. It is to be noted that if the Licensee fails to submit the capital investment plan and does not





take separate approval(s) for projects above 20 Crores and 220 kV in terms of Regulation 32.2 of UPERC MYT Regulations 2019, the Commission would be forced to disallow the same in terms of the Regulations.

7.3.8 Therefore, in line with the above, the Commission has considered the following assumptions for the computation of GFA & CWIP for FY 2020-21:

- (a) to allow 100% of the claimed capital investments for FY 2020-21.
- (b) to allow 25% capitalization of total investments which includes opening CWIP, Employee capitalisation, A&G capitalisation, Interest capitalisation and investments during the year, as has been the past practice.

Unquote

- 4.5.5 Further, the Commission vide its Tariff Order for FY 2021-22 dated June 29, 2021 once again directed the Petitioner to comply Regulation 32.2 of MYT Regulations, 2019. The relevant extract is reproduced below:

Quote

7.2.3 The Commission directs the Petitioner to submit the detailed capital investment plans/ schemes/ projects of 220 kV and above and other capital expenditure of value exceeding Rs. 20 Crores for prior approval as per MYT Regulations, failing which the Commission may not allow the capex in the ARR and Tariff. Such investment approval Petitions should be accompanied with detailed techno-economic analysis preferably based on load flow study, IRR computations, if any.

Unquote

- 4.5.6 The Commission observed that the Petitioner in compliance to the directions of the Commission sought approval(s) of capital investment on quarterly basis and the details of Orders issued by the Commission in this regard are as follows:

- A. Commission Order dated October 26, 2021 in Petition No. 1756 of 2021 for 1st Quarter of FY 2021-22. The relevant extract is as follows:

Quote

7. The Commission heard the Petitioner at length and after careful consideration of the submissions and pleading made by the Petitioner the scheme wise findings of the Commission are provided in the subsequent paras.

Scheme No. 1: Construction of 2x40 MVA 132/33kV Sohratgarh (Sidharthnagar) S/S including land and associated lines

Petitioner Submission:

- (i) Sohratgarh tehsil region currently is supplied power through 132kV S/S Naugarh through 132kV Bansi(220)-Naugarh line. Peak loading of 132 kV S/S Naugarh is continuously increasing as during FY 2019-20 to FY 2020-21 peak loading has increased by 20%. 02 nos. of new 33 kV substations is planned in





Naugarh tehsil by distribution licensee and there is space constraint for construction of new 33 kV feeder bays for connecting these substations. Hence, it is not possible to feed new upcoming 33kV feeders of Discom from existing Sub-Station. Further, due to long length of 33kV feeders from 132kV S/S Naugarh, problem of low voltage & interruption of power supply also exists.

- (ii) To overcome above constraints and to ensure redundancy / (N-1) contingency as mentioned in para 3.5 (d) of IEGC 2010, construction of 2x40MVA 132kV S/S Sohratgarh (Sidharthnagar) is proposed to meet the distribution system requirement as intimated by concerned distribution licensee. The scheme has been prepared based on least cost plan. After construction of this substation the five nos. 33kV substations will be fed from this proposed Sub-Station.

Commission's view

- (i) The Commission during the hearing enquired from the Petitioner about the present status of approvals of Board of Director, Appraisal & Evaluation Committee and ETF. The Petitioner submitted that Board of Director and Appraisal & Evaluation Committee approvals are not yet obtained and the same is under process. Further, in regard to ETF, the Petitioner submitted that the same is not required as the Scheme cost is less than Rs. 50 Crore.
- (ii) The Commission observed that the scheme cannot be approved at this stage since the approvals of Board of Director and Appraisal & Evaluation Committee are still pending. The Petitioner may approach the Commission afresh after receiving the approvals of Board of Director and Appraisal & Evaluation Committee.

Scheme 2: Construction of 3x60 MVA 220/33 kV GIS S/S at Kidwai Nagar, Govind Nagar (Kanpur) and associated lines (Modification of earlier TWC approved scheme)

Petitioner Submission:

- (i) Presently, Kidwai Nagar & Govind Nagar area of District Kanpur is fed through 220kV S/S Naubasta and 132kV S/S Meherbansingh-ka-Purwa through 33kV feeders emanating from these substations.
- (ii) Construction of 220/33kV GIS S/S Kidwai Nagar Govind Nagar (Kanpur) along with construction of LILO (06km) of Panki (220kV)-Bhauti PG Kanpur (400kV) 220kV line on Monopole at Govind Nagar (Kanpur) was approved by 13/20th TWC dated 27.12.2018.
- (iii) Subsequently, Metro Railway line with 03 nos. Metro railways stations was proposed on the way of construction of LILO line. Due to dense population near substation, line construction by using monopole is also not possible. In view of Row problem and inspection report of Director Committee, the scheme was revised for construction of underground cable instead of monopole and was sanctioned in 13/39th TWC dated 09.12.2020. Therefore, Petitioner approached the Commission for approval of increase in capex expenditure of Rs. 24.51 Crore due to revision of scope of work to underground cable instead of monopole

Commission's view

- (i) The Commission observed that earlier the Petitioner had filed the Petition no. 1676 of 2021 for the approval of same Scheme, however, at that time, the Commission did not consider the same due to pending approval of Energy Task



20



Force (ETF). The Commission vide Order dated 06.05.2021 in the matter of approval of schemes for Q3 of FY 2020-21 did not consider the scheme on the ground of pending approval of ETF and had directed to approach the Commission afresh after obtaining ETF. The relevant extract of the above Order is reproduced below:

"(iv) Scheme 6 (Construction of 3x60 MVA, 220/33 kV GIS Substation, Kidwai Nagar, Govind Nagar (Kanpur) and associated lines)

The Commission directed the Petitioner that the scheme cannot be approved at this moment, since the approval of Energy Task Force (ETF) is still pending. The Petitioner may approach the Commission afresh after receiving the approval of Energy Task Force (ETF) for the same."

- (ii) Pursuant to obtaining the approval of ETF, the Petitioner has now approached the Commission. Further, it is observed that earlier the scheme got sanctioned by TWC in FY 2018-19 for Rs. 99.69 Crore. Subsequently, the project cost got revised by TWC in FY 2020-21 for Rs. 124.20 Crore. The Petitioner in the instant Petition has approached the Commission for approval of additional cost of Rs. 24.51 Crore only due to revision under scope of work regarding construction of LILO line through underground cable instead of monopole.

- (iii) The Commission during the hearing enquired Petitioner that whether the scheme will be executed through TBCB, as the scheme is of 220 kV voltage level. The Petitioner submitted that this scheme was already considered by the Commission in FY 2018-19. Therefore, the execution of the scheme was already started and 220/33kV GIS S/S Kidwai Nagar is under construction and expected to be energized till November 2021. The Petitioner has approached the Commission only for approval of additional cost as the scheme was revised for the construction of LILO line through underground cable instead of on monopole due to RoW problem because of upcoming Metro Railway line on the way of construction of LILO line. Hence, execution of this scheme through TBCB is not feasible. Moreover, the Commission vide its Order dated 12.01.2021 in the matter of Review Petition of Business Plan Order had directed that all new transmission projects above 220 kV shall be implemented through TBCB in view of the difficulties and issues associated with it." Therefore, the TBCB is not applicable for 220kV schemes.

- (iv) The Commission observed that the Commission in its Business Plan Order for the MYT Control Period (FY 2020-21 to FY 2024-25) dated 15.10.2020 of UPPTCL had directed that all new transmission projects should be implemented through Tariff Based Competitive Bidding (TBCB) only. The relevant extract of the above said Order dated October 15, 2020 is reproduced below:

".....

Further, to provide a level playing field between the public and private sector, all new transmission projects should be implemented through Tariff Based Competitive Bidding (TBCB) only....."

Thereafter, UPPTCL filed a review Petition (Petition no. 1653/2020) before the Commission against the Business Plan Order dated 15.10.2020 on various grounds. One of the grounds for review was to exempt the implementation of 220 kV & 132 kV projects and augmentation works through TBCB. The





Commission vide its Order dated 10.02.2021 examined the issue and directed as below:

"(iv) The Commission has examined the issue in light of difficulties being faced by the Petitioner and has also considered the procedure being followed by other State. Thus, the Commission directs that all new transmission projects above 220 kV shall be implemented through TBCB in view of the difficulties and issues associated with it."

The Commission in view of above, would like to mention that due to implementation of schemes through TBCB route, there is significant scope for gaining efficiencies in procurement and construction resulting in lower tariffs to the end consumers. Hence, the Commission hereby clarifies that all new green field transmission projects of 220 kV voltage level shall also be implemented through TBCB route. For projects other than new green field transmission projects of 220 kV voltage level, the Commission may decide on case to case basis regarding projects on which TBCB route shall not be applicable.

- (v) Further, the Commission observed that the Petitioner has obtained necessary approval of the TWC, Appraisal & Evaluation Committee and ETF. Therefore, the Commission has considered the scheme. The Commission for calculating IRR has taken load factor for first ten years as 50% and for the remaining life the load factor is considered at 70%. The Commission finds the IRR of the said scheme to be 15.33%, which is more than 10.12%, i.e., the last approved rate of interest on loan/debt as per Tariff Order dated 29.06.2021 for FY 2021-22 and hence considers the same in order. Further, it has also been checked that these investments are catering to the load requirement of coming years. Accordingly, additional cost of Rs. 24.51 Crore of Scheme no. 2 is approved. As the scheme is already being under execution and on the verge of completion and as the Petitioner has only approached the Commission for approval of additional cost on account of change of scope of work due to RoW issues for construction of associated line of old scheme. Therefore, Petitioner as requested may consider not to implement this scheme through TBCB route.

8. The summary of the capital expenditure schemes approved for 1st quarter of FY 2021-22 are as under:

Sl. No.	Scheme No.	Name of Scheme	Type	Claimed		Approved	
				Amount (Rs. Crore)	IRR (%)	Amount (Rs. Crore)	IRR (%)
1	Scheme-1	Construction of 132/33kV 2x40MVA S/S Sohratgarh (Sidharthnagar) including land and associated lines	New S/S	37.97	24.56%	-	-
2	Scheme-2	Construction of 3x60MVA, 220/33kV GIS Substation, Kidwai Nagar, Govind Nagar (Kanpur) and associated lines	Modification of earlier approved (by TWC) scheme	24.51	17.30%	24.51	15.33%
		Total (Rs. Crore)		62.48		24.51	





9. The approval of the above discussed schemes is subject to the following conditions:
- The Scheme shall be executed within the stipulated timeframe as indicated. No time overrun or cost overrun shall be allowed.
 - The various equipment and material or execution of the schemes shall be procured through a fair and transparent competitive bidding process.
 - All works shall be carried out in compliance with the Act/ Regulations Rules/ Standards. Further, the work shall be executed by adopting best industry practices, duly keeping in view the aesthetics, in case of all overhead works. The Licensee shall follow the construction standards as approved by CEA.
 - The Licensee shall submit the completion report indicating the actual cost incurred in implementation of the schemes. The final cost and quantity will be subject to verification by way of prudence check/truing up at the time of final approval/ capitalization.
 - Reclamation of material, wherever applicable, shall be made and credit thereof shall be given at the time of finalization of scheme costs.
 - The Licensee shall submit six monthly progress report to the Commission indicating the financial and physical progress of the implementation of the schemes.
 - Taxes are to be levied as per actuals and it shall be accounted for accordingly at the time of finalization of account.
 - The Licensee shall submit the following prescribed certificates on completion of the schemes: -
 - Electrical Inspector's Certificate/ Report. It is also specified that the work shall be commissioned only after obtaining the requisite statutory certificates, including Electrical Inspector's Certificate.
 - Contractor's Certificate for proper execution of work
 - Statutory Auditor's Certificate for the full and final actual cost disbursed for execution of work.

10. Accordingly, the Petition is disposed of.

Unquote

- B. Commission Order dated April 07, 2022 in Petition No. 1817 of 2022 for 2nd Quarter of FY 2021-22. The relevant extract is as follows:

Quote

7. The Commission heard the Petitioner at length and after careful consideration of the submissions and pleading made by the Petitioner the scheme wise findings of the Commission are provided in the subsequent paras.





Scheme No. 1: Construction of 2x40MVA, 132/33kV Substation Ram Nagar (Barabanki) and associated lines

Petitioner Submission

(i) Presently supply of Tehsil- Ram Nager and adjoining area is currently supplied through 2x63MVA, 132/33kV S/S Barabanki. The feeding source to 132kV S/S Barabanki, Barabanki (220) - Barabanki line is overloaded and due to higher length of 33kV feeders from 132kV S/S Barabanki, this area always faces problem of low voltage and overloading.

(ii) Due to non-availability of additional 33kV bays at 132kV S/S Barabanki, more than one 33kV substations are being fed through single 33kV feeder, resulting disruption of supply in Ram Nagar and adjoining areas. For the solution to this problem, a new 2X40 MVA, 132/33kV Substation has been proposed.

(iii) After construction of the proposed Scheme, 33kV substations of MVVNL i.e., Ram Nager, Ram Nager Tehsil, Ram Nager (IPDS), Gauspur Tehsil, Masauli, Trilokpur, Suratganj and Sudiamau etc would be fed through this Substation.

Commission's view

The Commission observed that the scheme cannot be approved at this stage since the approval of Energy Task Force (ETF) is still pending. The Petitioner may approach the Commission afresh after receiving the approval of ETF.

Scheme No. 2: Construction of 132kV Mauranipur - Gurusarai S/C line and associated bays

Petitioner Submission

(i) 132kV Mauranipur and 132kV Gurusarai substations feed from single source i.e. 132kV S/C line from Paricha TPS and 132kV S/C line from 132kV S/S Moth respectively. Therefore, they are not compliant to N-1 from feeding source point of view.

(ii) During breakdown of these feeding lines, there is no alternate source of supply for these Substations, whereas for system reliability every transmission substation should be connected with at least two source of supply for N-1 compliant. Therefore, by constructing 132kV S/C line between 132kV Gurusarai and Mauranipur substations will get second source of supply and thus will be N-1 complaint.

Commission's view

(i) The Commission observed that the Petitioner has obtained the approvals of Board of Director and Appraisal & Evaluation Committee.



Further, in regard to ETF, the Petitioner submitted that the same is not required as the scheme cost is less than Rs. 50 Crore.

(ii) Construction of 132kV Mauranipur- Gurusarai S/C line will provide an additional source to feed 132kV S/S Mauranipur & 132kV S/S Gurusarai in addition to existing 132kV S/C line from Paricha TPS & 132kV S/C line from 132kV S/S Moth respectively. Further, such arrangement will make the system N-1 compliant, and the quality of supply and reliability will improve in the nearby areas.

(iii) The Commission for calculating IRR has taken the load factor as 40% throughout the useful year. The Commission finds the IRR of the said scheme to be 28.26%, which is more than 10.12%, i.e., the last approved rate of interest on loan/debt as per Tariff Order dated 29.06.2021 for FY 2021-22 and hence considers the same in order. Further, it has also been checked that these investments are catering to the load requirement of coming years and are in line with Business Plan Order. Accordingly, Scheme No. 2 of Rs. 22.26 crore is approved under RTM.

Scheme No. 3: Construction of 2x40MVA, 132/33kV Substation Sohratgarh (Sidharthnagar) and associated lines

Petitioner Submission

(i) Sohratgarh tehsil region currently is supplied power through 132kV S/S Naugarh through 132kV Bansi(220) - Naugarh line. Peak loading of 132kV S/S Naugarh is continuously increasing as during FY 2019-20 to FY 2020-21 peak loading has increased by 20%. 02 nos. of new 33kV substations is planned in Naugarh tehsil by distribution licensee and there is space constraint for construction of new 33kV feeder bays for connecting these substations. Hence, it is not possible to feed new upcoming 33kV feeders of Discom from existing Sub-Station. Further, due to long length of 33kV feeders from 132kV S/S Naugarh, problem of low voltage & interruption of power supply also exists.

(ii) To overcome above constraints and to ensure redundancy / (N-1) contingency as mentioned in para 3.5 (d) of IEGC 2010, construction of 2x40MVA, 132kV S/S Sohratgarh (Sidharthnagar) is proposed to meet the distribution system requirement as intimated by concerned distribution licensee. After construction of this substation the five nos. 33kV substations will be fed from this proposed Sub-Station.

(iii) Petitioner submitted the above said Scheme for approval in Petition no. 1756/2021 which is deferred by Hon'ble Commission vide its Order dated 26.10.2021 (Capex approval for 1st Quarter of FY 2021-22) due to pendency of BoD and Appraisal & Evaluation Committee approvals with a liberty to approach the Commission afresh after receiving these approvals



(iv) Petitioner has obtained BoD and Appraisal & Evaluation Committee approvals on 18.10.2021 and 25.11.2021 respectively and hereby approach afresh for approval.

Commission's view

(i) The Commission observed that earlier the Petitioner had filed the Petition no. 1756 of 2021 for the approval of same scheme. However, the Commission vide Order dated 26.10.2021 did not consider the scheme on the ground of pending approvals of BoD and Appraisal & Evaluation Committee and had directed to approach the Commission afresh after obtaining the same. The relevant extract of the Commission Order dated 26.10.2021 is reproduced below:

"The Commission observed that the scheme cannot be approved at this stage since the approvals of Board of Director and Appraisal & Evaluation Committee are still pending. The Petitioner may approach the Commission afresh after receiving the approvals of Board of Director and Appraisal & Evaluation Committee."

(ii) Pursuant to obtaining approvals of BoD and Appraisal & Evaluation Committee, Petitioner has now approached the Commission. Further, in regard to ETF, Petitioner submitted that the same is not required as scheme cost is less than Rs. 50 crore.

(iii) Construction of 2x40MVA, 132kV S/S Sohratgarh (Sidharthnagar) will meet the distribution system requirement, overcome constraints and ensure redundancy / (N-1) contingency. Further, such arrangement will reduce the loading of existing 132kV Substation, and the quality of supply and voltage profile will improve in the nearby region.

(iv) The Commission for calculating IRR has taken load factor for first ten years as 50% and for the remaining life the load factor is considered at 70%. The Commission finds the IRR of the said scheme to be 22.17%, which is more than 10.12%, i.e., the last approved rate of interest on loan/debt as per Tariff Order dated 29.06.2021 for FY 2021-22 and hence considers the same in order. Further, it has also been checked that these investments are catering to the load requirement of coming years and are in line with Business Plan Order. Accordingly, Scheme No. 3 of Rs. 37.97 Crore is approved under RTM.

8. The summary of capital expenditure schemes approved for 2nd quarter of FY 2021-22 are as:



**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Sl. No.	Scheme No.	Name of Scheme	Type	Claimed		Approved	
				Amount (Rs. Crore)	IRR (%)	Amount (Rs. Crore)	IRR (%)
1	Scheme-1	Construction of 2x40MVA, 132/33kV S/S Ram Nagar (Barabanki) and associated lines	New S/S	60.03	16.02%	-	-
2	Scheme-2	Construction of 132kV Mauranipur-Gurusarai S/C line and associated bays	New TL	22.26	57.68%	22.26	28.26%
3	Scheme-3	Construction of 2x40MVA, 132/33kV Sohratgarh (Sidharthnagar) & associated lines	New S/S	37.97	24.41%	37.97	22.17%
		Total (Rs. Crore)		120.26		60.23	

9. The approval of the above discussed schemes is subject to the following conditions:

(i) The Scheme shall be executed within the stipulated timeframe as indicated. No time overrun or cost overrun shall be allowed.

(ii) The various equipment and material or execution of the schemes shall be procured through a fair and transparent competitive bidding process.

(iii) All works shall be carried out in compliance with the Act/ Regulations/ Rules/ Standards of appropriate Commission/CEA or any other competent authority as applicable.

(iv) The Licensee shall submit the completion report indicating the actual cost incurred in implementation of the schemes. The final cost and quantity will be subject to verification by way of prudence check/truing up at the time of final approval/ capitalization.

(v) The Licensee shall submit six monthly progress report to the Commission indicating the financial and physical progress of the implementation of the schemes.

10. Accordingly, the Petition is disposed of.

Unquote

C. Commission Order dated July 28, 2022 in Petition No. 1844 of 2022 for 3rd Quarter of FY 2021-22. The relevant extract is as follows:

Quote

7. The Commission heard the Petitioner at length and the scheme wise Petitioner's Submission on record and findings of the Commission are provided in the subsequent paras.

Scheme No. 1: Construction of 2x60MVA, 220/33kV Badaun Road (Bareilly) S/S and its associated lines

Petitioner Submission



(a) Presently supply of Bareilly city and adjoining area is ensured through 132kV (2x63MVA +1x40MVA) substation at Bareilly town, 132kV Bareilly I (2X40MVA) and 220kV CB Ganj (2x200MVA + 2X63MVA), whereas there is no primary feeding source in south region of Bareilly city, due to which this area faces problem of low voltage and overloading.

(b) To cater this problem, a new 220kV (2x60MVA) substation has been proposed in southern region of Bareilly city. After construction of substation, length of 33 kV line will be reduced leading to improvement in voltage profile. 33kV substations of MVVNL i.e. subash nagar, maninath, sarai talfi, mission compound, mini bypass, subash nagar-II and chaudhary ka talab under re-vamp project would be fed through this Substation. For the construction of this Substation, 1.479 hectare land is acquired at block kyara tehsil sadar.

(c) The Petitioner has submitted an IRR of 20.97% for the scheme.

Commission's view

The Commission observed that the above said Scheme is of 220kV and as per Commission's Order dated October 26, 2021, for projects other than new green filed transmission projects of 220 kV voltage level, the Commission may decide on case to case basis regarding projects on which TBCB route shall not be applicable. However, during the hearing, the Petitioner has requested the Commission to defer the scheme till further submission of the Petitioner. The Commission has considered the request of the Petitioner and accordingly kept the scheme in abeyance till the Petition approaches the Commission.

Scheme No. 2: Construction of 2x63MVA 132kV Budhana-II (Muzaffarnagar) S/S and its associated lines

Petitioner Submission

(i) Tehsil Budhana & nearby area district of Muzaffarnagar is fed through 33kV feeders emanating from 132 kV Pura (63+40MVA) substation. The loading of these substations has reached up to its maximum capacity. Thus, to overcome the overloading of Buddhana and Pura S/S and to cater the future upcoming load in the area, 132 kV Budhana-II substations is proposed.

(ii) The proposed 132 kV Budhana-II S/S will be by 33kV S/S of PVVNL Discom- Budhana (Rural), Chanderi, Alipur, Aterna, Valli, Shahpur, Soran, Kakra, Shadabar. For construction of the proposed substation, two hectare of land is purchased at village Sultunpur, tehsil-Budhana.

(iii) The Petitioner has submitted an IRR of 23.84% for the scheme.



Commission's view

- (i) The Commission observed that the Petitioner has obtained the necessary approvals of Board of Director, TWC, Appraisal & Evaluation Committee and ETF.
- (ii) The Commission further observed construction of 2x63MVA 132kV Budhana-II (Muzaffarnagar) S/S and its associated lines will reduce the loading of 132kV Budhana and Pura S/S. Further, the implementation of scheme will reduce the feeding line length of 33kV, which will further improve the voltage profile, power supply quality and reduce the breakdown time. Such arrangement will increase the reliability and quality of supply in the nearby areas.
- (iii) The Commission for calculating IRR has taken the load factor as 50% for first 10 years and 70% from 11th year onwards. The Commission finds the IRR of the said scheme to be 21.33%, which is more than 10.12%, i.e., the last approved rate of interest on loan/debt as per Tariff Order dated 29.06.2021 for FY 2021-22 and hence considers the same in order. Further, it has also been checked that these investments will reduce the load of the existing overloaded S/S and also cater the load requirement of coming years and are in line with Business Plan Order. Accordingly, Scheme No. 2 of Rs. 66.86 Crore is approved under RTM.

Scheme No. 3: Construction of 2x40MVA, 132kV Naraini (Banda)S/S and its associated lines

Petitioner Submission

- (i) Supply of Thesil Naraini of district Banda and adjoining area is ensured through 132kV substation Atarra (40+20MVA). Presently 33kV substations Kalinjar and Naraini are fed through single 33kV Atarra feeder having length of 70Km, due to which problem of low voltage and interruption of power supply in the region exists.
- (ii) The State Discom had proposed 2 Nos. of new 33kV substation in the area under REVAMP Scheme. Further, there is space constraint at 132kV substation Atarra for construction of new 33kV feeder bays. Therefore, keeping in view of excessive length of existing 33kV feeder and future load growth and to meet out any contingency, construction of proposed 132/33kV substation Naraini (2X40 MVA) is essential.
- (iii) This will improve the voltage profile/reliability/stability, reduce I&D losses, and strengthen the network of lehsil Naraini and nearby area. After construction of proposed 132 kV substation Naraini, 33kV substation Naraini, Kalinjar, Girawa, Kartal, Sadha of DVVNL would be fed from this proposed 132kV substation. For the



construction of this substation, 1.7424 hectares land in Tehsil Naraini has been purchased from farmers.

- (iv) The Petitioner has submitted an IRR of 29.91% for the scheme.

Commission's view

- (i) The Commission observed that the Petitioner has obtained the approvals of Board of Director, TWC and Appraisal & Evaluation Committee. Further, in regard to ETF, the Petitioner submitted that the same is not required as the scheme cost is less than Rs. 50 Crore.
- (ii) The Commission further observed construction of 2x40MVA, 132kV Naraini (Banda) S/S and its associated lines will reduce the loading of 132kV Atarra S/S. Further, the implementation of scheme will reduce the feeding line length of 33kV, which will further improve the voltage profile, power supply quality and reduce the breakdown time. Such arrangement will increase the reliability and quality of supply in the nearby areas.
- (iii) The Commission for calculating IRR has taken the load factor as 50% for first 10 years and 70% from 11th year onwards. The Commission finds the IRR of the said scheme to be 27.14%, which is more than 10.12%, i.e., the last approved rate of interest on loan/debt as per Tariff Order dated 29.06.2021 for FY 2021-22 and hence considers the same in order. Further, it has also been checked that these investments will reduce the load of the existing overloaded S/S and also cater the load requirement of coming years and are in line with Business Plan Order. Accordingly, Scheme No. 3 of Rs. 33.21 Crore is approved under RTM.

Scheme No. 4: Construction of 2x40MVA, 132/33kV Substation Ram Nagar (Barabanki) and associated lines

Petitioner Submission

- (i) Presently supply of Tehsil- Ram Nagar and adjoining area is currently supplied through 2x63MVA, 132/33kV S/S Barabanki. The feeding source to 132kV S/S Barabanki, Barabanki (220) - Barabanki line is overloaded and due to higher length of 33kV feeders from 132kV S/S Barabanki, this area always faces problem of low voltage and overloading.
- (ii) Due to non-availability of additional 33kV bays at 132kV S/S Barabanki, more than one 33kV substations are being fed through single 33kV feeder, resulting disruption of supply in Ram Nagar and adjoining areas. For the solution to this problem, a new 2X40 MVA, 132/33kV Substation has been proposed.



- (iii) After construction of the proposed Scheme, 33kV substations of MVVNL i.e., Ram Nager, Ram Nager Tehsil, Ram Nager (IPDS), Gauspur Tehsil, Masauli, Trilokpur, Suratganj and Sudiamau etc would be fed through this Substation.
- (iv) The Petitioner has submitted an IRR of 17.45% for the scheme.

Commission's view

- (i) The Commission observed that earlier the Petitioner had filed the Petition no. 1817 of 2022 for the approval of same scheme. However, the Commission vide Order dated 07.04.2022 did not consider the scheme on the ground of pending approvals of ETF and had directed to approach the Commission afresh after obtaining the same. The relevant extract of the Commission Order dated 07.04.2022 is reproduced below:

"The Commission observed that the scheme cannot be approved at this stage since the approval of Energy Task Force (ETF) is still pending. The Petitioner may approach the Commission afresh after receiving the approvals of ETF."

- (ii) Pursuant to obtaining approval of ETF, the Petitioner has now approached the Commission.
- (iii) The construction of 2x40MVA, 132kV S/S Ram Nagar (Barabanki) S/S and its associated lines will reduce the loading of 132kV Barabanki & Nindura S/S. Further, the implementation of scheme will reduce the feeding line length of 33kV, which will further improve the voltage profile, power supply quality and reduce the breakdown time. Such arrangement will increase the reliability and quality of supply in the nearby areas.
- (iv) The Commission for calculating IRR has taken load factor as 50% for first 10 years and 70% from 11th year onwards. The Commission finds the IRR of the said scheme to be 15.22%, which is more than 10.12%, i.e., the last approved rate of interest on loan/debt as per Tariff Order dated 29.06.2021 for FY 2021-22 and hence considers the same in order. Further, it has also been checked that these investments will reduce the load of the existing overloaded S/S and also cater the load requirement of coming years and are in line with Business Plan Order. Accordingly, Scheme No. 3 of Rs. 60.03 Crore is approved under RTM.





8. The summary of capital expenditure schemes approved for 3rd quarter of FY 2021-22 are as:

Sl. No.	Scheme No.	Name of Scheme	Type	Claimed		Approved	
				Amount (Rs. Crore)	IRR (%)	Amount (Rs. Crore)	IRR (%)
1	Scheme-2	Construction of 2x63MVA 132kV Budhana-II (Muzaffarnagar) S/S and its associated lines	New S/S	66.86	23.84%	66.86	21.33%
2	Scheme-3	Construction of 2x40MVA, 132kV Naraini (Banda)S/S and its associated lines	New S/S	33.21	29.91%	33.21	27.14%
3	Scheme-4	Construction of 2x40MVA, 132kV Ram Nagar (Barabanki) S/S and its associated lines	New S/S	60.03	17.45%	60.03	15.22%
		Total (Rs. Crore)		232.40		160.10	

9. The approval of the above discussed schemes is subject to the following conditions:

- The Scheme shall be executed within the stipulated timeframe as indicated. No time overrun or cost overrun shall be allowed.
- The various equipment and material or execution of the schemes shall be procured through a fair and transparent competitive bidding process.
- The metering arrangement shall be done as per UPERC/CEA Regulations and its cost is included in the capital expenditure of the schemes approved by the Commission.
- All works shall be carried out in compliance with the Act/ Regulations/ Rules/ Standards of appropriate Commission/CEA or any other competent authority as applicable.
- The Licensee shall submit the completion report indicating the actual cost incurred in implementation of the schemes. The final cost and quantity will be subject to verification by way of prudence check/truing up at the time of final approval/ capitalization.
- The Licensee shall submit the details of land acquired for the scheme, compensation paid along with the land compensation paid.
- The Licensee shall submit six monthly progress report to the Commission indicating the financial and physical progress of the implementation of the schemes.





(viii) The Licensee shall submit the following prescribed certificates on completion of the schemes:

- a) Electrical Inspector's Certificate/ Report. It is also specified that the work shall be commissioned only after obtaining the requisite statutory certificates, including Electrical Inspector's Certificate.
- b) Statutory Auditor's Certificate for the full and final actual cost disbursed for execution of work.

10. The Commission also directs the Petitioner that Petition filed in future before the Commission must include proposal/requisition and consent of distribution licensee(s) for the respective schemes. Further, the DPR of the scheme should also specify the location of the project along with latitude and longitude.

11. Accordingly, the Petition is disposed of.

Unquote

D. Commission Order dated September 23, 2022 in Petition No. 1866 of 2022 for 4th Quarter of FY 2021-22. The relevant extract is as follows:

Quote

11. The scheme wise Petitioner's submission and findings of the Commission are provided in the subsequent paras.

Scheme No. 1: Construction of 220kV Tirwa (Kannuj) (2x160+2x63MVA) Substation and its associated lines

Petitioner submission

(a) At present electricity supply of Kannuj district is being fed through primary substations- 220/132/33kV Chhibramau (2x160+2x63MVA), 132/33kV Kannauj (2x63MVA) and 132/33kV Talgram (2x40MVA). The primary source for substations- 132kV Chhibramau, 132kV Kannauj and 132 kV Talgram is 220kV S/S Chhibramau in normal conditions and 220 kV S/S Nibkarori (1x160+2x100MVA) under N-1 contingency. In case of outage of normal feeding line (N-1 condition) of 132kV S/S Fatehgarh and 132kV S/S Kusmara, these substations are also fed from 220kV S/S Chhibramau. Both these 220kV Substations become saturated.

Further, in tehsil Tirwa, there is problem of low voltage and overloading due to longer length of 33kV feeders from 132kV S/S Kannauj and also there is no additional space available for 33kV bays at this substation.

(b) For catering the upcoming future demand with the consent of DVVNL and for reducing the loading of 220kV Chhibramau and 132kV Kannauj substations, a new 220/132/33kV Substation Tirwa (Kannuj) (2x160+2x63MVA) has been proposed to be constructed in Tirwa area on available gramsabha land, along with construction of LILO of 220kV Mainpuri-Bhauti (PG) line at Tirwa S/S on ACSR Zebra conductor (Ckt length-2x13Km) and LILO of 132kV Dibiyapur-





Bidhuna line at Tirwa S/S on ACSR Panther conductor (Ckt length-2x35Km) under TBCB mode.

(c) The proposed 220 Tirwa Substation will feed existing 33 kV substations of DVVNL- Indergarh, Thathiya, Tirwa, Patti Karera and new 33 kV substations- Khairnagar, Kanouli, Umarda, Jankhat and Sursi. 132kV S/S Dibiyapur (2x40MVA) and 132kV S/S Bidhuna (1x20MVA) will get second source. Scheme will improve the voltage profile, reliability & quality of supply, and strengthen the network of district Kannuj and nearby areas.

Commission's view

- (a) The Commission observes that the Petitioner has obtained approvals of the Board of Directors and ETF. The approval of Appraisal & Evaluation Committee is not required as the scheme is proposed under TBCB mode as per the Petitioner's submission. In regard to approval /MoM of NRPC(TP) regarding LILO of 220 kV Manipuri-Bhauti(PG) line, Petitioner submitted that the same will be taken up in the upcoming meeting of CEA/NRPC.
- (b) The Commission further observes that construction of 2x160+2x63 MVA, 220/132/33 kV S/S Tirwa (Kannauj) (Double Main and Transfer) and its associated lines, will reduce the loading of primary substations- 220kV Chhibramau and 132 kV Kannauj and will provide second source to 132 kV S/S Dibiyapur and 132 kV Bidhuna thus making N-1 compliant system. Further, nine nos. 33kV substations of DVVNL will be fed from the proposed primary Substation. The implementation of scheme will reduce the feeding line length of 33kV, which will further improve the voltage profile and reduce the line breakdown time. New primary Substation will enhance the operational flexibility, system reliability and transformation capacity after becoming a part of the network. Such arrangement will meet the upcoming load, improve the voltage profile, increase the reliability and quality of supply in the Kannuj district and nearby area.
- (c) The Commission further observes that as per Commission's Order dated 26.10.2021 in Petition No. 1756/2021, all new green field transmission projects of 220 kV voltage level shall be implemented through TBCB route. Therefore, the said scheme which is a green field transmission project of 220 kV voltage level, will be implemented under TBCB mode.
- Further, the Petitioner shall ensure that there is provision of sufficient land space at proposed substation / switchyard for its future extension.
- (d) The Commission for calculating IRR has taken the load factor as 50% for first 10 years and 70% from 11th year onwards. The Commission finds the IRR of the said scheme to be 33.20%, which is more than 10.56%, i.e., the last approved rate of interest on loan/debt as per Tariff Order dated 20.07.2022 for FY 2022-23 and hence considered the same in order. Further, these investments will reduce the load of the existing primary substations and also cater the load requirement of coming years. Accordingly, Scheme No. 1 of Rs. 109.84 Crore is approved under TBCB mode.





Scheme No. 2: Up-gradation of 132kV Mawana (2x63MVA) S/S to 220kV Mawana (Meerut) (2x160+3x63MVA) Substation and its associated lines

Petitioner submission

- (a) Presently supply of district Meerut region is met through primary substations- 220kV Modipuram (2x200MVA), 220kV Shatabdi Nagar (1x200+2x160MVA), 220kV Jagriti Vihar (3x160MVA) and 220kV Charla (2x160+1x100MVA). Further, as district Meerut's proximity to NCR, rapid expansion of industrial, commercial activities and uptick in numbers of domestic consumers, electricity demand is increasing rapidly. The demand of Mawana is currently met by 132kV S/S Mawana (2x63MVA) with peak load of 120 MVA. This substation is fed from 132kV Charla(220)-Mawana and 132kV Modipuram(220)-Mawana SC lines. 132kV S/S Ramraj substation is also radially connected with 132kV S/S Mawana and therefore, during outage of any of the source line it is difficult to cater 120MVA load of 132kV S/S Mawana.

There are twelve numbers of 33kV feeders emanating from 132kV S/S Mawana. During summer season, due to overloading of lines, 33kV feeders have to be transferred to nearby primary substation. Further, under Revamp scheme of PVVNL construction of four new 33kV substations are in planning stage therefore, four new 33kV feeder bays are also proposed.

- (b) Hence, due to overloading of the 132kV source line and for meeting upcoming future demand based on the proposal of distribution licensee, up-gradation of existing 2x63MVA, 132kV AIS S/S Mawana to 220kV Substation with capacity (2x160+3x63MVA) has been proposed. Due to limited availability of space, 220kV side is to be constructed on hybrid arrangement and 132kV side is to be constructed on conventional AIS arrangement. Further, transformation capacity at 132kV level is to be increased from 2x63MVA to 3x63MVA to meet out N-1 criteria.

220kV Meerut(765)-Mawana DC line is to be constructed on ACSR Zebra conductor (Ckt length-2x19Km) and will be feeding source for 220kV S/S Mawana. Two nos. of 220kV feeder bays are available at 765kV GIS S/S Meerut which is under construction in TBCB mode. 220kV S/S Mawana will further act as source substation for feeding 132kV S/S Ramraj.

The above proposed scheme will meet the load growth, improve the voltage profile, reliability and quality of power supply in Mawana-Tehsil, Meerut.

- (c) The Revised Tariff Policy notified on 28.01.2016 by MoP provide provision for exemption of up-gradation schemes of ISTS from TBCB on case to case basis. Further, Empowered Committee on Transmission (ECT) in 2nd meeting dated 06.08.2018 deliberated that implementation of augmentation works through TBCB may have jurisdictional implications with regard to sharing of common facilities and may jeopardize the augmentation work and agreed with advice of CEA for exemption of





implementation of augmentation/modification works at existing ISTS substations from TBCB and implementation of the same by the respective owner of the substation under RTM.

As the scheme involves creation of 220kV voltage level along with increasing capacity from 2x63 MVA to 3x63MVA of 132kV S/S Mawana in the same premises of existing 132kV substation, therefore the issues regarding sharing of common facilities in the existing substation (control room, fire-fighting system, control equipment, DC supply system, protection system etc.) and jurisdictional issues in operation may arise.

In view of the above, Petitioner requested the Commission to exempt the scheme through TBCB and allow under RTM mode.

- (d) The Petitioner has submitted an IRR of 35.06% for the scheme. Further, the Petitioner vide its submission dated 08.09.2022 revised the IRR as 33.65% considering the tariff, interest on working capital, interest on loan etc. as approved by the Commission vide Order dated 20.07.2022 in Petition No. 1839/2022 for ARR of FY 2022-23.

Commission's view

- (a) The Commission observes that the Petitioner has obtained the necessary approvals of Board of Directors, Appraisal & Evaluation Committee and ETF.
- (b) The Commission further observes that upgradation of existing 132/33kV Mawana (2x63MVA) AIS S/S into 220/132/33kV Mawana (Meerut) (2x160+3x63MVA) S/S (Double Main and Transfer) with 220kV side on Hybrid, will enhance the transformation capacity and reduce the loading of primary substations- 220kV Modipuram and 220kV Charla and thus making N-1 compliant system. The proposed 220kV S/S Mawana will act as source substation for feeding 132kV S/S Ramraj. Further, four nos. new 33kV distribution substations of PVVNL will be fed from the proposed Substation. The implementation of scheme will enhance the operational flexibility, system reliability and transformation capacity after becoming a part of the network. Such arrangement will meet the upcoming load, increase the reliability and quality of supply in the nearby areas.
- (c) The Commission for calculating IRR has taken the load factor as 50% for first 10 years and 70% from 11th year onwards. The Commission finds the IRR of the said scheme to be 32.26%, which is more than 10.56%, i.e., the last approved rate of interest on loan/debt as per Tariff Order dated 20.07.2022 for FY 2022-23 and hence considered the same. Further, these investments will reduce the load of the existing primary substations and also cater the load requirement of coming years and are in line with Business Plan Order. Accordingly, Scheme No. 2 of Rs. 68.02 Crore is approved under RTM.



2



Scheme No. 3: Up-gradation of 132kV Noida Sec-62 (3x63MVA) S/S to 220kV Noida Sec-62 (Gautam Budhnagar) (2x160+3x63MVA) Substation and its associated lines

Petitioner submission

(a) At present 220kV S/S Noida Sector-62(UP gate) (peak loading of 220/132kV system is 84%) is getting power from 400kV S/S Greater Noida and 400kV GIS S/S Indirapuram. Existing 132kV S/S Noida Sec-62 (near NIB) having capacity of 3x63MVA is being fed from 132kV Noida Sector-62(220)-Noida Sec-62 S/C line on ACCC Casablanca (HTLS) conductor. The other source is 132kV Vaisali-Noida Sec-62 line which can only be used in emergency for substation supply only. Hence, the substation is N-1 non-compliant from feeding source point of view. Also, 132kV S/S Noida Sect-62 (peak load of 140MVA) is not fulfilling the N-1 contingency in case of breakdown of any transmission element. Additionally, as Noida is an important industrial hub the load demand in area is rapidly increasing due to construction of multi-story buildings, data centres, traction load etc. The upcoming data centre of Adani Coonex in Noida Sector-62 region with demand of 81MVA in phased manner and 31.6MVA demand of Delhi Metro Rail Corporation will result in increase in electricity demand in future.

(b) In view of meeting the additional future demand, reducing the loading of existing 220kV S/S Noida Sector-62(UP gate) and increasing the reliability of source, up-gradation of existing 3x63 MVA, 132kV AIS S/S Noida Sec-62 to 220kV Substation with capacity 2x160+3X63 MVA has been proposed. Due to limited spare space available, 220kV side will be GIS, whereas 132kV side of 160 MVA transformers and proposed 132kV outgoing feeders to be constructed as extension of 132kV Noida Sec-62 (AIS) in the available space. 220kV Substation will be fed by constructing 220kV D/C underground cable line (2.65 km route length) from 400kV GIS S/S Indirapuram due to paucity of corridor along NH-24. Two nos. of 220kV feeder bays are available at existing 400kV GIS S/S Indirapuram (WUPPTCL).

Proposed 220kV Noida Sec-62 GIS Substation will significantly reduce the loading at 220kV S/S Noida Secto-62(UP gate) and 220kV S/S Sahibabad also, adding the additional feeding source to 132kV S/S Vaishali and 132kV S/S Noida Sec-62.

The above proposed scheme will meet the load growth, improve the voltage profile, reliability & quality of power supply.

(c) In view of the difficulties mentioned in Scheme No. 2 and issues associated with implementation of modification works at existing 132kV S/S Noida Sec-62, Petitioner requested the Commission to exempt the scheme through TBCB and allow under RTM mode

(d) The Petitioner has submitted an IRR of 16.61% for the scheme. Further, the Petitioner vide its submission dated 08.09.2022 revised the IRR as 15.95% considering the tariff, interest on working capital, interest on loan etc. as approved by the Commission vide Order dated 20.07.2022 in Petition No. 1839/2022 for ARR of FY 2022-23.





Commission's view

(a) The Commission has observed that the Petitioner has obtained the approvals of Board of Directors, Appraisal & Evaluation Committee and ETF.

(b) The Commission further observes that upgradation of existing 3x63MVA, 132kV AIS S/S Noida Sec-62 (NIB) into 2x160MVA, 220/132kV S/S with 220kV side on GIS, will enhance the transformation capacity, reduce the loading of 220kV S/S Noida Sector-62(UP gate) and increase the reliability of source significantly. The proposed 220kV Substation will act as main feeding source to 132kV S/S Noida Sec-62 and as additional feeding source to 132kV S/S Vaishali and thus making N-1 compliant system. The implementation of scheme will enhance the operational flexibility, system reliability and transformation capacity after becoming a part of the network. Such arrangement will meet the upcoming load, increase the reliability and quality of supply in the nearby areas.

(c) The Commission for calculating IRR has taken the load factor as 50% for first 10 years and 70% from 11th year onwards. The Commission finds the IRR of the said scheme to be 14.37%, which is more than 10.56%, i.e., the last approved rate of interest on loan/debt as per Tariff Order dated 20.07.2022 for FY 2022-23 and hence considered the same. Further, these investments will reduce the load of the existing primary substations and also cater the load requirement of coming years and are in line with Business Plan Order. Accordingly, Scheme No. 3 of Rs. 102.20 Crore is approved under RTM.

12. The summary of capital expenditure schemes approved for 4th quarter of FY 2021-22 are as:

Sl. No.	Scheme No.	Name of Scheme	Type	Claimed		Approved	
				Amount (Rs. Crore)	IRR (%)	Amount (Rs. Crore)	IRR (%)
1	Scheme- 1	Construction of 220kV Tirwa (Kannuj) (2x160+2x63MVA) S/S and its associated lines	New S/S	109.84	Though TBCB mode	109.84	33.20%
2	Scheme- 2	Up-gradation of 132kV Mawana (2x63MVA) S/S to 220kV Mawana (Meerut) (2x160+3x63MVA) S/S and its associated lines	Up-gradation	68.02	33.65%	68.02	32.26%
3	Scheme- 3	Up-gradation of 132kV Noida Sec-62 (3x63 MVA) S/S to 220kV Noida Sec-62 (Gautam Budhnagar) (2x160+3x63MVA) S/S and its associated lines	Up-gradation	102.20	15.95%	102.20	14.37%
		Total (Rs. Crore)		280.06		280.06	

13. The approval of the above discussed Scheme no 2 and Scheme No. 3 is subject to the following conditions:

a. The Scheme shall be executed within the stipulated timeframe as indicated. No time overrun or cost overrun shall be allowed.



20



- b. The various equipment and material or execution of the schemes shall be procured through a fair and transparent competitive bidding process.
- c. All works shall be carried out in compliance with the Act/ Regulations/ Rules/ Standards of Commission/CEA or any other competent authority as applicable.
- d. The Licensee shall submit six monthly progress report to the Commission indicating the financial and physical progress of the implementation of the schemes.
- e. The Licensee shall submit the completion report indicating the actual cost incurred in implementation of the schemes. The final cost and quantity will be subject to verification by way of prudence check/truing up at the time of final approval/ capitalization.

14. Accordingly, the Petition is disposed of.

Unquote

- 4.5.7 In view of the above, the Commission approves 100% capital investment / expenditure for FY 2021-22 and also directs the Petitioner that prior approval of all the schemes / projects as per Regulation 32.2 of MYT Regulations, 2019 should be ensured by the Petitioner.
- 4.5.8 In regard to capitalisation, the Commission in its past True Up Orders for the period from FY 2017-18 to FY 2019-20 had allowed the capitalization based on percentage of capitalisation of total investment as per audited accounts, as the Petitioner had not taken the prior approval of Commission for the schemes as per Regulations. However, in-compliance of Commission's directive to take prior approval of investment, the Petitioner has started submitting Petitions for capex approval on quarterly basis from FY 2020-21 onwards. Therefore, 100% capital investment during FY 2021-22 has been considered. Hence, the actual capitalization as per balance sheet of FY 2021-22 for true up of FY 2021-22 has been provisionally allowed. It is pertinent to mention here that the actual capitalization during FY 2021-22 may comprise of capital expenditure (schemes) not approved (as per MYT Regulations, 2014) in previous years by the Commission, for which the Commission has deducted 25% capex in their respective financial year Tariff Orders. However, the same is allowed provisionally considering that the Petitioner has started taking prior approvals of capex schemes as per Regulation 32.2 of MYT Regulations, 2019. The decapitalisation / deduction in the assets during the FY 2021-22 is considered as per audited accounts for FY 2021-22. The Petitioner is directed to submit the details of the above observation in the next ARR / Tariff filing.
- 4.5.9 The Interest Capitalisation Rate is considered as per audited accounts. Accordingly, the Commission approves the Capital Expenditure and Capitalisation for FY 2021-22 as shown below:





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Table 4-18: CAPITAL EXPENDITURE APPROVED BY THE COMMISSION (Rs. Crore)

Particular	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True-up)	Approved (True up)
Opening CWIP as on 01.04.2021	A	8,315.33	7,958.32	6,564.14*
Investments during FY 2021-22	B	5,123.22	2,514.07	2,514.07
Employee Expenses Capitalisation	C	406.64	192.89	192.89
A&G Expenses Capitalisation	D	0.00	0.00	0.00
Interest Capitalisation on Interest on Long Term Loans	E	180.94	174.63	174.63
Total Investments	F= A+B+C+D+E	14,026.13	10,839.90	9,445.72
Transferred to GFA (Total Capitalisation)	G	3,506.53	3,888.09	3,888.09
Closing CWIP as on 31.03.2022	H= F-G	10,519.60	6,951.81	5,557.63

* This is the closing CWIP as on 31.03.2021 as approved by the Commission in True up of FY 2020-21 in Tariff Order of FY 2022-23 dated July 20, 2022.

Table 4-19: GFA APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
Opening GFA as on 01.04.2021	A	29,690.36	31,879.58	30,485.09
GFA Addition during FY 2021-22	B	3,506.53	3,888.09	3,888.09
Decapitalisation / Deduction during FY 2021-22	C	214.77	188.94	188.94
Closing GFA as on 31.03.2022	D=A+B-C	32,982.12	35,578.74	34,184.24

4.6 CONSUMER CONTRIBUTION, CAPITAL GRANTS AND SUBSIDIES

Petitioner's Submission

4.6.1 The Petitioner, in its Petition submitted the Consumer Contributions, Capital Grants and Capital Subsidies based on the audited accounts for FY 2021-22, as shown in the table below:

Table 4-20: CONSUMER CONTRIBUTION SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)	
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
Opening Balance of Consumer Contributions (CC), Grants and Subsidies towards Cost of Capital Assets as on 01.04.2021	A	1,919.96	1,914.63^
Additions during FY 2021-22	B	829.56	618.56*
Less: Amortisation during FY 2021-22	C	109.55	163.94#
Closing Balance of CC, Grants and Subsidies towards Cost of Capital Assets as on 31.03.2022	D=A+B-C	2,639.97	2,369.25

Note: ^ The above opening is as per the 'reinstated balance' as per the annual accounts for FY 2021-22

* This value is as per Balance Sheet - 'Proceed from Consumer Contribution'

This value is as per Balance Sheet - 'Revenue recognised from Consumer Contribution'



Commission's Analysis

- 4.6.2 The Commission observes that the Opening Balance of Consumer Contributions, Grants & Subsidies towards cost of capital assets for FY 2021-22 claimed by the Petitioner (Rs. 1,914.63 Crore) is not matching with closing trued up value of FY 2020-21 (Rs. 2,000.45 Crore) as approved by the Commission in its Tariff Order for FY 2022-23 dated July 20, 2022. The Commission therefore had directed the Petitioner to provide justification for such variation vide its 1st deficiency letter dated January 05, 2023.
- 4.6.3 The Petitioner in its reply dated January 30, 2023 submitted the actual opening balance of the Consumer Contributions, Grants & Subsidies for 2021-22 is Rs. 1,914.63 Crore as per the audited annual accounts FY 2021-22 and the same is considered.
- 4.6.4 The Commission observes that amortisation / depreciation on Consumer Contributions, Grants and Subsidies claimed by Petitioner is as per audited accounts which is based on Straight-Line method (SLM), whereas the Commission computed the amortisation / depreciation on Consumer Contributions, Grant and Subsidies based on Written Down Value (WDV) method as per MYT Regulations, 2014 for the period from FY 2017-18 to FY 2019-20. Thus, the amortisation / depreciation during the year from FY 2017-18 to FY 2019-20 is considered as per regulatory accounting in line with MYT Regulations, 2014, resulting in variation in computed value of closing Consumer Contributions, Grants and Subsidies with respect to audited value.
- 4.6.5 However, as per Regulation 21.1 (b) of MYT Regulations, 2019, the amortisation / depreciation even on Consumer Contributions, Grant and Subsidies is required to be computed as per Straight-Line Method from FY 2020-21 onwards which is also in line with the methodology adopted in audited accounts. Thus, the Commission considers the addition to Consumer Contributions, Grant and Subsidies for FY 2021-22 and amortisation as per audited accounts as mentioned below:

Table 4-21: CONSUMER CONTRIBUTION APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
Opening Balance of Consumer Contributions (CC), Grants and Subsidies towards Cost of Capital Assets as on 01.04.2021	A	1,919.96	1,914.63^	2,000.45
Additions during FY 2021-22	B	829.56	618.56*	618.56
Less: Amortisation during FY 2021-22	C	109.55	163.94#	163.94





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Particulars	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
Closing Balance of CC, Grants and Subsidies towards Cost of Capital Assets as on 31.03.2022	D=A+B-C	2,639.97	2,369.25	2,455.07

Note: ^ The above opening is as per the 'reinstated balance' as per the annual accounts for FY 2021-22

* This value is as per Balance Sheet – 'Proceed from Consumer Contribution'

This value is as per Balance Sheet – 'Revenue recognised from Consumer Contribution'

4.7 DEBT-EQUITY RATIO

Petitioner's Submission

4.7.1 The Petitioner submitted that they have considered the normative approach with Debt-Equity ratio as 70:30, i.e., 70% of capitalisation during the FY 2021-22 to be financed through term loan and balance 30% through equity. The amount of Consumer Contributions, Capital Subsidies and Grants towards cost of capital assets received during FY 2021-22 as per audited accounts has been separated and reduced, as the same would not be charged to consumers.

4.7.2 Further, in line with Regulation 20.2 of MYT Regulations, 2019 and methodology approved by the Commission in past Tariff Orders, the Petitioner has considered the financing of capitalisation during FY 2021-22 in the ratio of debt and equity as 70:30. The amount of Consumer Contributions, Capital Subsidies and Grants towards cost of capital assets received during FY 2021-22 as per audited accounts is deducted to derive the net capitalisation to be funded through debt and equity. Accordingly, the Debt and Equity addition during the FY 2021-22 as claimed by Petitioner is as follows:

Table 4-22: DEBT: EQUITY RATIO SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)	
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
Capitalisation during the FY 2021-22	A	3,506.53	3,888.09
Less: Decapitalisation/ Deduction during the FY 2021-21	B	214.77	0.00#
Less: Consumer Contribution, Grants & Capital Subsidies during the FY 2021-22	C	829.56	618.56
Net Capitalisation to be funded by Debt & Equity	D=A-B-C	2,462.20	3,269.53
Equity (%)	E	30.00%	30.00%
Debt (%)	F	70.00%	70.00%
Equity Funded during the FY 2021-22	G=E*D	738.66	980.86
Debt Funded during the FY 2021-22	H=F*D	1,723.54	2,288.67

Note: #Petitioner has not considered the Decapitalization while calculation of Net Debt and Equity addition during the FY 2021-22.





Commission's Analysis

- 4.7.3 The normative Debt-Equity ratio in respect to additional capitalisation is specified in Regulation 20 of MYT Regulations, 2019 as reproduced below:

Quote

20 Debt-Equity Ratio

20.1 For a capital investment Scheme declared under commercial operation on or after April 1, 2020, debt-equity ratio as on the date of commercial operation shall be 70:30 of the amount of capital cost approved by the Commission under Regulation 18, after making appropriate adjustment of Assets funded by Consumer Contribution/ Deposit Works/ Capital Subsidies/ Grant subject to prudence check for determination of Tariff:

Provided that if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan for the Licensee for determination of Tariff:

Provided further that the Licensee shall submit documentary evidence for the actual deployment of equity and explain the source of funds for the equity:

Provided also that where equity actually deployed is less than 30% of the capital cost of the capitalised asset, the actual equity shall be considered for determination of Tariff:

Provided also that the equity invested in foreign currency shall be designated on the date of each investment.

20.2 In case of the Licensee, for the fixed assets capitalised on account of Capital Expenditure Scheme prior to April 1, 2020, the debt-equity ratio allowed by the Commission for determination of ARR / Tariff for the period ending March 31, 2020 shall be considered:

Provided that in case of retirement or replacement or de-capitalisation of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or de-capitalisation of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets.

20.3 Any expenditure incurred or projected to be incurred on or after April 1, 2020, as may be admitted by the Commission as additional





capital expenditure for determination of Tariff, and Renovation and Modernisation expenditure for life extension, shall be serviced in the manner stipulated in these Regulations.

Unquote

- 4.7.4 The Commission observes that the Petitioner has not taken into account the Decapitalisation / Deduction during FY 2021-22 while deriving the net capitalisation for FY 2021-22 to be funded through debt and equity.
- 4.7.5 The Commission has considered the normative approach with Debt-Equity ratio as 70:30, i.e. 70% of capitalisation during FY 2021-22 to be financed through term loan and balance 30% through equity. The amount of Consumer Contributions, Capital Subsidies and Grants towards cost of capital assets during FY 2021-22 as per audited accounts is reduced, as the same is not to be charged to consumers. In addition to above, the assets which are decapitalized / deducted during FY 2021-22 is further deducted from capitalisation to derive net equity and debt addition during FY 2021-22 as shown below:

Table 4-23: DEBT: EQUITY RATIO APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
Capitalisation during FY 2021-22	A	3,506.53	3,888.09	3,888.09
Less: Decapitalisation / Deduction during FY 2021-22	B	214.77	188.94 [#]	188.94 [*]
Less: Consumer Contribution, Grants & Capital Subsidies during FY 2021-22	C	829.56	618.56	618.56
Net Capitalisation to be funded by Debt & Equity	D=A-B-C	2,462.20	3,080.59	3,080.59
Equity (%)	E	30.00%	30.00%	30.00%
Debt (%)	F	70.00%	70.00%	70.00%
Equity addition during FY 2021-22	G=E*D	738.66	924.18	924.18
Debt addition during FY 2021-22	H=F*D	1,723.54	2,156.41	2,156.41

Note: [#] Revised in reply of 1st data gap dated January 30, 2023, ^{*} This value is as per audited accounts.

4.8 DEPRECIATION

Petitioner's Submission

- 4.8.1 For computation of allowable Depreciation for FY 2021-22, the Petitioner has considered normative closing Gross Fixed Asset Base for FY 2019-20 and subsequent addition and yearly capitalisation for FY 2020-21 and FY 2021-22 as per the annual accounts. Further the Petitioner has computed the asset-wise depreciation as per rates provided in the Annexure A of MYT Regulations, 2019 based on the normative





opening and closing Gross Fixed Asset Base for FY 2021-22. Thus, the allowable depreciation for Part-A & Part-B in line with MYT Regulations, 2019 and methodology adopted by Commission in its Tariff Order for FY 2020-21 dated November 10, 2020 are tabulated below:

**Table 4-24: GROSS DEPRECIATION FOR ASSETS UPTO 31.03.2020 (PART-A) SUBMITTED BY
PETITIONER (Rs. Crore)**

Particulars	Opening GFA	Additions to GFA	Deductions to GFA	Closing GFA	Depreciation Rate (%)	Allowable Depreciation
Land & Land Rights						
Unclassified	141.97	1.31	43.84	99.45	0.00%	-
Freehold Land	1.26	0.09	1.29	0.06	0.00%	-
Buildings	1,085.14	145.76	1.11	1,229.79	3.34%	38.66
Other Civil Works	91.63	11.91	0.00	103.54	3.34%	3.26
Plants & Machinery	12,822.19	1,435.39	630.18	13,627.40	5.28%	698.27
Lines, Cable Network etc.	11,314.74	1,707.37	48.78	12,973.34	5.28%	641.21
Vehicles	3.37	0.00	0.06	3.31	9.50%	0.32
Furniture & Fixtures	8.74	1.23	0.02	9.96	6.33%	0.59
Office Equipments	9.55	2.56	0.00	12.11	6.33%	0.69
Intangible Assets	4.27	0.03	0.00	4.30	5.28%	0.23
Assets taken over by Licensee (Pending for final Valuation)	105.44	4.74	1.84	108.34	5.28%	5.64
Total Depreciable Assets	25,445.07	3,309.00	681.99	28,072.09	6.71%	1,388.86
Total Non-Depreciable Assets	143.23	1.41	45.13	99.50	-	-
Grand Total (Assets)	25,588.30	3,310.41	721.12	28,171.59	6.71%	1,388.86

**Table 4-25: GROSS DEPRECIATION FOR ASSETS FROM 01.04.2020 (PART-B) SUBMITTED BY
PETITIONER (Rs. Crore)**

Particulars	Opening GFA	Additions to GFA	Deductions to GFA	Closing GFA	Depreciation Rate (%)	Allowable Depreciation
Land & Land Rights						
Unclassified	16.73	69.91	-	86.65	0.00%	-
Freehold Land	0.00	0.01	-	0.01	0.00%	-
Buildings	1,18.62	141.84	-	260.47	3.34%	6.33
Other Civil Works	9.69	7.66	-	17.35	3.34%	0.45
Plants & Machinery	1,531.44	1,342.45	-	2,873.89	5.28%	116.30
Lines, Cable Network etc.	1,832.08	2,311.03	-	4,143.11	5.28%	157.75
Vehicles	0.01	0.10	-	0.12	9.50%	0.01
Furniture & Fixtures	1.21	1.17	-	2.38	6.33%	0.11
Office Equipments	0.97	2.07	-	3.04	6.33%	0.13
Intangible Assets	4.41	4.69	-	9.10	5.28%	0.36
Assets taken over by Licensee (Pending for final Valuation)	3.88	7.16	-	11.03	5.28%	0.39
Total Depreciable Assets	3,502.32	3,818.17	0.00	7,320.49	5.21%	281.83
Total Non-Depreciable Assets	16.73	69.92	0.00	86.66	-	0.00
Grand Total (Assets)	3,519.05	3,888.09	0.00	7,407.15	5.21%	281.83



- 4.8.2 The Petitioner has submitted that the depreciation proportionate to the extent of fixed assets being funded through Consumer Contribution, Capital Grants and Capital Subsidies on actuals as per annual accounts for FY 2021-22 have been deducted from Gross Depreciation in order to arrive at the Net Depreciation for FY 2021-22.
- 4.8.3 Further, the Petitioner has submitted that in compliance to provisions of Appendix 'C' to IndAS-I8, from FY 2016-17 onwards, Consumer Contribution Reserve has been recognized as revenue as equal annual income over the useful life of the underlying asset / term of the arrangement with consumers. Therefore, the Income from Consumer Contribution recognized as revenue (or equivalent depreciation amount) in annual accounts of FY 2021-22 is considered as depreciation of assets created from Consumer Contribution, Capital Grants and Capital Subsidies.

Table 4-26: NET DEPRECIATION (PART-A + PART-B) SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)	
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
Depreciation of Assets upto 31.03.2021	A	984.33	1,388.86
Depreciation of Assets from 01.04.2021 onwards	B	233.83	281.83
Less: Depreciation of assets created from Consumer Contribution, Capital Grants and Capital Subsidies	C	109.54	163.94
Net Depreciation	D=A+B-C	1,108.62	1,506.74

Commission's Analysis

- 4.8.4 Regulation 21 of MYT Regulations, 2019 specifies the methodology for computation of Depreciation as reproduced below:

Quote

21 Depreciation

21.1 The Licensee, shall be permitted to recover Depreciation on the value of fixed assets used in their respective businesses, computed in the following manner:

(a) The approved original cost of the fixed assets shall be the value base for calculation of Depreciation:

Provided that the Depreciation shall be allowed on the entire capitalised amount of the new assets after reducing the approved original cost of the retired or replaced or de-capitalised assets.

(b) Depreciation shall be computed annually based on the Straight- Line Method at the rates stipulated in the Annexure- A to these Regulations.

Provided that the Licensee shall ensure that once the individual asset is depreciated to the extent of seventy percent, remaining depreciable



value as on 31st March of the year closing shall be spread over the balance Useful Life of the asset including the Extended Life, as per submission of the Licensee and approved by the Commission.

(c) The salvage value of the asset shall be considered at 10% of the allowable capital cost and Depreciation shall be allowed up to a maximum of 90% of the allowable capital cost of the asset:

Provided that land owned shall not be treated as a Depreciable asset and shall be excluded while computing Depreciation:

Provided further that Depreciation shall be chargeable from the first year of commercial operation.

Depreciation shall not be allowed on assets funded by Consumer Contributions or Subsidies/ Grants/ Deposit works.

21.2 In case of existing assets, the balance depreciable value as on April 01, 2020, shall be worked out taking into consideration the life of the asset, and by deducting the cumulative Depreciation as admitted by the Commission up to March 31, 2020, from the gross depreciable value of the assets.

21.3 In case of projected commercial operation of the assets for part of the year, depreciation shall be computed based on the average of opening and closing value of assets.

21.4 Depreciation shall be re-computed for assets capitalised at the time of Truing-Up, based on Audited Accounts and documentary evidence of assets capitalised by the Petitioner, subject to the prudence check of the Commission.

Unquote

- 4.8.5 The Commission in its Tariff Order for FY 2020-21 dated November 10, 2020 observed as under:

Quote

7.5.7 It is observed that the Regulation 21.1 specifies for process of computation of depreciation of the new assets, wherein depreciation shall be computed annually based on the Straight- Line Method at the rates stipulated in the Regulations and the Licensee has to ensure that once the individual asset is depreciated to the extent of seventy percent, remaining depreciable value as on 31st March of the year closing has to be spread over the balance Useful Life of the asset including the Extended Life. However, the Regulations doesn't specifically say the same wrt to the existing Gross Block and further explains the treatment of existing assets in Regulation 21.2. Also, there is a huge lack of individual asset-wise details in the existing gross block since this has been carried on from FY 2007-08 after the unbundling of UPPCL and transfer scheme to UPPTCL. Further, the Licensee also started



maintaining the FAR much later after repeated directions of the Commission, from FY 2014-15 onwards. Hence, the life of individual assets cannot be ascertained and as such it cannot be found whether the individual asset has depreciated to the extent of seventy percent or not.

7.5.8 Accordingly, the existing assets are to be dealt with separately as per Regulations 21.2 and their Net block (as on 31.3.2020) may be kept separate and may be considered Gross Block to apply SLM from 1.4.2020 onwards and the new assets to be dealt as per Regulations 21.1 of MYT Regulations 2019.

7.5.9 Further, UPPTCL is directed to maintain a separate individual asset wise FAR for assets capitalized after 1.4.2020 and the Gross Block and Depreciation may be computed separately from the Gross Block before 1.4.2020. Accordingly, from FY 2020-21 onwards UPPTCL to maintain two separate Gross Blocks (one for assets upto 31.3.2020 (Part-A) and second for assets after 1.4.2020 (Part B) and two separate FAR's depicting addition of assets details from 01.04.2020 onwards for the purpose of depreciation computation for Regulatory Accounts.

.....

7.5.11 As per above, the Commission has computed the depreciation. The written down closing of FY 2019-20 is considered as Opening for FY 2020-21 where the gross depreciation computed for FY 2019-20 is negated from it to get the Net written down opening (considered to be opening GFA) due to the Change in methodology of Depreciation from Written Down Value to Straight Line Method.

Unquote

- 4.8.6 In compliance to above, the Petitioner has submitted gross depreciation for Part-A and Part-B, separately and later combined to derive the gross depreciation for FY 2021-22. However, the Commission observes that the Petitioner has not calculated the depreciation for assets that were capitalized upto March 31, 2020 as per the methodology approved by the Commission in Tariff Order for FY 2020-21 dated November 10, 2020. Therefore, the Commission vide its 1st deficiency letter dated January 05, 2023, directed the Petitioner to submit the same as per the methodology approved by Commission.
- 4.8.7 The Petitioner vide reply dated January 30, 2023 submitted that since the methodology for calculating depreciation is changed from Written Down Value (WDV) method to Straight Line Method (SLM), it is necessary to calculate the opening Gross Fixed Assets without the impact of cumulative depreciation. The methodology adopted by Commission in its Tariff Order for FY 2020-21 dated November 10, 2020 for calculation of depreciation of Part-A is WDV method. However, as per MYT



Regulations, 2019, the depreciation for both Part-A and Part-B shall be calculated on SLM method. Further the depreciation from assets created out of consumer contribution, grant and subsidy is deducted to arrive at net allowable depreciation.

- 4.8.8 The Commission observes that the methodology adopted by the Petitioner is not in line with the methodology approved by the Commission in Para 7.5.11 of Tariff Order of FY 2020-21 dated November 10, 2020. The relevant extract of Tariff Order of FY 2020-21 dated November 10, 2020 is reproduced below:

Quote

7.5.11 As per above, the Commission has computed the depreciation. The written down closing of FY 2019-20 is considered as Opening for FY 2020-21 where the gross depreciation computed for FY 2019-20 is negated from it to get the Net written down opening (considered to be opening GFA) due to the Change in methodology of Depreciation from Written Down Value to Straight Line Method. The gross allowable depreciation for each component is sum totalled and the equivalent depreciation on assets created out of Consumer Contributions, capital grants and subsidies are deducted as shown under:

Unquote

- 4.8.9 The Commission directed the Petitioner to maintain a separate individual asset wise FAR for assets capitalized after April 01, 2020 and the Gross Block and Depreciation may be computed separately from the Gross Block before April 01, 2020. Accordingly, from FY 2020-21 onwards the Petitioner is to maintain two separate Gross Blocks (one for assets upto March 31, 2020 (Part-A) and second for assets after April 01, 2020 (Part B) and two separate FAR's depicting addition of assets details from April 01, 2020 onwards for the purpose of depreciation computation.
- 4.8.10 The depreciation is computed by considering the provisions of above Regulations and approach adopted in last year Tariff Order. The Commission has considered opening GFA for FY 2023-24 equals to closing GFA of FY 2022-23, the gross allowable depreciation for each component is totalled and the equivalent depreciation on assets created out of consumer contributions, capital grants and subsidies are deducted as shown under:

Table 4-27: GROSS FIXED ASSETS UPTO 31.03.2020 (PART-A) APPROVED BY THE COMMISSION IN TARIFF ORDER FOR FY 2021-22 DATED JUNE 29, 2021 (Rs. Crore)

Particulars	Opening GFA (FY 2019-20)	Gross Allowable Depreciation (FY 2018-19)	Written Down Opening (FY 2019-20)	Additions to GFA (FY 2019-20)	Deductions (FY 2019-20)	Closing GFA (FY 2019-20)	Average GFA (FY 2019-20)	Rate of Depreciation (%)	Gross Allowable Depreciation (FY 2019-20)
Land & Land Rights									
Unclassified	90.31							90.31	-
Freehold Land	0.03							0.03	-



**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Particulars	Opening GFA (FY 2019-20)	Gross Allowable Depreciation (FY 2018-19)	Written Down Opening (FY 2019-20)	Additions to GFA (FY 2019-20)	Deductions (FY 2019-20)	Closing GFA (FY 2019-20)	Average GFA (FY 2019-20)	Rate of Depreciation (%)	Gross Allowable Depreciation (FY 2019-20)
Buildings	845.06	23.57	821.48	119.60	0.85	940.23	880.86	3.02%	26.60
Other Civil Works	69.40	2.02	67.38	9.77	0.00	77.15	72.27	3.02%	2.18
Plants & Machinery	9,497.57	701.34	8,796.23	1,177.71	288.92	9,685.02	9,240.63	7.81%	721.69
Lines, Cable Network etc.	8,832.58	434.37	8,398.21	1,400.87	20.61	9,778.46	9,088.34	5.27%	478.96
Vehicles	2.25	0.29	1.96	0.00	0.00	1.96	1.96	12.77%	0.25
Furniture & Fixtures	6.36	0.70	5.66	1.01	0.00	6.67	6.16	12.77%	0.79
Office Equipments	6.85	0.81	6.04	2.10	0.00	8.15	7.10	12.77%	0.91
Assets taken over by Licensee (Pending for final Valuation)	72.87	8.73	64.13	3.89	0.10	67.93	66.03	12.77%	8.43
Intangible Assets	3.24	0.49	2.75	0.00	0.00	2.75	2.75	15.00%	0.41
Total Assets	19,426.51*	1,172.31	18,254.20^	2,714.95	310.48	20,658.67#	20,042.59		1,240.22
Net Gross Fixed Assets upto March 31, 2020 (Part-A) [Closing GFA (Rs. 20658.67 Crore) minus Gross Allowable Depreciation (1,240.22)]									19,418.45

Note: * Opening GFA includes Rs. 19336.17 (Depreciable assets) plus Rs. 90.34 Crore of Land & Land Rights (Non-Depreciable assets). ^ Written Down Opening includes Rs. 18163.36 (Depreciable assets) plus Rs. 90.34 Crore of Land & Land Rights (Non-Depreciable assets). # Closing GFA includes Rs. 20568.33 (Depreciable assets) plus Rs. 90.34 Crore of Land & Land Rights (Non-Depreciable assets)

4.8.11 The net Gross Fixed Assets upto March 31, 2020 (Part-A) is calculated by considering the approved trued up value of closing GFA for FY 2019-20 (Rs. 20658.67 Crore) minus gross allowable depreciation for FY 2019-20 (Rs. 1240.22 Crore) in true up Order for FY 2019-20 dated June 29, 2021. Further, the opening Gross Block of Part-A for FY 2021-22 is considered as approved closing value (Rs. 19235.88 Crore) in Tariff Order for FY 2022-23 dated July 20, 2022.

4.8.12 For Part-B i.e., assets capitalised after April 01, 2020, the Commission has calculated the asset wise depreciation as per Regulation 21.1 (b) of MYT Regulations, 2019 i.e., depreciation shall be computed annually based on the Straight-Line Method at the rates stipulated in the Annexure-A of MYT Regulations, 2019.

4.8.13 Further, the Commission observes that the depreciation on asset created out of Consumer Contribution, Capital Grants and Capital Subsidies in audited accounts for FY 2021-22 are as per Straight Line Method and the rates of depreciation adopted by the Petitioner are as per CERC which are in accordance with MYT Regulations, 2019. Hence, the depreciation on asset created out of Consumer Contribution, Capital Grants and Capital Subsidies are considered as per audited accounts for FY 2021-22.

4.8.14 Further, considering the FY 2021-22, the assets in Part-A are way older than the assets under Part-B and therefore, practically the assets in Part-A will be decapitalised / deducted first when compared to Part-B assets. Hence, the Commission has considered the complete decapitalised / deducted during the FY 2021-22 in Part-A





asset base. Accordingly, the Commission approves the Depreciation for Part A and Part B in the following tables.

Table 4-28: GROSS DEPRECIATION FOR ASSETS UPTO 31.03.2020 (PART-A) APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Opening GFA	Additions to GFA	Deductions to GFA	Closing GFA	Depreciation Rate (%)	Allowable Depreciation
Land & Land Rights						
Unclassified	90.31	-	-	90.31	-	-
Freehold Land	0.03	-	-	0.03	-	-
Buildings	913.61	-	0.24	913.37	3.34%	30.51
Other Civil Works	74.97	-	-	74.97	3.34%	2.50
Plants & Machinery	8796.19	-	174.12	8622.07	5.28%	459.84
Lines, Cable Network etc.	9284.62	-	13.28	9271.34	5.28%	489.88
Vehicles	1.65	-	-	1.65	9.50%	0.16
Furniture & Fixtures	5.88	-	0.02	5.86	6.33%	0.37
Office Equipments	7.24	-	-	7.24	6.33%	0.46
Assets taken over by Licensee (Pending for final Valuation)	59.02	-	1.27	57.75	5.28%	3.08
Intangible Assets	2.34	-	-	2.34	5.28%	0.12
Total Assets	19235.88	-	188.94	19046.94	5.16%	986.93

Table 4-29: GROSS DEPRECIATION FOR ASSETS FROM 01.04.2020 ONWARDS (PART-B) APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Opening GFA	Additions to GFA	Deductions to GFA	Closing GFA	Depreciation Rate (%)	Allowable Depreciation
Land & Land Rights						
Unclassified	16.73	69.91	-	86.65	-	-
Freehold Land	0.00	0.01	-	0.01	-	-
Buildings	118.62	141.84	-	260.47	3.34%	6.33
Other Civil Works	9.69	7.66	-	17.35	3.34%	0.45
Plants & Machinery	1531.44	1342.45	-	2873.89	5.28%	116.30
Lines, Cable Network etc.	1832.08	2311.03	-	4143.11	5.28%	157.75
Vehicles	0.01	0.10	-	0.12	9.50%	0.01
Furniture & Fixtures	1.21	1.17	-	2.38	6.33%	0.11
Office Equipments	0.97	2.07	-	3.04	6.33%	0.13
Assets taken over by Licensee (Pending for final Valuation)	3.88	7.16	-	11.03	5.28%	0.39
Intangible Assets	4.41	4.69	-	9.10	5.28%	0.36
Total Assets	3519.05	3888.09	0.00	7407.15	5.18%	281.83



4.8.15 The following tables summarizes the Depreciation as claimed by the Petitioner and as approved by the Commission for FY 2021-22:

Table 4-30: NET DEPRECIATION (PART-A + PART-B) APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
Depreciation of Assets upto 31.03.2020	A	984.33	1388.86	986.93
Depreciation of Assets from 01.04.2020 onwards	B	233.83	281.83	281.83
Less: Depreciation of assets created from Consumer Contribution, Capital Grants and Capital Subsidies	C	109.54	163.94	163.94
Net Depreciation	D=A+B-C	1108.62	1506.74	1104.81

4.9 INTEREST ON LONG TERM LOANS

Petitioner's Submission

4.9.1 The Petitioner submitted that the Commission in its Tariff Order for FY 2020-21 dated November 10, 2020 had considered the normative opening of the loan as mentioned below:

Quote

7.6.5 As per the Regulation 23.2, the normative long term loan outstanding as on April 1, 2020, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2020, from the gross normative loan as shown below:

Unquote

4.9.2 Accordingly, the Petitioner in its Petition has computed the normative opening loan as on April 01, 2020 as follows:

Table 4-31: OPENING NORMATIVE LOAN AS ON 01.04.2020 SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2020-21 (True up)	
		Tariff Order for FY 2020-21 dated 10.11.2020	Petition (True up)
Opening GFA	A	27268.44	28543.10
Opening CC, Grants & Subsidies	B	1513.05	1548.05
Net Opening GFA	C=A-B	25755.39	26995.05
Opening Debt (70%)	D=70%	70.00%	70.00%
Opening Debt	E=D*C	18028.77	18896.54
Cumulative Net Depreciation	F	7344.64	7490.39
Opening Normative Loan	G=E-F	10684.13	11406.15

4.9.3 The Commission further in its order dated July 20, 2022 with respect to the opening of the loan and equity in terms of Regulation 20.2, has stated that it will consider either value derived as per Regulation 23.2 of MYT Regulations 2019 or the normative closing



equity base of FY 2019-20 as approved by Commission in its True-Up Order dated June 29, 2021, whichever is lower.

- 4.9.4 The Petitioner has challenged the above approach of the Commission before the Hon'ble APTEL. Accordingly, for the purpose of computation of normative interest on loan, UPPTCL has considered the loan addition as 70% of actual capitalisation after adjusting the Consumer Contribution and Grants. The portion of capital expenditure financed through Consumer Contributions, Capital Subsidies and Grants has been separated as the depreciation and interest thereon has not been charged to the Beneficiaries. The deemed repayment has been considered equivalent to net depreciation for FY 2021-22.
- 4.9.5 The Table below shows the normative loan and normative equity addition during the FY 2021-22 as submitted by the Petitioner. The normative loan is estimated based on the actual capitalization and actual Consumer Contribution, Capital Grants and Capital Subsidies received during FY 2021-22 as per the audited accounts.

Table 4-32: NORMATIVE LOAN & NORMATIVE EQUITY ADDED DURING FY 2021-22 SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)	
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
Capitalization during the FY	A	3506.53	3888.09
Decapitalisation / Deduction	B	214.77	0.00
Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets during FY 2020-21	C	829.56	618.56
Net Capitalization during the FY	D=A-B-C	2462.20	3269.53
Equity (%)	E=30%	30.00%	30.00%
Loan (%)	F=70%	70.00%	70.00%
Equity addition during the FY	G=E*D	738.66	980.86
Loan addition during the FY	H=F*D	1723.54	2288.67

- 4.9.6 The Petitioner submitted that normative interest has been computed in accordance with the Regulations 23.5 of MYT Regulations, 2019 on the average balance of weighted average rate of interest of the actual long- term loan portfolio during the concerned financial year. The interest capitalisation has been considered at a rate of 11.94% for FY 2021-22 which is as actual capitalisation rate for FY 2021-22 as per audited accounts.

Table 4 33: INTEREST ON LONG TERM LOANS SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)	
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
Opening Loan as on 1st April of FY	A	11084.78	12165.98





Particulars	Derivation	FY 2021-22 (True up)	
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
Addition during the FY	B	1723.54	2288.67
Less: Repayment during the FY	C	1108.62	1506.74
Closing Loan	D=A+B-C	11699.70	12947.91
Wtg. Avg. Interest Rate	E	10.12%	11.65%
Interest on Loan	F=average (A, D)*E	1152.50	1462.88
Interest Capitalisation Rate	G=H/F (%)	15.70%	11.94%
Less: Interest Capitalised	H	180.94	174.63
Net Interest Charged	I=F-H	971.56	1288.26

Commission's Analysis

4.9.7 Regulation 23 of MYT Regulations, 2019 specifies as under:

Quote

23 Interest on Long-Term Loan

23.1 The long-term loans arrived at in the manner indicated in these Regulations on the assets put to use shall be considered as gross normative loan for calculation of interest on loan:

Provided that in case of retirement or replacement or de-capitalisation of assets, the loan capital approved as mentioned above, shall be reduced to the extent of outstanding loan component of the original cost of such assets based on documentary evidence.

23.2 The normative long- term loan outstanding as on April 1, 2020, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2020, from the gross normative loan.

23.3 The repayment for each year shall be deemed to be equal to the Depreciation allowed for that year.

23.4 Notwithstanding any moratorium period availed, the repayment of loan shall be considered from the first year of commercial operation of the asset.

23.5 The rate of interest shall be the weighted average rate of interest computed on the basis of the actual long- term loan portfolio at the beginning of each year:

Provided that at the time of Truing- Up, the weighted average rate of interest of the actual long- term loan portfolio during the concerned year shall be considered as the rate of interest:





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

Provided also that if the Licensee, does not have actual long- term loan even in the past, the weighted average rate of interest of its other Businesses regulated by the Commission shall be considered:

Provided also that if the Licensee does not have actual long- term loan, and its other Businesses regulated by the Commission also do not have actual loan even in the past, then the weighted average rate of interest of the entity as a whole shall be considered:

Provided also that if the entity as a whole does not have actual long-term loan because of which interest rate is not available, then the rate of interest for the purpose of allowing the interest on the normative long- term loan should be the weighted average SBI MCLR (1 Year) prevailing during the concerned year.

23.6 The interest on long- term loan shall be computed on the normative average long- term 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 concerned year shall be considered on the basis of the actual asset capitalisation approved by the Commission for the year.

23.7 The excess interest during construction on account of time and / or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission:

Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Licensee, any liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:

Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.

Unquote

- 4.9.8 The Commission observes that there is variation in opening loan base because the Petitioner has claimed the opening loan based on the audited value instead of approved closing value of previous year Trued-Up values. Thus, considering the regulatory accounts and provisions, the opening loan base for FY 2021-22 is considered





as closing value of loan for FY 2020-21, which is the approved true up value in Tariff Order of FY 2022-23 dated July 20, 2022. Further, 70% of Net GFA addition (after considering deduction / de-capitalization, Consumer Contribution and Grants in GFA as approved for FY 2021-22 has been considered as loan addition during the year.

4.9.9 The deemed repayment is approved as equal to net depreciation approved during the Financial Year as per Regulation 23.3 of MYT Regulations, 2019.

4.9.10 The Commission during prudence check found that the Petitioner has claimed the interest rate of 11.65% which is as follows:

Table 4-34: INTEREST RATE ON LONG TERM LOAN SUBMITTED BY PETITIONER (%)

Loan No.	Lender	FY 2021-22 (True up)								
		Opening as on 01.04.21	Current Maturity from long term debt	Opening as on 01.04.21	Addition	Repayment	Closing as on 31.03.22	Current Maturity from long term debt	Closing as on 31.03.21	Interest Paid (Claimed by Petitioner)
		A	B	C=A-B	D	E	F=A+D-E	G	H=F-G	I
Loan-1	PFC	5790.63	645.96	5144.67	980.86	634.25	6137.23	645.96	5491.27	629.47
Loan-2	REC	7486.45	808.96	6677.49	890.65	826.86	7550.23	808.96	6741.28	809.37
Loan-3	Indian Bank	0.00	0.00	0.00	211.82	0.00	211.82	0.00	211.82	11.15
Loan-4	IREDA	0.00	0.00	0.00	3.80	0.00	3.80	0.00	3.80	0.05
Total		13277.07	1454.92	11822.15	2087.12	1461.11	13903.09	1454.92	12448.17	1450.04
Weighted Average Interest Rate for Long Term Loan (I/H)										11.65%

4.9.11 However, the Petitioner in its reply to TVS queries dated February 15, 2023 revised the interest rate for long term loan as 10.67% which is tabulated below:

Table 4-35: REVISED INTEREST RATE ON LONG TERM LOAN SUBMITTED BY PETITIONER IN REPLY DATED 15.02.2023 (%)

Loan No.	Lender	FY 2021-22 (True up)				
		Opening as on 01.04.21	Addition	Repayment	Closing as on 31.03.22	Interest Paid (Claimed by Petitioner)
		A	B	C	D=A+B-C	E
Loan-1	PFC	5790.63	980.86	634.25	6137.23	629.47
Loan-2	REC	7486.45	890.65	826.86	7550.23	809.37
Loan-3	Indian Bank	0.00	211.82	0.00	211.82	11.15
Loan-4	IREDA	0.00	3.80	0.00	3.80	0.05
Total		13277.07	2087.12	1461.11	13903.09	1450.04
Weighted Average Interest Rate for Long Term Loan $E \times 100\% / \{(A+D)/2\}$						10.67%

4.9.12 The Commission observes that the Petitioner has claimed interest rate of 11.65% incorrectly which is further revised in its reply dated February 15, 2023. The Commission observes that the interest paid during the FY 2021-22 claimed by the Petitioner is not matching with the audited accounts. Accordingly, the Commission





computes the interest rate for long term loan as 10.22% based on the audited figures for FY 2021-22, in line with Regulation 23.4 of MYT Regulations, 2019 and methodology adopted by the Commission in its Tariff Order for FY 2021-22 dated June 29, 2021 and Tariff Order for FY 2022-23 dated July 20, 2022 as shown below.

Table 4-36: INTEREST RATE ON LONG TERM LOAN APPROVED BY THE COMMISSION (Rs. Crore)

Loan No.	Lender	FY 2021-22 (True up)				
		Opening as on	Addition	Repayment	Closing as on	Interest paid (as per Balance Sheet)
		01.04.2021			31.03.2022	
		A	B	C	D=A+B-C	E
Loan-1	PFC	5790.63	980.86	634.25	6137.23	568.33
Loan-2	REC	7486.45	890.65	826.86	7550.23	808.12
Loan-3	Indian Bank	-	211.82		211.82	12.59
Loan-4	IREDA	-	3.80		3.80	0.08
Total		13277.07	2087.12	1461.11	13903.09	1389.13
Weighted Average Interest Rate for Long Term Loan (%) $E*100/\{(A+D)/2\}$						10.22%

4.9.13 The Interest Capitalisation is approved based on actuals as per audited accounts. The Interest Capitalisation Rate is determined based on actual Interest Capitalised and interest on long term loan approved for FY 2021-22.

4.9.14 The following table details the Interest on Long Term Loan as submitted by the Petitioner and approved by the Commission for FY 2021-22 is as shown below.

Table 4-37: INTEREST ON LONG TERM LOAN APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
Opening Loan as on 1st April of FY	A	11084.78	12165.98	11563.50
Addition during the FY	B	1723.54	2288.67	2156.41
Less: Repayment during the FY	C	1108.62	1506.74	1104.81
Closing Loan	D=A+B-C	11699.70	12947.91	12615.11
Weighted Average Interest Rate	E	10.12%	11.65%	10.22%
Interest on Loan	F=average (A, D)*E	1152.50	1462.88	1235.73
Interest Capitalisation Rate	G=H/F (%)	15.70%	11.94%	14.13%
Less: Interest Capitalised	H	180.94	174.63	174.63
Net Interest Charged	I=F-H	971.56	1288.26	1061.10

4.10 INTEREST ON WORKING CAPITAL

Petitioner's Submission

4.10.1 In accordance with Regulation 25 of MYT Regulations, 2019, the Petitioner has derived the value of each component of Working Capital requirement of the Transmission





Licensee. Further, the Interest Rate on Working Capital requirement is considered as "weighted average SBI MCLR (1 Year) prevailing during the concerned Year (FY 2021-22) plus 250 basis points" i.e. 9.50% as per proviso of Regulation 25 of MYT Regulations, 2019.

Table 4-38: INTEREST ON WORKING CAPITAL SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)	
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
O&M Expenses for one Month	$A = O\&M/12$	58.02	122.56
Maintenance Spares at 40% of R&M Expenses for two Months	$B = 40\% * R\&M/6$	25.23	25.71
One and Half Month equivalent of the expected revenue for transmission Charges at prevailing Tariff	$C = ARR * 1.5/12$	340.06	375.52
Less: Amount held as security deposits, if any, from Transmission System Users	D	0.00	0.00
Total Working Capital	$E = A + B + C - D$	423.31	523.78
Interest Rate on Working Capital Requirement	F	10.65%	9.50%
Interest on Working Capital	$G = E * F$	45.08	49.76

Commission's Analysis

4.10.2 Regulation 25 of MYT Regulations, 2019 specifies as under:

Quote

25 Interest on Working Capital

25.1 Transmission

(a) The working capital requirement of the Transmission Licensee shall cover:

- (i) Operation and maintenance expenses for one month;
 - (ii) Maintenance spares at 40% of the R&M expenses for two months; and
 - (iii) One-and-a-half-month equivalent of the expected revenue from transmission charges at the prevailing Tariff;
- minus
- (iv) Amount held as security deposits, if any, from Transmission System Users:

Provided further that for the purpose of Truing- Up for any year, the working capital requirement shall be re-computed on the basis of the values of components of working capital approved by the Commission in the Truing- Up;

(b) Rate of interest on working capital shall be simple interest and shall be equal to the SBI MCLR (1 Year) on October 01, 2019 plus 250 basis points:





Provided that for the purpose of Truing- Up for any year, simple interest on working capital shall be allowed at a rate equal to the weighted average SBI MCLR (1 Year) prevailing during the concerned Year plus 250 basis points.

Unquote

4.10.3 For computing working capital, the Commission considers approved O&M Expenses for one Month and Maintenance Spares at 40% of R&M Expenses for two Months in line with the provisions of MYT Regulations, 2019. In addition to above, other components of Working Capital requirement are also calculated as per MYT Regulations, 2019.

4.10.4 The Interest Rate on Working Capital requirement is considered as weighted average SBI MCLR (1 Year) prevailing during the year (FY 2021-22) plus 250 basis points i.e. 9.50% as per first proviso of Regulation 25.1(b) of MYT Regulations, 2019. Accordingly, the Commission approves Interest rate and interest on working as shown in table below:

Table 4-39: INTEREST RATE ON WORKING CAPITAL FOR FY 2021-22 APPROVED BY THE COMMISSION (%)

From Date	To Date	Derivation	FY 2021-22 (True up)	
			SBI 1 Year MCLR*	No. of Days
01.04.2021	31.03.2022	A	7.00%	365
Interest Rate on Working Capital Requirement		B = A + 2.50%	9.50%	-

* Source: SBI MCLR (1 Year) prevailing during the year (FY 2021-22).

Link: <https://sbi.co.in/web/interest-rates/interest-rates/mclr-historical-data>

Table 4-40: INTEREST ON WORKING CAPITAL APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
O&M Expenses for one Month	A=O&M/12	58.02	122.56	76.87
Maintenance Spares at 40% of R&M Expenses for two Months	B=40%*R&M/6	25.23	25.71	26.07
One and Half Month equivalent of the expected revenue for transmission Charges at prevailing Tariff	C=ARR*1.5/12	340.06	375.52	396.19
Less: Amount held as security deposits, if any, from Transmission System Users	D	0.00	0.00	0.00
Total Working Capital	E=A+B+C-D	423.31	523.78	499.14
Interest Rate on Working Capital Requirement	F	10.65%	9.50%	9.50%
Interest on Working Capital Requirement	G=E*F	45.08	49.76	47.42



4.11 RETURN ON EQUITY

Petitioner's Submission

- 4.11.1 The Petitioner has computed the eligible Return on Equity by considering the opening normative equity as April 01, 2021 and normative equity closing based on capital addition for FY 2021-22. Return on Equity has been computed on normative equity portion (30%) of capitalised assets i.e., debt-equity ratio as 70:30. The Petitioner further added that Return on Equity has been computed as per methodology adopted by Commission in its previous Tariff Orders
- 4.11.2 The Petitioner submitted that under provisions of MYT Regulations, 2019, the Petitioner is eligible for Return on Equity at 14.50% on equity base. The Petitioner further added that seeing the huge gap to recover cost of supply from Distribution Licensee, claiming Return on Equity at 14.50% would only result in increase in arrears and accumulation of receivables. Hence, the Petitioner is claiming Return on Equity at 2.00% since FY 2009-10.

Table 4-41: RETURN ON EQUITY SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)	
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
Opening Equity	A	8302.60	9002.93
Equity addition during FY 2021-22	B	738.66	980.86
Closing Equity	C=A+B	9041.26	9983.78
Average Equity	D=(A+C)/2	8671.93	9493.35
Rate of Return on Equity	E	2.00%	2.00%
Return on Equity	F=D*E	173.44	189.87

Commission's Analysis

- 4.11.3 Regulation 22 of MYT Regulations, 2019 specifies as under:

Quote

22 Return on Equity

22.1 Return on equity shall be computed in Rs. terms on equity base at the rate of 14.5% post-tax per annum for the Transmission Licensee and at the rate of 15% post-tax per annum for Distribution Licensee respectively as determined in accordance with Regulation 20:

Provided that assets funded by Consumer Contribution / Deposit works, Capital Subsidies / Grants and corresponding Depreciation shall not form part of the Capital Cost. Actual Equity infused by the Licensee as per book value shall be considered and shall be used for computation in these Regulations.

Unquote



- 4.11.4 The Commission observes that the Petitioner has claimed the opening equity based on its claim in previous year Tariff petition instead of closing value approved by the Commission thereunder, resulting in variation of opening equity base.
- 4.11.5 The Commission has considered the opening equity base of FY 2021-22 as approved closing value while truing up for FY 2020-21 in Tariff Order of FY 2022-23 dated July 20, 2022. Further, 30% of Net GFA addition after considering deduction / de-capitalization, Consumer Contribution and Grants in GFA as approved for FY 2021-22 has been considered as equity addition during the year.
- 4.11.6 The Commission observes that the Petitioner has claimed the rate of Return on Equity as 2.00% instead of 14.50% as per Regulation 22.1 of MYT Regulations, 2019, citing the reason that the Distribution Licensees are already in financial stress and claiming rate of return on equity at 14.50% will further worsen the financial condition of Distribution Licensee.
- 4.11.7 The Commission is of the view that as per Regulation 22.1 of MYT Regulations, 2019, the Petitioner is entitled for rate on Return on Equity at 14.50%, however, the Petitioner has claimed rate of Return on Equity as 2.00%. Therefore, the Commission taking into the account the plea / claim of the Petitioner considers the rate of Return on Equity as 2.00% instead of 14.50%. Accordingly, the Return on Equity (RoE) for FY 2021-22 is shown in the table below:

Table 4-42: RETURN ON EQUITY APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
Opening Normative Equity	A	8302.60	9002.93	8506.50
Equity addition during the year (30% of net capitalisation)	B	738.66	980.86	924.18
Closing Normative Equity	C=A+B	9041.26	9983.78	9430.68
Average Normative Equity	D=(A+C)/2	8671.93	9493.35	8968.59
Rate of Return on Equity	E	2.00%	2.00%	2.00%
Return on Equity	F=D*E	173.44	189.87	179.37

4.12 INCOME TAX

Petitioner's Submission

- 4.12.1 The Petitioner has not projected any income tax for FY 2021-22.



Commission's Analysis

4.12.2 Regulation 26 of MYT Regulations, 2019 specifies as under:

Quote

26 Income Tax

26.1 Income Tax, if any, on the licensed business of the Licensee shall be treated as expense and shall be recoverable from consumers through Tariff. However, tax on any income other than that through its Licensed business shall not be a pass through, and it shall be payable by the Licensee itself.

26.2 Notwithstanding anything contained in Regulation 26.1, total Income Tax payable by the Licensee, in any year, shall be lowest of the following:

- (a) Actual payment made;
- (b) ROE allowed in that year x MAT (%) or ROE allowed in that year x Corporate tax (%), whichever is applicable.

26.3 Any under recoveries or over recoveries of Tax on income shall be adjusted every year on the basis of Income Tax assessment under the Income Tax Act 1961, subject to Regulation 26.2 above, as certified by the Statutory Auditors.

Unquote

4.12.3 The Commission observes that the Petitioner has not claimed any income tax for FY 2021-22. Thus, the Commission has not approved any income tax for FY 2021-22.

4.13 NON-TARIFF INCOME

Petitioner's Submission

4.13.1 The Petitioner submitted that against the approved Non-Tariff Income of Rs. 271.24 Crore vide Tariff Order dated June 29, 2021 for FY 2021-22, the actual Non-Tariff Income as per audited accounts is Rs. 107.30 Crore. Further, as per FY 2021-22 annual accounts the Income from Consumer Contribution to the tune of Rs. 163.94 Crore is also recognized under "Other Income" which is already deducted from Gross allowable Depreciation. Thus, the Petitioner considered the net Non-Tariff Income as Rs. 107.30 Crore for FY 2021-22.

Table 4-43: NON-TARIFF INCOME SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	FY 2021-22 (True up)	
	Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
Non-Tariff Income	237.68	107.30



Commission's Analysis

4.13.2 Regulation 35 of MYT Regulations, 2019 specifies as under:

Quote

35. Non-Tariff Income

35.1 The amount of Non-Tariff income relating to the Transmission Business as approved by the Commission shall be deducted from the ARR in determining the 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 in such form as may be stipulated by the Commission.

35.2 Non-Tariff Income shall include:

Income from rent of land or buildings;

Income from sale of scrap;

Income from investments;

Interest income on advances to suppliers/contractors;

Interest income on loans / advances to employees;

Income from rental from staff quarters;

Income from rental from contractors;

Income from hire charges from contractors and others;

Supervision charges for capital works;

Income from advertisements;

Income from sale of tender documents;

Excess found on physical verification;

Prior Period Income;

Miscellaneous receipts; and

Any other Non-Tariff Incomes:

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

Unquote

4.13.3 The Commission has scrutinized the audited accounts and finds that the claim of the Petitioner is in line with MYT Regulations, 2019. Thus, the Commission approves the Non-Tariff Income as claimed by the Petitioner.

Table 4-44: NON-TARIFF INCOME APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	FY 2021-22 (True up)		
	Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
Interest Income	237.68	11.43	11.43
Maintenance & Shutdown Charges		18.33	18.33
Income from Contractors/Suppliers		19.79	19.79





Particulars	FY 2021-22 (True up)		
	Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
Incomes from Consumer Contribution Reserve		163.94	163.94
Supervision Charges		36.66	36.66
Rental from Staff		0.29	0.29
Miscellaneous Receipts		20.80	20.80
Income from subsidies & Grants (Repayment of Loan Principal)		0.00	0.00
PoC Charges of CERC lines		0.00	0.00
Non-Tariff Income		271.24	271.24
Less: Consumer Contribution during FY 2021-22		163.94	163.94
Net Non-Tariff Income	237.68	107.30	107.30

4.14 REVENUE

Petitioner's Submission

4.14.1 The Petitioner submitted the transmission charges as Rs. 3418.97 Crore for FY 2021-22. Further, as part of separate function of UPSLDC, the Petitioner is maintaining a separate account for UPSLDC and recovered UPSLDC charges to the tune of Rs. 10.70 Crore in FY 2021-22. The Open Access charges to the tune of Rs. 114.21 Crore as considered in audited accounts for FY 2021-22, includes Short-Term Open Access charges recovered in FY 2021-22 for approved Inter-State and Intra-State transactions by NRLDC and UPSLDC. Thus, the total revenue receipts of the Petitioner for FY 2021-22 is Rs. 3050.89 Crore after adjustment of True-up gap of Rs. 357.38 Crore pertaining to FY 2020-21 and approved by the Commission vide its Order dated July 20, 2022 for truing up for FY 2020-21.

Table 4-45: REVENUE FROM OPERATIONS SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)	
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
Transmission Charges for FY 2021-22	A	-	3294.06
Open Access Charges for FY 2021-22	B	-	114.21
UPSLDC Charges for FY 2021-22	C	-	10.70
Gross Revenue for FY 2021-22	D=A+B+C	2720.50	3418.97
Less: True-up adjustment for FY 2020-21	E	-	357.38
Less: UPSLDC Charges for FY 2021-22	F=C	-	10.70
Net Revenue for FY 2021-22	G=D-E-F	2720.50	3050.89





Table 4-46: DETAILED BREAKUP OF REVENUE FROM OPERATIONS SUBMITTED BY PETITIONER
(Rs. Crore)

Particulars	FY 2021-22 (True up)	
	Energy Delivered (MU)	Amount (Rs. Crore)
Distribution Licensee		
DVVNL	25725.44	619.75
MVVNL	24352.98	586.57
PVVNL	34427.51	829.10
PuVVNL	28621.34	689.54
KESCO	3757.86	90.52
NPCL	2532.44	31.79
Sub-Total (Distribution Licensees) (A)	119417.57	2847.27
Open Access Consumer		
Northern Railway (U.P)	2068.60	35.15
Open Access Customers	2588.47	168.46
Sub-Total (Open Access Consumers) (B)	4657.07	203.62
Total (A+B)	124074.64	3050.89

Commission's Analysis

4.14.2 The Commission has considered the Revenue from Operations as per audited accounts for FY 2021-22. The energy wheeled for FY 2021-22 is considered as per joint statement signed by UPPTCL and UPSLDC for FY 2021-22. Accordingly, the net revenue of Rs. 3050.89 Crore is approved based on transmission charges, open access charges and UPSLDC charges received during the year and deducting true-up adjustment for FY 2020-21 of UPPTCL as shown below:

Table 4-47: REVENUE FROM OPERATIONS APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
Transmission Charges for FY 2021-22	A	-	3294.06	3294.06
Open Access Charges for FY 2021-22	B	-	114.21	114.21
UPSLDC Charges for FY 2021-22	C	-	10.70	10.70
Gross Revenue for FY 2021-22	D=A+B+C	2720.50	3418.97	3418.97
Less: True-up adjustment for FY 2020-21 approved by the Commission vide its Order dated July 20, 2022	E	-	357.38	357.38
Less: UPSLDC Charges for FY 2021-22	F=C	-	10.70	10.70
Net Revenue for FY 2021-22	G=D-E-F	2720.50	3050.89	3050.89





**Table 4-48: DETAILED BREAKUP OF REVENUE FROM OPERATIONS APPROVED BY THE COMMISSION
(Rs. Crore)**

Particulars	FY 2021-22 (True up)			
	Petition (True up)		Approved (True up)	
	Energy Delivered (MU)	Amount (Rs. Crore)	Energy Delivered (MU)	Amount (Rs. Crore)
Distribution Licensee				
DVVNL	25725.44	619.75	25725.44	619.75
MVVNL	24352.98	586.57	24352.98	586.57
PVVNL	34427.51	829.10	34427.51	829.10
PuVVNL	28621.34	689.54	28621.34	689.54
KESCO	3757.86	90.52	3757.86	90.52
NPCL	2532.44	31.79	2532.44	31.79
Sub-Total (Distribution Licensees) (A)	119417.57	2847.27	119417.57	2847.27
Open Access Consumer				
Northern Railway (U.P)	2068.60	35.15	2068.60	35.15
Open Access Customers	2588.47	168.46	2588.47	168.46
Sub-Total (Open Access Consumers) (B)	4657.07	203.62	4657.07	203.62
Total (A+B)	124074.64	3050.89	124074.64	3050.89

4.15 SUMMARY OF ANNUAL REVENUE REQUIREMENT AND GAP/(SURPLUS)

Petitioner's Submission

4.15.1 The Petitioner has projected a Gap / (Surplus) of Rs. 1115.86 Crore for FY 2021-22 and requested the Commission to approve the same.

Table 4-49: SUMMARY OF ARR SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)	
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
O&M Expenses	A=B+C+D	1102.83	1470.66
Employee Expenses	B	671.58	1026.93
A&G Expenses	C	52.80	58.05
R&M Expenses	D	378.45	385.68
Interest on Loan Capital	E	1152.50	1462.88
Interest on Working Capital	F	45.08	49.76
Depreciation	G	1108.62	1506.74
Gross Expenditure	H=A+E+F+G	3409.03	4490.03
Less: Employee Expenses Capitalised	I	406.64	192.89
Less: A&G Expenses Capitalised	J	0.00	0.00
Less: Interest Expenses Capitalised	K	180.94	174.63
Net Expenditure	L=H-I-J-K	2821.45	4122.53
Add: Return on Equity	M	173.44	189.87
Less: Non-Tariff Income	N	237.68	107.30
Annual Revenue Requirement	O=L+M-N	2757.21	4205.08





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Particulars	Derivation	FY 2021-22 (True up)	
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)
Less: SLDC ARR	P	36.71	38.35
Net Annual Revenue Requirement	Q=O-P	2720.50	4166.75
Revenue from Operations	R	-	3050.89
Net Gap/ (Surplus)	S=Q-R	-	1115.86

Commission's Analysis

4.15.2 Based upon above deliberation, the following table summarises the Annual Revenue Requirement and Gap/(Surplus) for FY 2021-22 as submitted by the Petitioner vis-à-vis the values approved by the Commission.

Table 4-50: SUMMARY OF ARR APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
O&M Expenses	A=B+C+D	1102.83	1470.66	1115.37
Employee Expenses	B	671.58	1026.93	666.06
A&G Expenses	C	52.80	58.05	58.27
R&M Expenses	D	378.45	385.68	391.04
Interest on Loan Capital	E	1152.50	1462.88	1235.73
Interest on Working Capital	F	45.08	49.76	47.42
Depreciation	G	1108.62	1506.74	1104.81
Gross Expenditure	H=A+E+F+G	3409.03	4490.03	3503.33
Less: Employee Expenses Capitalised	I	406.64	192.89	192.89
Less: A&G Expenses Capitalised	J	0.00	0.00	0.00
Less: Interest Expenses Capitalised	K	180.94	174.63	174.63
Net Expenditure	L=H-I-J-K	2821.45	4122.53	3135.81
Add: Return on Equity	M	173.44	189.87	179.37
Less: Non-Tariff Income	N	237.68	107.30	107.30
Annual Revenue Requirement	O=L+M-N	2757.21	4205.08	3207.89
Less: SLDC ARR	P	36.71	38.35	38.35
Net Annual Revenue Requirement	Q=O-P	2720.50	4166.75	3169.54
Revenue from Operations	R	-	3050.89	3050.89
Net Gap/ (Surplus)	S=Q-R	-	1115.86	118.65

4.15.3 The Commission further allows the Petitioner to recover the net gap as mentioned above, on account of true up for FY 2021-22 in four monthly instalments from the date of this Order in the proportion of amount billed to the Distribution Licensees and other entities in FY 2021-22.





4.16 TRANSMISSION TARIFF

Commission's Analysis

4.16.1 Regulation 33.2 of MYT Regulations, 2019 specifies the methodology for allocation of Annual Transmission Service Charge to its Beneficiaries as stated below:

Quote

33.2 Allocation of Annual Transmission Service Charge:

The Annual Transmission Service Charge (ATSC) shall be divided between Beneficiaries of the Transmission System on monthly basis based on the allotted Transmission Capacity or contracted capacity, as the case may be.

If a Transmission System has been created for a particular Long-term Transmission Beneficiary including dedicated transmission line(s) for a generating station, transmission charges for such Transmission System shall be payable by that Long-term Transmission Beneficiary.

For Intra-State Transmission System, the monthly transmission charges shall be pooled for sharing by Long-Term Transmission Customers in accordance with the following formula:

Transmission Charges for Intra-State System payable for a month by a Long-term Transmission Customer of that Transmission System =

$$\sum_{i=0}^n (TC_i / 12) \times CL / SCL$$

Where,

TC_i = Annual Transmission Service Charges for the ith project in the State computed in accordance with these Regulations;

N = Number of Projects in the State;

CL = Allotted Transmission Capacity to the Long-term Transmission Customer;

SCL = Sum of Allotted Transmission Capacities to all the Long-term Transmission Customers of the State Transmission System

In the case of Medium-term users of the Intra-State Transmission System, charges payable shall be in proportion to the MW for which Medium-term usage has been approved by the State Transmission Utility for that month.

In case of Short-term Open Access consumers, charges payable shall be calculated in accordance with the following methodology:

$$ST_RATE = [ATSC / Av CAP] / 365$$

Where,

ST_RATE is the rate for short-term Open Access consumers in Rs. Per MW per day;

ATSC is Annual Transmission Service Charge;





Av-CAP means the average capacity in MW served by the Transmission System of the Transmission Licensee in the last Financial Year and shall be the sum of the generating capacities connected to the Transmission System and contracted capacities of other transactions handled by the system of the Transmission Licensee;

Transmission charges corresponding to any plant capacity for which a Beneficiary has not been identified and contracted shall be paid by the concerned generating Company:

Provided that till the time transmission charges for Intra- State system cannot be determined for long- term, medium- term and short- term customers as stipulated above, the Commission will determine per unit charges for energy transmitted by dividing the total ARR by the total number of units transmitted and will be same for long- term, medium- term and short- term customers.

Unquote

- 4.16.2 The MYT Regulations, 2019 provide for capacity (MW) based transmission charges. However, there are still numerous issues in the determination of MW based Transmission Tariff, like allocation of transmission capacity to the existing long-term transmission system users, allocation of existing PPAs, etc. Presently, the State Distribution Licensees have not been allotted transmission capacity as such; hence, the Transmission Tariff has been calculated by the Commission on the basis of the number of units wheeled by the Transmission Licensee for the Distribution Licensees.
- 4.16.3 The Commission considers the energy Delivered as 124074.64 MU for FY 2021-22. The following table summarises the Annual Revenue Requirement and Transmission Tariff for FY 2021-22 as submitted by the Petitioner vis-à-vis the values approved by the Commission.

Table 4-51: TRUED UP TRANSMISSION TARIFF APPROVED BY THE COMMISSION (Rs. / kWh)

Particulars	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
Net Annual Revenue Requirement (Rs. Crore)	A	2720.50	4166.75	3169.54
Energy Delivered (MU)	B	112360.21	124074.64	124074.64
Transmission Tariff (Rs. / kWh)	$C=A*10/B$	0.2421	0.3358	0.2555





4.16.4 The net incremental transmission tariff for FY 2021-22 after truing up to recover the gap as mentioned above is as follows:

Table 4-52: REVENUE GAP RECOVERY FOR FY 2021-22 APPROVED BY THE COMMISSION (Rs. / kWh)

Particulars	Derivation	FY 2021-22 (True up)		
		Tariff Order for FY 2021-22 dated 29.06.2021	Petition (True up)	Approved (True up)
Net Annual Revenue Requirement (Rs. Crore)	A	2720.50	4166.75	3169.54
Revenue from Operations (Rs. Crore)	B	2720.50	3050.89	3050.89
Net Gap / (Surplus) (Rs. Crore)	C=A-B	0.00	1115.86	118.65
Energy Delivered (MU)	D	112360.21	124074.64	124074.64
Transmission Tariff (Rs. / kWh)	E=A*10/D	0.2421	0.3358	0.2555
Additional Transmission Tariff to be Recovered from Transmission System Users (Rs. / kWh)	F= C*10/D	-	0.0899	0.0096

4.16.5 Based on the approved net gap for FY 2021-22, the net additional transmission Tariff to be recovered from Transmission System Users is Rs. 0.0096 / kWh for FY 2021-22.





5 ANNUAL PERFORMANCE REVIEW FOR FY 2022-23

5.1 INTRODUCTION

- 5.1.1 The Commission in its Tariff Order for FY 2021-22 dated June 29, 2021 in Petition No. 1656 of 2020 carried out the Truing-Up for FY 2019-20, Annual Performance Review (APR) for FY 2020-21 and Aggregate Revenue Requirement (ARR) and Tariff for FY 2021-22. The Petitioner had filed an appeal (DFR No. 214 of 2022, I.A. No. 841, 842 & 843 of 2022) before the Hon'ble APTEL challenging this Tariff Order.
- 5.1.2 Further, the Commission, in its Tariff Order for FY 2022-23 dated July 20, 2022 in Petition No. 1839 of 2022 approved the True-Up of ARR for FY 2020-21, APR for FY 2021-22 and ARR and Tariff for FY 2022-23 of UPPTCL. The Petitioner had filed an appeal (Appeal No. 131 of 2023) before the Hon'ble APTEL against the Commission's Tariff Order dated July 20, 2022 for FY 2022-23.
- 5.1.3 The Petitioner has now sought approval for the Annual Performance Review (APR) for FY 2022-23.
- 5.1.4 Regulation 7 of MYT Regulations, 2019 specifies as under:

Quote

7 Annual Performance Review

7.1 The Licensee shall file Petition for Annual Performance Review (APR) as provided in Regulation 4.1 of these Regulations:

Provided that the Petition shall include information in such form as may be prescribed by the Commission, together with the audited/ provisional Accounting Statements, extracts of books of account and such other details, etc., as per the Guidelines and Formats prescribed.

Unquote

- 5.1.5 The Petitioner has submitted the Annual Performance Review (APR) for FY 2022-23 as per the provisions of MYT Regulations, 2019 and based on the revised projections of expenses and capital expenditure.
- 5.1.6 The Commission in this Order has not carried out the detailed analysis of various components of APR for FY 2022-23. The Commission has carried out comparison of each component of APR as claimed by the Petitioner with that approved in Tariff Order for FY 2022-23 vide Order dated July 20, 2022. The Commission will carry out the detailed prudence check of various components of ARR for FY 2022-23 while carrying out the truing up for FY 2022-23.
- 5.1.7 The component-wise description of the Petitioner's submission against the approved value in Tariff Order dated July 20, 2022 for FY 2022-23 is provided hereunder.



5.2 TRANSMISSION SYSTEM AVAILABILITY

Petitioner's Submission

5.2.1 The Petitioner has estimated the normative transmission availability for FY 2022-23 as 98% inline to Regulation 33.1.1 of MYT Regulations, 2019.

Commission's Analysis

5.2.2 The Commission observed that the Petitioner has estimated transmission availability for FY 2022-23 as 98% inline to Regulation 33.1.1 of MYT Regulations, 2019. The prudence of the same will be done at the time of Truing-up.

5.3 TRANSMISSION LOSS

Petitioner's Submission

5.3.1 The Petitioner has estimated the Intra-State Transmission loss as 3.27% in line with Business Plan Order dated October 15, 2020 and Tariff Order for FY 2022-23 dated July 20, 2022 as shown below.

Table 5-1: INTRA-STATE TRANSMISSION LOSS SUBMITTED BY PETITIONER (%)

Particulars	FY 2022-23 (APR)	
	Business Plan Order dated 15.10.2020 & Tariff Order for FY 2022-23 dated 20.07.2022	Petition (APR)
Intra-State Transmission loss	3.27%	3.27%

Commission's Analysis

5.3.2 The Commission observed that the Petitioner has claimed the transmission loss in line with Business Plan Order dated October 15, 2020 and Tariff Order for FY 2022-23 dated July 20, 2022. The prudence of the same will be done at the time of Truing-up.

5.4 OPERATION AND MAINTENANCE EXPENSES (O&M)

Petitioner's Submission

5.4.1 The Petitioner submitted that they have segregated each component of O&M expenses. The Petitioner has calculated the normative value of Employee Expenses for FY 2022-23 based on normative value of Employee Expenses for FY 2021-22 derived in its Petition and escalated the same based on average of actual Consumer Price Index (CPI) for immediately preceding three financial years (5.89%) in accordance with Regulation 34.1 of MYT Regulations, 2019. The actual Employee Expense capitalisation



for FY 2021-22 works out to be 27.00% of the actual Employee Expenses as per audited account and the same ratio (27.00%) is considered for projection of Employee Expense capitalisation for FY 2022-23.

- 5.4.2 Similarly, the Petitioner has projected the normative R&M Expenses for FY 2022-23 based on normative value of R&M Expenses for FY 2021-22 derived in its Petition and escalated the same based on average of actual Wholesale Price Index (WPI) for immediately preceding three financial years (5.32%) in accordance to Regulation 34.2 of MYT Regulations, 2019.
- 5.4.3 To calculate the normative A&G Expenses for FY 2022-23, the Petitioner has considered the normative value of A&G Expenses derived for FY 2021-22 derived in its Petition and escalated the same based on average of actual Wholesale Price Index (WPI) for immediately preceding three financial years (5.32%) in accordance to Regulation 34.3 of MYT Regulations, 2019. The Petitioner has additionally claimed Rs. 0.07 Crore towards Finance Charges over and above the normative A&G Expenses.

Table 5-2: NORMATIVE O&M EXPENSES SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2022-23 (APR)	
		Tariff Order for FY 2022-23 dated 20.07.2022	Petition (APR)
Employee Expenses	A	655.95	1,087.43
Less: Employee Expenses Capitalised	B	447.27	293.57
Net Employee Expenses	C=A-B	208.68	793.86
A&G Expenses	D	55.69	54.81
Add: Licensee Fee	E	-	-
Add: Finance Charges	F	-	0.07
Net: A&G Expenses	G=D+E+F	55.69	54.88
Net R&M Expenses	H	395.07	406.20
O&M Expenses	I=C+G+H	659.44	1,254.95

Commission's Analysis

- 5.4.4 The overall O&M expenses claimed by the Petitioner have increased as compared to the O&M expenses approved in Tariff Order dated July 20, 2022 for the FY 2022-23. The prudence of the same will be done at the time of Truing-up. The Commission has provisionally computed the normative value of each component of O&M Expenses for FY 2022-23 based on the normative value of FY 2021-22 by escalating with inflation factor i.e. average of past three financial years (FY 2019-20 to FY 2021-22), which is subject to true up with actual point to point inflation factor for FY 2022-23 as per MYT Regulations, 2019. Further, the computed normative value of O&M Expenses of FY 2020-23 is used to derive the normative O&M Expenses for FY 2023-24 based on the



normative value of FY 2022-23 by escalating with inflation factor i.e. average of past three financial years (FY 2020-21 to FY 2022-23), which is subject to true up with actual point to point inflation factor for FY 2022-23 as per MYT Regulations, 2019. The computation of O&M Expenses for FY 2022-23 is shown in the subsequent chapter of ARR for FY 2023-24.

5.5 CAPITAL WORK IN PROGRESS (CWIP) & GROSS FIXED ASSET (GFA)

Petitioner's Submission

5.5.1 The Petitioner has estimated the capital investment for FY 2022-23 based on the expected expenditure projected towards the ongoing projects / schemes and those towards the new projects to be undertaken in FY 2022-23. The capital investment estimated by the Petitioner for FY 2022-23 is shown below:

Table 5-3: SOURCE OF CAPITAL INVESTMENT SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2022-23 (APR)
		Petition (APR)
Consumer Contribution/ Deposit Works/Grants	A	626.36
Debt Funded	B	2,619.94
Equity Funded	C	1,122.83
Total Capital Investment	D=A+B+C	4,369.13

5.5.2 The Petitioner submitted that the above capital expenditure as per Business Plan has been revised in view of the change in the timelines of the projects. The proposed capex and timeline estimated above is revised after taking into account Government approvals of extension of timelines, across the Board, due to COVID-19 impact as well as funding crunch from Government of Uttar Pradesh (GoUP) and directed to take up important projects only due to austerity measures declared by GoUP.

5.5.3 The Consumer Contribution of Rs. 618.56 Crore is considered towards capital formation for FY 2022-23, inline to actual Consumer Contribution in FY 2021-22. Further, an expenditure of Rs. 23.62 Crore is estimated in FY 2022-23 towards GEC-II scheme, with a grant contribution of Rs. 7.79 Crore.

5.5.4 In regards to capitalisation, the Petitioner has estimated that 25% of the total investment will be capitalised during FY 2022-23. Further, the Petitioner has not considered any deduction/ deletion of assets and submitted that the same may be considered on actual basis at the time of true-up.



Table 5-4: CAPITAL EXPENDITURE SUBMITTED BY PETITIONER (Rs. Crore)

Particular	Derivation	FY 2022-23 (APR)	
		Tariff Order FY 2022-23 dated 20.07.2022	Petition (APR)
Opening CWIP as on 1st April 2022	A	7,662.88	6,951.81
Investments during FY 2022-23	B	5,216.90	4,369.13
Employee Expenses Capitalisation	C	447.27	293.57
A&G Expenses Capitalisation	D	0.00	0.00
Interest Capitalisation on Interest on Long Term Loans	E	186.86	179.71
Total Investments	F= A+B+C+D+E	13,513.91	11,794.21
Transferred to GFA (Total Capitalisation)	G	3,739.95	2,948.55
Closing CWIP as on 31st March 2023	H= F-G	9,773.96	8,845.66

Table 5-5: GFA SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2022-23 (APR)	
		Tariff Order FY 2022-23 dated 20.07.2022	Petition (APR)
Opening GFA as on 1st April 2022	A	33,330.82	35,578.74
GFA Addition during FY 2022-23	B	3,739.95	2,948.55
Decapitalisation/ Deduction during FY 2022-23	C	182.57	0.00
Closing GFA as on 31st March 2023	D=A+B-C	36,888.20	38,527.29

Commission's Analysis

5.5.5 The Commission observes that the Petitioner has considered the normative closing GFA for FY 2021-22 as proposed in the petition for opening GFA for FY 2022-23, which is the main reason for the difference in the claimed figure of the Petitioner against the approved value in last year's Tariff Order. The Commission has provisionally considered the investment and GFA addition during the year as claimed by the Petitioner for FY 2022-23 to derive the closing investment and closing GFA for FY 2022-23 respectively. The same is further subject to prudence check at the time of truing up based on audited accounts and applicable Regulations. The computation of Capital investment and Gross Fixed Assets for FY 2022-23 is shown in the subsequent chapter of ARR for FY 2023-24. The provisionally computed closing investment and closing GFA for FY 2022-23 is considered as opening investment and GFA for FY 2023-24 while deriving the ARR for FY 2023-24.

5.6 CONSUMER CONTRIBUTION, CAPITAL GRANTS AND GRANTS

Petitioner's Submission

5.6.1 The Consumer Contribution considered towards the capital formation in FY 2022-23 as Rs. 618.56 Crore, same as that of FY 2021-22, whereas grant of Rs. 7.79 Crore has been considered for FY 2022-23, as summarised below





Table 5-6: CONSUMER CONTRIBUTION SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2022-23 (APR)	
		Tariff Order FY 2022-23 dated 20.07.2022	Petition (APR)
Opening Balance of Consumer Contributions (CC), Grants and Subsidies towards Cost of Capital Assets as on 1st April 2022	A	2,343.79	2,377.40
Additions during FY 2022-23	B	854.31	626.35
Less: Amortisation during FY 2022-23	C	189.75	169.42
Closing Balance of CC, Grants and Subsidies towards Cost of Capital Assets as on 31st March 2023	D=A+B-C	3,008.35	2,834.34

Commission's Analysis

5.6.2 The Commission observes that the Petitioner has considered the opening and closing Consumer Contributions towards cost of capital assets for FY 2022-23 as per audited accounts and grant of Rs. 7.79 Crore instead of approved value by Commission, which resultant in difference in the claimed figure of the Petitioner against the approved value in Tariff of FY 2022-23. The Commission has provisionally considered the addition of Consumer Contribution, Grants and Subsidies towards cost of capital assets and amortisation during the year as claimed by the Petitioner for FY 2022-23 to derive the closing Consumer Contribution, Grants and Subsidies towards cost of capital assets and amortisation for FY 2022-23 respectively. The same is further subject to prudence check at the time of truing up based on audited accounts. The computation of Consumer Contribution, Grants and Subsidies towards cost of capital assets and amortisation for FY 2022-23 is shown in the subsequent chapter of ARR for FY 2023-24. The notional computed closing Consumer Contribution, Grants and Subsidies towards cost of capital assets for FY 2022-23 is considered as opening Consumer Contribution, Grants and Subsidies towards cost of capital assets for FY 2023-24 while deriving the ARR for FY 2023-24.

5.7 DEBT-EQUITY RATIO

5.7.1 The Petitioner submitted that they have considered the normative approach with Debt-Equity ratio as 70:30, i.e. 70% of estimated capitalisation during the FY 2022-23 to be financed through term loan and balance 30% through equity. The amount of Consumer Contributions, Capital Subsidies and Grants towards cost of capital assets estimated for FY 2022-23 is reduced to derive the net capitalisation, as the same would not be charged to consumers.





Table 5-7: DEBT: EQUITY RATIO AND FINANCING OF CAPITALISATION SUBMITTED BY PETITIONER
(Rs. Crore)

Particulars	Derivation	FY 2022-23 (APR)	
		Tariff Order FY 2022-23 dated 20.07.2022	Petition (APR)
Capitalisation during the FY 2022-23	A	3,739.95	2,948.55
Less: Decapitalisation/ Deduction during the FY 2022-23	B	182.57	0.00
Less: Consumer Contribution, Grants & Capital Subsidies during the FY 2022-23	C	854.31	626.35
Net Capitalisation to be funded by Debt & Equity	D=A+B-C	2,703.07	2,322.20
Equity (%)	E	30.00%	30.00%
Debt (%)	F	70.00%	70.00%
Equity Funded during the FY 2022-23	G=D*E	810.92	696.66
Debt Funded during the FY 2022-23	H=D*F	1,892.15	1,625.54

Commission's Analysis

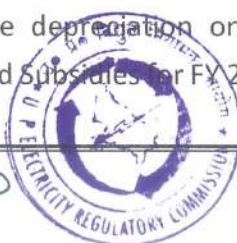
5.7.2 The Commission observes that there is variation in estimated capitalisation, Decapitalisation/ Deduction and Consumer Contribution, Grants & Capital Subsidies during the FY 2022-23, resulting in variation of debt and equity addition during FY 2022-23 against the approved projected value of FY 2022-23 in Tariff Order dated July 20, 2022. The Commission has considered the normative debt:equity ratio of 70:30 for financing of the project as per Regulations, 2019. The detail analysis will be carried out at the time of truing up.

5.8 DEPRECIATION

Petitioner's Submission

5.8.1 For computation of allowable Depreciation for FY 2022-23, the Petitioner has considered Normative Closing Gross Fixed Asset Base for FY 2019-20 and FY 2020-21 and subsequent addition and yearly capitalization for FY 2022-23 as per revised estimates. Further the Petitioner has computed the asset-wise depreciation as per the rates provided in the Annexure A of the MYT Regulations, 2019 based on the normative opening and closing Gross Fixed Asset base for FY 2022-23. The Petitioner in line with the above MYT Regulation, 2019 and methodology adopted by the Commission in Tariff Order dated November 10, 2020 for FY 2020-21 and June 29, 2021 for FY 2021-22 has computed the allowable depreciation for assets upto March 31, 2020 (Part-A) and assets after April 01, 2020 (Part-B).

5.8.2 Further, the Petitioner has projected the depreciation on assets created out of Consumer Contributions, Capital Grants and Subsidies for FY 2022-23 in the same ratio



as per annual accounts of FY 2021-22. The Petitioner has reduced the equivalent depreciation amounting to Rs. 169.42 Crore for FY 2022-23 in respect of depreciation on assets created out of Consumer Contributions, Capital Grants and Subsidies.

5.8.3 The Petitioner further submitted that in compliance to the provisions of Appendix 'C' to IndAS-I8, FY 2016-17 onwards the Consumer Contribution Reserve has been recognized as revenue as equal annual income over the useful life of the underlying asset/term of the arrangement with consumers. The Income from Consumer Contribution recognized as revenue (or equivalent depreciation amount) in FY 2022-23 has been projected as the percentage of Non-Tariff Income (same ratio as in the annual accounts of FY 2021-22).

5.8.4 Thus, the Petitioner requests the Commission to consider the net depreciation amount of Rs. 1,676.74 Crore for FY 2022-23.

Table 5-8: GROSS DEPRECIATION FOR ASSETS UPTO 31.03.2020 (PART-A) SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Opening GFA	Additions to GFA	Deductions to GFA	Closing GFA	Depreciation Rate (%)	Allowable Depreciation
Land & Land Rights						
Unclassified	141.97	1.31	43.84	99.45	0.00%	-
Freehold Land	1.26	0.09	1.29	0.06	0.00%	-
Buildings	1,085.14	145.76	1.11	1,229.79	3.34%	38.66
Other Civil Works	91.63	11.91	0.00	103.54	3.34%	3.26
Plants & Machinery	12,822.19	1,435.39	630.18	13,627.40	5.28%	698.27
Lines, Cable Network etc.	11,314.74	1,707.37	48.78	12,973.34	5.28%	641.21
Vehicles	3.37	0.00	0.06	3.31	9.50%	0.32
Furniture & Fixtures	8.74	1.23	0.02	9.96	6.33%	0.59
Office Equipments	9.55	2.56	0.00	12.11	6.33%	0.69
Intangible Assets	4.27	0.03	0.00	4.30	5.28%	0.23
Assets taken over by Licensee (Pending for final Valuation)	105.44	4.74	1.84	108.34	5.28%	5.64
Total Depreciable Assets	25,445.07	3,309.00	681.99	28,072.09	6.71%	1,388.86
Total Non-Depreciable Assets	143.23	1.41	45.13	99.50	-	-
Grand Total (Assets)	25,588.30	3,310.41	721.12	28,171.59	-	1,388.86

Table 5-9: GROSS DEPRECIATION FOR ASSETS FROM 01.04.2020 (PART-B) SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Opening GFA	Additions to GFA	Deductions to GFA	Closing GFA	Depreciation Rate (%)	Allowable Depreciation
Land & Land Rights						
Unclassified	86.65	16.36	0.00	103.01	0.00%	-
Freehold Land	0.01	0.14	0.00	0.15	0.00%	-
Buildings	260.47	125.04	0.00	385.51	3.34%	10.79
Other Civil Works	17.35	10.56	0.00	27.91	3.34%	0.76
Plants & Machinery	2,873.89	1,477.51	0.00	4,351.40	5.28%	190.75



**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Particulars	Opening GFA	Additions to GFA	Deductions to GFA	Closing GFA	Depreciation Rate (%)	Allowable Depreciation
Lines, Cable Network etc.	4,143.11	1,303.80	0.00	5,446.92	5.28%	253.18
Vehicles	0.12	0.39	0.00	0.50	9.50%	0.03
Furniture & Fixtures	2.38	1.01	0.00	3.39	6.33%	0.18
Office Equipments	3.04	1.10	0.00	4.14	6.33%	0.23
Intangible Assets	9.10	0.49	0.00	9.59	5.28%	0.49
Assets taken over by Licensee (Pending for final Valuation)	11.03	12.15	0.00	23.18	5.28%	0.90
Total Depreciable Assets	7,320.49	2,932.05	0.00	10,252.54	5.20%	457.30
Total Non-Depreciable Assets	86.66	16.50	0.00	103.16	-	0.00
Grand Total (Assets)	7,407.15	2,948.55	0.00	10,355.70	-	457.30

**Table 5-10: NET ALLOWABLE DEPRECIATION (PART-A + PART-B) SUBMITTED BY PETITIONER
(Rs. Crore)**

Particulars	Derivation	FY 2022-23 (APR)	
		Tariff Order FY 2022-23 dated 20.07.2022	Petition (APR)
Depreciation of Assets upto 31.03.2020	A	2,343.79	2,377.40
Depreciation of Assets from 01.04.2020 onwards	B	854.31	626.35
Less: Depreciation of assets created from Consumer Contribution, Capital Grants and Capital Subsidies	C	189.75	169.42
Net Depreciation	D=A+B-C	3,008.35	2,834.34

Commission's Analysis

5.8.5 The Commission will carry out the detailed prudence check of depreciation of each asset while carrying out the truing up for FY 2022-23.

5.9 INTEREST ON LONG TERMS LOANS

Petitioner's Submission

5.9.1 The Petitioner submitted that the normative opening loan for FY 2022-23 has been considered as per the closing loan balance of FY 2021-22 considered in its Petition. The normative loan addition during the FY 2022-23 is estimated as 70% of estimated capitalisation after adjusting the Consumer Contribution, Capital Grants and Subsidies, as the same can't be charges to the Beneficiaries.

5.9.2 The estimated allowable depreciation for FY 2022-23 is considered as repayment during the respective financial year. The weighted average rate of interest of overall long-term loan portfolio for FY 2021-22 (11.65%) has been considered for FY 2022-23, as it seems to be fair and equitable and interest capitalisation at 11.94% for FY 2022-23, based on ratio of actual capitalization for FY 2021-22 as per audited accounts. The computations for interest on long term loan is depicted below:





Table 5-11: INTEREST ON LONG TERM LOANS SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2022-23 (APR)	
		Tariff Order FY 2021-22 dated 29.06.2021	Petition (APR)
Opening Loan as on 1st April of FY	A	12,115.64	12,947.91
Addition during the FY	B	1,892.15	1,625.54
Less: Repayment during the FY	C	1,271.11	1,676.74
Closing Loan	D=A+B-C	12,736.68	12,896.70
Wtg. Avg. Interest Rate	E	10.56%	11.65%
Interest on Loan	F=average (A, D)*E	1,312.24	1,505.45
Interest Capitalisation Rate	G	14.24%	11.94%
Less: Interest Capitalised	H=F*G	186.86	179.71
Net Interest Charged	I=F-H	1,125.38	1,325.74

Commission's Analysis

5.9.3 The Commission observes that the Petitioner has considered the normative approach with debt-equity ratio of 70:30 specified in MYT Regulations, 2019. The portion of capital expenditure financed through Consumer Contributions, Capital Grants and Subsidies has been separated as the depreciation thereon would not be charged to the consumers. The Commission has provisionally considered the addition of loan during the year and depreciation as claimed by the Petitioner for FY 2022-23 to derive the closing base of loan for FY 2022-23. The same is further subject to prudence check at the time of truing up based on audited accounts. The computation of interest on loan for FY 2022-23 is shown in the subsequent chapter of ARR for FY 2023-24. The notional computed closing loan for FY 2022-23 is considered as opening loan base for FY 2023-24 while deriving the ARR for FY 2023-24.

5.10 INTEREST ON WORKING CAPITAL

Petitioner's Submission

5.10.1 In accordance to Regulation 25 of MYT Regulations, 2019, the Petitioner has derived the value of each component of Working Capital requirement of the Transmission Licensee. Further, the Interest Rate on Working Capital requirement is considered as current State Bank Marginal Cost of Funds based Lending Rate (MCLR) i.e. 10.65%.

Table 5-12: INTEREST ON WORKING CAPITAL SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2022-23 (APR)	
		Tariff Order FY 2022-23 dated 20.07.2022	Petition (APR)
O&M Expenses for one Month	A=O&M/12	54.95	129.04
Maintenance Spares at 40% of R&M Expenses for two Months	B=40%*R&M/6	26.34	27.08





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Particulars	Derivation	FY 2022-23 (APR)	
		Tariff Order FY 2022-23 dated 20.07.2022	Petition (APR)
One and Half Month equivalent of the expected revenue for transmission Charges at prevailing Tariff	$C=ARR*1.5/12$	387.15	424.61
Less: Amount held as security deposits, if any, from Transmission System Users	D	0.00	0.00
Total Working Capital	$E=A+B+C-D$	468.44	580.73
Interest Rate on Working Capital Requirement	F	9.50%	10.65%
Interest on Working Capital	$G=E*F$	44.50	61.85

Commission's Analysis

5.10.2 The Interest on Working Capital claimed by Petitioner has increased as compared to the Interest on Working Capital Expenses approved in Tariff Order dated July 20, 2022 for FY 2022-23. The prudence of the same will be carried out at the time of Truing-up.

5.11 RETURN ON EQUITY

Petitioner's Submission

5.11.1 The Petitioner submitted that the normative opening equity for FY 2022-23 has been considered as per the closing loan balance of FY 2021-22 considered in its Petition. The normative equity addition during the FY 2022-23 is estimated as 30% of estimated capitalisation after adjusting the Consumer Contribution, Capital Grants and Subsidies, as the same can't be charges to the Beneficiaries.

5.11.2 The Petitioner submitted that under provisions of MYT Regulations, 2019, the Petitioner is eligible for Return on Equity at 14.50% on equity base. The Petitioner further added that seeing the huge gap to recover cost of supply from Distribution Licensee, claiming Return on Equity at 14.50% would only result in increase in arrears and accumulation of receivables. Hence, the Petitioner is claiming Return on Equity at 2.00% since FY 2009-10.

Table 5-13: RETURN ON EQUITY SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2022-23 (APR)	
		Tariff Order FY 2022-23 dated 20.07.2022	Petition (APR)
Opening Equity	A	9,208.92	9,983.78
Equity addition during FY 2020-21	B	810.92	696.66
Closing Equity	$C=A+B$	10,019.84	10,680.44
Average Equity	$D=(A+C)/2$	9,614.38	10,332.11
Rate of Return on Equity	E	2.00%	2.00%
Return on Equity	$F=D*E$	192.29	206.64





Commission's Analysis

5.11.3 The Commission observes that the increase in claimed amount of Return on Equity by the Petitioner is because of increase in the equity at the beginning of FY 2022-23. The Commission has provisionally considered the addition of equity during the year as claimed by the Petitioner for FY 2022-23 to derive the closing base of equity for FY 2022-23 respectively. The same is further subject to prudence check at the time of truing up based on audited accounts. The computation of return on equity for FY 2022-23 is shown in the subsequent chapter of ARR for FY 2023-24. The notional computed closing equity for FY 2022-23 is considered as opening equity base for FY 2023-24 while deriving the ARR for FY 2023-24.

5.12 NON-TARIFF INCOME

Petitioner's Submission

5.12.1 The Petitioner submitted that the Non-Tariff Income, comprises of interest on loans and advances to employees, income from fixed rate investment deposits and interest on loans and advances to Licensees. Further, the amount of depreciation charged on assets created out of Consumer Contributions, Capital Grants and Subsidies are also booked under the head "Other Incomes" in the annual accounts. The Non-Tariff Income for FY 2022-23 is claimed as Rs. 110.88 Crore, projected after deducting the estimated amount of Income from Consumer Contribution from the total Non-Tariff Income for FY 2022-23.

Table 5-14: NON-TARIFF INCOME SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	FY 2022-23 (APR)	
	Tariff Order FY 2022-23 dated 20.07.2022	Petition (APR)
Non-Tariff Income	145.55	110.88

Commission's Analysis

5.12.2 The Commission noted the submission made by the Petitioner. The detailed analysis and prudence check will be carried out at the time of truing up.

5.13 INCOME FROM OTHER BUSINESS

Petitioner's Submission

5.13.1 The Petitioner submitted that have initiated the leasing the dark fibre cable (OPGW) for optimum utilization of transmission assets by way of utilization of surplus capacity of UPPTCL's OPGW. In this regard the Petitioner had approached the





Hon'ble Commission vide Petition No. 1848 / 2022 seeking permission of the Commission about engaging in Other Business for leasing of UPPTCL's OPGW infrastructure. Accordingly, the Commission had given approval of the same vide its order dated November 02, 2022 as mentioned below:

"

....., the Commission has allowed utilization of surplus capacity of UPPTCL's OPGW infrastructure by leasing out its dark fiber for a lease period of 15 years subject to compliance of conditions stipulated under UPERC Other Business Regulations 2004 or any subsequent amendment, re-enactment thereof. The utilization of the assets and facilities of the licensed business for other business shall not in any manner affect the license conditions, performance of obligations or quality of service required from UPPTCL under licensed business."

Further, with respect to sharing of such income, the Commission observed as:

"Accordingly, the Commission has decided that an amount equal to 70% of the gross revenue from such other business in a given financial year shall be utilised for reducing the transmission charges of the licensed business whereas, 30% of the gross revenue shall be retained with the other business. The operation and maintenance cost of leased dark fibres shall be borne by UPPTCL out of their revenue share."

Accordingly, the Petitioner has shared the 70% of the expected net revenue to the tune of Rs. 9.49 crore in FY 2022-23 from leasing of dark fibres. However, at the time of truing-up for FY 2022-23 the income from other business shall be considered on actual basis for the purpose of computation of the allowable ARR.

Table 5-15: INCOME FROM OTHER BUSINESS SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	FY 2022-23 (APR)	
	Tariff Order FY 2022-23 dated 20.07.2022	Petition (APR)
Income from Other Business	-	9.49

Commission's Analysis

5.13.2 The Commission noted the submission made by the Petitioner. The detailed analysis and prudence check will be carried out at the time of truing up.

5.14 SUMMARY OF AGGREGATE REVENUE REQUIREMENT FOR FY 2022-23

Petitioner's Submission

5.14.1 The Petitioner has projected the Annual Revenue Requirement and Transmission Tariff as Rs. 4,363.35 Crore and Rs. 0.3167 / kWh respectively for FY 2022-23 as shown below:





Table 5-16: SUMMARY OF ARR SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2022-23 (APR)	
		Tariff Order FY 2022-23 dated 20.07.2022	Petition (APR)
O&M Expenses	A=B+C+D	1,106.71	1,548.51
Employee Expenses	B	655.95	1,087.43
A&G Expenses	C	55.69	54.88
R&M Expenses	D	395.07	406.20
Interest on Loan Capital	E	1,312.24	1,505.45
Interest on Working Capital	F	44.50	61.85
Depreciation	G	1,271.11	1,676.74
Gross Expenditure	H=A+E+F+G	3,734.56	4,792.54
Less: Employee Expenses Capitalised	I	447.27	293.57
Less: A&G Expenses Capitalised	J	0.00	0.00
Less: Interest Expenses Capitalised	K	186.86	179.71
Net Expenditure	L=H-I-J-K	3,100.43	4,319.27
Add: Return on Equity	M	192.29	206.64
Less: Non-Tariff Income	N	145.55	110.88
Less: Income from Other Business	O	-	9.49
Annual Revenue Requirement	P=L+M-N-O	3,147.17	4,405.55
Less: SLDC ARR	Q	50.00	42.20
Net Annual Revenue Requirement	R=P-Q	3,097.17	4,363.35
Energy Delivered (MU)	S	1,25,638.50	1,37,796.71
Transmission Tariff (Rs./ kWh)	T=R*10/S	0.2465	0.3167

Commission's Analysis

5.14.2 The Commission observes that the revised ARR for FY 2022-23 as estimated by the Petitioner is Rs. 4,363.35 Crore against approved value of Rs. 3,097.17 Crore in the Tariff Order of FY 2022-23 dated July 20, 2022. Further, the Petitioner has projected the transmission tariff as Rs. 0.3167 / kWh for FY 2022-23 against the approved value of Rs. 0.2465 / kWh.

5.14.3 The Commission observes that the Petitioner has neither mentioned the estimated revenue for FY 2022-23, nor claimed any Revenue Gap / (Surplus) for FY 2022-23. The Commission shall determine Revenue Gap / (Surplus) for FY 2022-23 during the truing up exercise.





6 AGGREGATE REVENUE REQUIREMENT FOR FY 2023-24

6.1 INTRODUCTION

- 6.1.1 The Commission in its Tariff Order for FY 2021-22 dated June 29, 2021 in Petition No. 1656 of 2020 carried out the Truing-Up for FY 2019-20, Annual Performance Review (APR) for FY 2020-21 and Aggregate Revenue Requirement (ARR) and Tariff for FY 2021-22. The Petitioner had filed an appeal (DFR No. 214 of 2022, I.A. No. 841, 842 & 843 of 2022) before the Hon'ble APTEL challenging this Tariff Order.
- 6.1.2 Further, the Commission, in its Tariff Order for FY 2022-23 dated July 20, 2022 in Petition No. 1839 of 2022 approved the True-Up of ARR for FY 2020-21, APR for FY 2021-22 and ARR and Tariff for FY 2022-23 of UPPTCL. The Petitioner had filed an appeal (Appeal No. 131 of 2023) before the Hon'ble APTEL against the Commission's Tariff Order dated July 20, 2022 for FY 2022-23.
- 6.1.3 The Petitioner has now sought approval for the Annual Revenue Requirement (ARR) for FY 2023-24.
- 6.1.4 The Commission has analysed the Tariff Petition submitted for approval of ARR and determination of transmission charges for FY 2023-24 as per provisions specified in MYT Regulations, 2019. In this regard Regulation 30.10 of MYT Regulations, 2019 provides as below:

Quote

30.10 The Annual Transmission Charges shall provide for the recovery of the ARR of the Transmission Licensee, as approved by the Commission and comprise the following components:

- (a) Operation and maintenance expenses;*
- (b) Depreciation;*
- (c) Interest on Loan Capital;*
- (d) Interest on Working Capital;*
- (e) Contribution to Contingency Reserves;*
- (f) Return on Equity;*
- (g) Income Tax;*
- minus:*
- (h) Non-Tariff Income;*
- (i) Income from other Business, to the extent stipulated in these Regulations;*

Provided that Depreciation, Interest on Loan Capital, Interest on Working Capital, Contribution to Contingency Reserves, Return on Equity, and Income Tax for Transmission Licensees shall be allowed in accordance with the provisions stipulated in Part-D of these Regulations:



Provided further that the components of the ARR corresponding to the transmission lines owned by the Transmission Licensee and conveying electricity to other States, being recovered through the Point of Connection (PoC) transmission charges in accordance with the Regulations and Orders of the Central Electricity Regulatory Commission, shall not be recovered from the Annual Transmission Charges determined under these Regulations:

Provided also that in case any such components have already been recovered through the Intra-State transmission Tariff, then such excess recovery shall be deducted from the ARR of the Transmission Licensee for the future years, along with associated carrying Cost, as applicable:

Provided also that prior period income/expenses shall be allowed by the Commission at the time of Truing- Up based on audited accounts, on a case to case basis, subject to prudence check:

Provided also that all penalties and compensation payable by the Licensee to any party for failure to meet any Standards of Performance or for damages, as a consequence of the Orders of the Commission, Courts, etc., shall not be allowed to be recovered through the ARR:

Provided also that the Transmission Licensee shall maintain separate details of such penalties and compensation paid or payable by the Licensee, if any, and shall submit them to the Commission along with its Petition.

Unquote

- 6.1.5 The detailed deliberation upon each element identified above is presented in the subsequent sections.

6.2 TRANSMISSION SYSTEM AVAILABILITY

Petitioner's Submission

- 6.2.1 The Petitioner submitted that as per Regulations 2019, the Transmission System Availability Factor for a Calendar Month (TAFM) shall be calculated by the respective Transmission Licensee, got verified and certified by UPSLDC and separately for each A.C. Transmission System and grouped according to sharing of transmission charges. Further, TAFM (%) shall be equal to $(100 - 100 \times \text{NAFM})$, where NAFM is the non-availability factor in per unit for the month, for the Transmission System / sub-system. The formula for NAFM for A.C. systems / sub-systems shall be equal to:

$$= \frac{[\sum_{l=1}^L (OH_l \times Cktkm_l \times NSC_l) + \sum_{t=1}^T (OH_t \times MVA_t \times 2.5) + \sum_{r=1}^R (OH_r \times MVAR_r \times 4)]}{THM \times [\sum_{l=1}^L (Cktkm_l \times NSC_l) + \sum_{t=1}^T (MVA_t \times 2.5) + \sum_{r=1}^R (MVAR_r \times 4)]}$$



Where,

l = identifies a transmission line circuit;

t = identifies a transformer / Inter connecting transformer (ICT);

r = identifies a bus reactor, switchable line reactor or Static VAR Compensation (SVC);

L = total number of line circuits;

T = total number of bus reactors, switchable line reactors and SVCs;

R = total number of bus reactors, switchable line reactors and SVCs;

OH = Outage hours or hours of non-availability in the month, excluding the duration of outages not attributable to the Transmission Licensee,

Ckt. km = Length of a transmission line circuit in km;

NSC = Number of sub-conductors per phase;

MVA = MVA rating of a transformer / ICT;

MVAR = MVAR rating of a bus reactor switchable line reactor or an SVC (in which case it would be the sum of inductive and capacitive capabilities);

THM = Total hours in the month;

- 6.2.2 Based on the methodology, the Petitioner has projected the normative Annual Transmission System Availability factor for FY 2023-24 as 98.00% inline to Regulation 33.1 of MYT Regulations, 2019.

Commission's Analysis

- 6.2.3 Regulation 33.1.1 of MYT Regulations, 2019 specifies the Normative Annual Transmission System Availability factor (NATSAF) for AC system as 98% as quoted below:

Quote

33.1 Target availability

33.1.1 Normative Annual Transmission System Availability factor (NATSAF) shall be as under:

- 1) AC System: 98%;
- 2) HVDC bi-pole links and back-to-back Stations: 95%

Unquote

- 6.2.4 In this regard, it would be prudent to summarize the past trends of the Annual Transmission System Availability factor achieved by the Petitioner from FY 2011-12 to FY 2021-22, which is tabulated below:





Table 6-1: ACTUAL ANNUAL TRANSMISSION SYSTEM AVAILABILITY FACTOR FOR FY 2011-12 TO FY 2016-17 (%)

Particulars	FY12	FY13	FY14	FY15	FY16	FY17
Actual Annual Transmission System Availability factor	99.75%	99.68%	99.72%	99.64%	99.75%	99.03%

Table 6-2: ACTUAL ANNUAL TRANSMISSION SYSTEM AVAILABILITY FACTOR FOR FY 2017-18 TO FY 2021-22 (%)

Particulars	FY18	FY19	FY20	FY21	FY22
Actual Annual Transmission System Availability factor	99.00%	99.01%	99.47%	99.46%	99.52%

- 6.2.5 Further, it is observed that the Commission has approved the normative annual transmission system availability factor as 98% for each year of the Control Period from FY 2020-21 to FY 2024-25 in Business Plan Order dated October 15, 2020 in accordance with Regulation 33.1.1 of MYT Regulations, 2019. Therefore, the Commission accordingly approves the normative ATSAF as 98% for FY 2023-24.

6.3 INTRA-STATE TRANSMISSION LOSS

Petitioner's Submission

- 6.3.1 The Petitioner claimed the Intra-State Transmission loss as 3.22% in accordance with approved value of 3.22% in Business Plan Order dated October 15, 2020.

Commission's Analysis

- 6.3.2 The actual intra-State transmission loss from FY 2008-09 to FY 2013-14 for the Petitioner along with the Transmission loss trajectory approved by the Commission for the Control Period from FY 2020-21 to FY 2024-25 and relevant provision of MYT Regulations, 2019 has been summarized subsequently before deliberating upon the intra-State transmission loss for FY 2023-24.
- 6.3.3 Regulation 38 of MYT Regulations, 2019 provides as follows:

Quote

38 Transmission Losses

The energy losses in the Intra-State Transmission System, as determined by the State Load Despatch Centre and approved by the Commission, shall be borne by the Transmission System Users in proportion to their usage of the Intra-State Transmission System.

Unquote





6.3.4 The past trends of actual Intra-State transmission losses are shown below:

Table 6-3: ACTUAL INTRA-STATE TRANSMISSION LOSS FROM FY 2008-09 TO FY 2013-14 (%)

Particulars	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
Intra-State Transmission loss	4.11%	3.98%	3.56%	3.63%	4.08%	4.10%

Table 6-4: ACTUAL INTRA-STATE TRANSMISSION LOSS FROM FY 2014-15 TO FY 2020-21 (%)

Particulars	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Intra-State Transmission loss	3.67%	3.59%	3.55%	3.56%	3.56%	3.43%	3.37%	3.33%

6.3.5 It is noteworthy to mention that the Commission has already approved the Transmission loss trajectory for the Control Period from FY 2020-21 to FY 2024-25 in Business Plan Order dated October 15, 2020 as tabulated below:

Table 6-5: APPROVED TRAJECTORY OF INTRA-STATE TRANSMISSION LOSS (%)

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Trajectory of Intra-State Transmission loss	3.40%	3.33%	3.27%	3.22%	3.18%
Actual Intra-State Transmission loss	3.37%	3.33%	-	-	-

6.3.6 Accordingly, in view of above, the Commission approves intra-state transmission loss as 3.22% for FY 2023-24.

6.3.7 The above loss figures are for the purpose of regulatory treatment in the True-up and ARR. However, for commercial purposes, estimated or actual or normative intra-State transmission loss as approved / specified in the applicable Regulations / Orders of the Commission shall be used / considered by all concerned.

6.4 OPERATION AND MAINTENANCE EXPENSES (O&M)

Petitioner's Submission

6.4.1 The Petitioner submitted that it has segregated each component of O&M expenses. The Petitioner has calculated the normative value of Employee Expenses for FY 2023-24 based on normative value of Employee Expenses for FY 2022-23 derived in its Petition and escalated the same by 5.03% i.e. average of past three years. The actual Employee Expense capitalisation for FY 2021-22 works out to be 27.00% of the actual Employee Expenses as per audited account and the same ratio (27.00%) is considered for projection of Employee Expense capitalisation for FY 2023-24.

6.4.2 Similarly, the Petitioner has projected the normative R&M Expenses for FY 2023-24 based on normative value of R&M Expenses for FY 2022-23 in its Petition and escalated the same based by 8.17% i.e. average of past three years.



6.4.3 To calculate the normative A&G Expenses for FY 2023-24, the Petitioner has considered the normative value of A&G Expenses derived for FY 2022-23 derived in its Petition and escalated the same by 8.17% i.e. average of past three years. The Petitioner has also claimed Rs. 0.07 Crore towards Finance Charges over and above the normative A&G Expenses.

Table 6-6: NORMATIVE O&M EXPENSES SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2022-23 (APR)	Average of previous 3 years CPI and WPI		FY 2023-24 (ARR)
		Petition (APR)	WPI	CPI	Petition (ARR)
Employee Expenses	A	1,087.43	-	5.03%	1,142.16
Less: Employee Expenses Capitalised	B	293.57	-	-	308.34
Net Employee Expenses	C=A-B	793.86	-	-	833.82
A&G Expenses	D	54.82	8.17%	-	59.29
Add: Finance Charges	E	0.07	-	-	0.07
Net A&G Expenses	F=D+E	54.88	-	-	59.36
Net R&M Expenses	G	406.20	8.17%	-	439.38
Net O&M Expenses	H=C+F+G	1,254.95	-	-	1,332.56

Commission's Analysis

6.4.4 Regulation 34.1, 34.2 and 34.3 of MYT Regulations, 2019 specifies the methodology to compute each element of O&M Expenses as stated below:

Quote

34.1 Employee Cost

Employee cost shall be computed as per the following formula escalated by consumer price index (CPI), adjusted by provisions for expenses beyond the control of the Licensee and one-time expected expenses, such as recovery/adjustment of terminal benefits, implications of Pay Commission, arrears, Interim Relief, etc.,

$$EMP_n = EMP_{n-1} (1 + \text{CPI inflation})$$

Where:

EMP_n : Employee expense for the n th year;

EMP_{n-1} : Employee expense for the $(n-1)$ th year;

CPI inflation is the average of Consumer Price Index (CPI) for immediately preceding three Financial Years.

34.2 Repairs and Maintenance Expense

Repair and Maintenance expense shall be calculated as per the following formula:

$$R\&M_n = R\&M_{n-1} (1 + \text{WPI inflation})$$

Where:

$R\&M_n$: Repairs & Maintenance expense for n th year;

$R\&M_{n-1}$: Repairs & Maintenance expense for the $(n-1)$ th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years.

34.3 Administrative and General Expenses

A&G expense shall be computed as per the following formula escalated by the Wholesale Price Index (WPI) and adjusted by provisions for confirmed initiatives (IT, etc., initiatives as proposed by the Transmission Licensee and validated by the Commission) or other expected one-time expenses:

$$A\&G_n = A\&G_{n-1} (1 + \text{WPI inflation})$$

Where:

A&G_n: A&G expense for the nth year;

A&G_{n-1}: A&G expense for the (n-1)th year;

WPI inflation is the average of Wholesale Price Index (WPI) for immediately preceding three Financial Years:

Provided that Interest and Finance charges such as Credit Rating charges, collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges shall be a part of A&G expenses.

Illustration: For FY 2020-21, (n-1)th year will be FY 2019-20 which is also the base year.

Unquote

6.4.5 The inflation indices considered by the Commission for FY 2023-24 is shown in the Table below:

Particulars	Whole Sale Price Index				Consumer Price Index			
	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23
April	121.10	119.20	132.00	152.30	312.00	329.00	345.89	367.78
May	121.60	117.50	132.90	155.00	314.00	330.00	347.33	371.52
June	121.50	119.30	133.70	155.40	316.00	332.00	350.50	372.10
July	121.30	121.00	135.00	154.00	319.00	336.00	353.66	372.10
August	121.50	122.00	136.20	153.20	320.00	338.00	354.24	374.98
September	121.30	122.90	137.40	151.90	322.00	340.13	355.10	378.14
October	122.00	123.60	140.70	152.90	325.00	344.16	359.71	381.60
November	122.30	125.10	143.70	152.50	328.00	345.31	362.02	381.6
December	123.00	125.40	143.30	150.50	330.00	342.14	361.15	381.02
January	123.40	126.50	143.80	150.70	330.00	340.42	360.29	382.46
February	122.20	128.10	145.30	150.90	328.00	342.72	360.00	382.18
March	120.40	129.90	148.90	150.90	326.00	344.45	362.88	383.9
Average	121.80	123.38	139.41	152.52	322.50	338.69	356.06	377.62

6.4.6 The Commission has considered the CPI and WPI inflation rate as notified by Labour Bureau, Gol (<https://labourbureau.gov.in/all-india-general-index-1>) and Economic



Advisor Government of India (https://eaindustry.nic.in/download_data_1112.asp) respectively for different years is shown in the table below:

Table 6-7: INFLATION INDEX FOR FY 2023-24 CONSIDERED BY THE COMMISSION (%)

FY	INDEX		INFLATION RATE		Average of Last 3 Years	
	WPI	CPI	WPI	CPI	WPI	CPI
FY 2013-14	112.46	236.00	5.20%	9.68%		
FY 2014-15	113.88	250.83	1.26%	6.29%		
FY 2015-16	109.72	265.00	-3.65%	5.65%		
FY 2016-17	111.62	275.92	1.73%	4.12%		
FY 2017-18	114.88	284.42	2.92%	3.08%		
FY 2018-19	119.79	299.92	4.28%	5.45%		
FY 2019-20	121.80	322.50	1.68%	7.53%		
FY 2020-21	123.38	338.69	1.29%	5.02%	2.96%	5.35%
FY 2021-22	139.41	356.06	13.00%	5.13%	2.42%	6.00%
FY 2022-23	152.65	376.33	9.40%	6.05%	5.32%	5.89%
FY 2023-24	-	-	-	-	7.90% = average of (1.29%, 13.00% & 9.40%)	5.40% = average of (5.02%, 5.13% & 6.05%)

In order to compute the normative Employee Expenses for FY 2023-24, the Commission has taken the normative Employee Expenses for FY 2022-23 (provisionally) and the same has been escalated with inflation factor (5.40%) i.e. average of Consumer Price Index (CPI) for immediately preceding three Financial Years (i.e. FY 2020-21 to FY 2022-23) as per Regulations 34.1 of MYT Regulations, 2019. Further, for computing net Employee Expenses to be allowed, the Employee Expenses Capitalised as claimed by the Petitioner for FY 2023-24 is provisionally considered and deducted from the normative Employee Expenses so calculated.

6.4.7 The normative R&M Expenses for FY 2023-24 is calculated, while escalating the normative R&M Expenses for FY 2022-23 provisionally approved in this Order with inflation factor (7.90%) i.e., average of Wholesale Price Index (WPI) for immediately preceding three Financial Years (i.e. FY 2020-21 to FY 2022-23) as per Regulations 34.2 of MYT Regulations, 2019.

6.4.8 The Commission observes that the Petitioner has claimed Finance Charge over and above the normative value, whereas the Commission has considered the Finance Charge in A&G Expenses while deriving the Mid-Year value (FY 2017-18) and Base-Year value (FY 2019-20). Hence, the claim of Petitioner for allowing Finance Charge separately over and above the normative value cannot be considered.

The normative A&G Expenses for FY 2023-24 is calculated, while escalating the normative A&G Expenses (A&G Expenses including Licenses Fee and Finance Charge)





for FY 2022-23 provisionally approved in this Order with inflation factor (7.90%) i.e., average of Wholesale Price Index (WPI) for immediately preceding three Financial Years (i.e. FY 2020-21 to FY 2022-23) as per Regulations 34.3 of MYT Regulations, 2019.

6.4.9 Accordingly, the Commission approves the O&M Expenses for FY 2023-24 based on the norms specified in Regulation 34 of MYT Regulations, 2019 as shown in table below:

Table 6-8: NORMATIVE O&M EXPENSES FOR FY 2023-24 APPROVED BY THE COMMISSION
(Rs. Crore)

Particulars	Derivation	FY 2021-22 (True up)	Average of previous 3 years CPI and WPI		FY 2022-23 (APR)	Average of previous 3 years CPI and WPI		FY 2023-24 (ARR)
		Normative (Computed)	WPI	CPI	Provisionally Computed (APR)	WPI	CPI	Approved (ARR)
Employee Expenses	A	666.06	-	5.89%	705.31	-	5.40%	743.41
Less: Employee Expenses Capitalised	B	192.89	-	-	293.57	-	-	308.34
Net Employee Expenses	C=A-B	473.17	-	-	411.74	-	-	435.07
Net A&G Expenses	D	58.27	5.32%	-	61.37	7.90%	-	66.21
Net R&M Expenses	E	413.36	5.32%	-	435.35	7.90%	-	469.73
Net O&M Expenses	F=C+D+E	944.80	-	-	908.46	-	-	971.01

Table 6-9: O&M EXPENSES FOR FY 2023-24 APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)	
		Petition (ARR)	Approved (ARR)
Employee Expenses	A	1,142.16	743.41
Less: Employee Expenses Capitalised	B	308.34	308.34
Net Employee Expenses	C=A-B	833.82	435.07
Net A&G Expenses	D	59.36	66.21
Net R&M Expenses	E	439.38	469.73
Net O&M Expenses	F=C+D+E	1,332.56	971.01

6.4.10 The Commission observes that the Petitioner instead of considering the average of Trued-Up values (without efficiency gain / loss) for the last five financial years, considered the Trued-Up values of FY 2015-16 & FY 2016-17 and normative values for the period from FY 2017-18 to FY 2019-20 as claimed in its Petition, which is not as per MYT Regulations, 2019. Further, the inflation index considered by Petitioner is not in line with the WPI and CPI (Inflation index) issued by Government of India. The reasons for variation in O&M Expenses is detailed in True up chapter under O&M Expenses of this Order. Thus, the Commission has accordingly computed the mid-year value (FY 2017-18) to derive the Base year value of O&M Expenses for FY 2019-20.





6.4.11 Since, each component of O&M Expenses for FY 2023-24 is derived by applying the inflation index on the previous year normative value. Thus, the approved value of A&G Expenses and R&M Expenses is more than claimed value by Petitioner because of the reasons cited above.

6.5 CAPITAL WORK IN PROGRESS, GROSS FIXED ASSET & ASSET CAPITALISATION

Petitioner's Submission

6.5.1 The Petitioner has estimated the capital investment for FY 2023-24 based on the expected expenditure projected towards the ongoing projects / schemes and those towards the new projects to be undertaken in FY 2023-24. The capital investment estimated by Petitioner for FY 2023-24 is shown below:

Table 6-10: SOURCE OF CAPITAL INVESTMENT SUBMITTED BY PETITIONER (Rs. Crore)

Source of Capital Investment	Derivation	FY 2023-24
Grant towards the Green Energy Corridor	A	7,18.55
Consumer Contribution/ Grant	B	618.56
Debt	C	2525.69
Equity	D	1,082.44
Total Capital Investment	E=A+B+C+D	4,945.24

6.5.2 The Petitioner submitted that the proposed capital investment has been revised in view of the change in the timelines of the projects. Further, the Petitioner submitted that the proposed CAPEX and timeline for FY 2023-24 is also changed considering the Government approval of extension of timelines, across the Board due to COVID-19 impact as well as funding crunch from Government of Uttar Pradesh (GoUP) and directive to take up important projects only due to austerity measures.

6.5.3 The expenditure towards the GEC-II scheme has been considered to the tune of Rs. 2,177.43 Crore in FY 2023-24. Further, the investment through deposit work has been taken for capital formation. The Consumer Contribution considered towards the capital formation in FY 2023-24 is Rs. 618.56 Crore, based on actuals for FY 2021-22. Further, grant @33% has been considered towards the expenditure for the assets under the Green Energy Corridor (GEC-II) during the FY 2023-24. Further, capital investment planned for the FY 2023-24 is Rs. 4,945.24 Crore is towards ongoing and new schemes.

6.5.4 For capitalisation, the Petitioner has assumed 25% of the opening CWIP and 25% of investment during the year including Employee Expenses capitalised & interest capitalised to be capitalised during FY 2023-24, in line with the past practice of the Commission.



Table 6-11: CAPITAL EXPENDITURE SUBMITTED BY PETITIONER (Rs. Crore)

Particular	Derivation	FY 2023-24 (ARR)
		Petition (ARR)
Opening CWIP as on 01.04.2023	A	8,845.66
Investments during FY 2023-24	B	4,945.24
Employee Expenses Capitalisation	C	308.34
A&G Expenses Capitalisation	D	0.00
Interest Capitalisation on Interest on Long Term Loans	E	177.43
Total Investments	F= A+B+C+D+E	14,276.66
Transferred to GFA (Total Capitalisation)	G	3,569.17
Closing CWIP as on 31.03.2024	H= F-G	10,707.50

Table 6-12: GFA SUBMITTED BY PETITIONER (Rs. Crore)

Particular	Derivation	FY 2023-24 (ARR)
		Petition (ARR)
Opening GFA as on 01.04.2023	A	38,527.29
GFA Addition during FY 2023-24	B	35,69.17
Decapitalisation / Deduction during FY 2023-24	C	0.00
Closing GFA as on 31.03.2024	D=A+B-C	42,096.46

Commission's Analysis

6.5.5 The relevant Regulations 32 of MYT Regulations, 2019 related to Capital Investment Plan is reproduced below: -

Quote

32 Capital Investment Plan

32.1 The Transmission Licensee shall submit a detailed capital investment plan, financing plan and physical targets for each year of the Control Period for strengthening and augmentation of the Intra-State Transmission System of the Transmission Licensee, meeting the requirement of load growth, improvement in quality of supply, reliability, metering, reduction in congestion, etc., to the Commission for approval:

Provided that in case of non- submission of the Capital Investment Plan by the Transmission Licensee for a year of the Control Period, the Commission may disallow the Capital expenditure for that year.

32.2 The Capital Investment Plan shall be a least cost plan for undertaking investments. However, all capital expenditure projects of 220 kV and above and other capital expenditure of value exceeding Rs. Twenty Crore, must have prior approval of the Commission on quarterly basis, and will be subject to prudence check.

Unquote



6.5.6 The Commission in its Business Plan Order dated October 15, 2020 in Petition No. 1572 of 2020 for MYT Control Period (FY 2020-21 to FY 2024-25) of UPPTCL observed that all new transmission projects should be implemented through TBCB only. The relevant extract of the same is as below:

Quote

3.9.3

Further, to provide a level playing field between the public and private sector, all new transmission projects should be implemented through Tariff Based Competitive Bidding (TBCB) only."

Unquote

Subsequently, UPPTCL filed a review Petition (Petition No. 1653 of 2020) before the Commission against the above said Business Plan Order dated October 15, 2020 on various grounds, with one of the grounds for review was to exempt the implementation of 220 kV & 132 kV projects and augmentation works through TBCB, which was disposed by the Commission vide its Order dated February 10, 2021 with the following directions:

Quote

(iv) The Commission has examined the issue in light of difficulties being faced by the Petitioner and has also considered the procedure being followed by other States. Thus, the Commission directs that all new transmission projects above 220 kV shall be implemented through TBCB in view of the difficulties and issues associated with it.

Unquote

Further, the Commission in its Order dated October 26, 2021 in Petition No. 1756/2021 provided clarification that all new green field transmission projects of 220 kV voltage level shall also be implemented through TBCB route as below:

Quote

The Commission in view of above, would like to mention that due to implementation of schemes through TBCB route, there is significant scope for gaining efficiencies in procurement and construction resulting in lower tariffs to the end consumers. Hence, the Commission hereby clarifies that all new green field transmission projects of 220 kV voltage level shall also be implemented through TBCB route. For projects other than new green field transmission projects of 220 kV voltage level, the Commission may decide on case to case basis regarding projects on which TBCB route shall not be applicable.

Unquote





6.5.7 Business Plan Order dated October 15, 2020 provides peak demand of UPPTCL (MW) from FY 2012-13 to FY 2019-20 and Year on Year increase approved by the Commission. The same is reproduced in below table:

Table 6-13: ACTUAL PEAK DEMAND (MW) & YEAR ON YEAR INCREASE (%)

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
Peak Demand (MW)	12048.25	12327.00	13002.75	14502.79	16110.45	18061.41	20062.00	21632.00
Year on Year Increase (%)	-	2.31%	5.48%	11.54%	11.09%	12.11%	11.08%	7.83%

6.5.8 Further, the Commission has approved the projected peak demand for control period from FY 2020-21 to FY 2024-25 of the Petitioner in its Business Plan Order dated October 15, 2020 as shown below:

Table 6-14: PEAK DEMAND (MW) APPORVED BY THE COMMISSION IN BUSINESS PLAN ORDER DATED 15.10.2020

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Peak Demand (MW)	23867	25486	27212	28991	30819

6.5.9 Further, the Commission observes that the Petitioner in its Business Plan Petition for the Control period from FY 2020-21 to FY 2024-25 had submitted the capital investment as follows:

Table 6-15: CAPITAL INVESTMENT PLAN FOR MYT CONTROL FOR FY 2020-21 TO FY 2024-25 SUBMITTED BY PETITIONER IN ITS BUSINESS PLAN PETITION (Rs. Crore)

Particulars	Derivation	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
New/Ongoing Projects	A	3436	4351	4214	1734	1621
Green Energy Corridor (Solar Power)	B	335	1476	1584	1007	610
Augmentation	C	594	225	377	388	360
System Strengthening (Line & Bays)	D	359	264	250	300	350
Addition of Capacitor/Reactor	E	87	75	100	100	100
Total	F=A+B+C+D+E	4810	6393	6525	3529	3041
Through Tariff Based Competitive Bidding (TBCB)	G	2952	3317	0	0	0

It is observed that the Petitioner has revised its capital investment for FY 2023-24 to Rs. 4,945.24 Crore in view of reasons as mentioned above.

6.5.10 The Commission in its Tariff Order for FY 2020-21 dated November 10, 2020 in Petition No. 1515 & 1571 of 2020 had directed the Petitioner to submit the complete capital investment plan at the earliest and take separate approval(s) for projects above 20 Crores and 220 kV in compliance to Regulation 32.2 of MYT Regulations, 2019. The relevant extract of above said Order dated November 10, 2020 is as below:





Quote

7.3.6 The Commission observes that the Petitioner has submitted some DPRs or details for approval and the scrutiny of the same is under process. However, the 1st & 2nd quarter of the year has already passed. Therefore, the Commission has allowed 100% of the Capital Expenditure as claimed by the Petitioner for FY 2020-21.

7.3.7 However, the Commission directs the Petitioner to submit the complete capital investment plan at the earliest and take separate approval(s) for projects above 20 Crores and 220 kV in terms of Regulation 32.2 of UPERC MYT Regulations, 2019. It is to be noted that if the Licensee fails to submit the capital investment plan and does not take separate approval(s) for projects above 20 Crores and 220 kV in terms of Regulation 32.2 of UPERC MYT Regulations 2019, the Commission would be forced to disallow the same in terms of the Regulations.

7.3.8 Therefore, in line with the above, the Commission has considered the following assumptions for the computation of GFA & CWIP for FY 2020-21:

- (a) to allow 100% of the claimed capital investments for FY 2020-21.
- (b) to allow 25% capitalization of total investments which includes opening CWIP, Employee capitalisation, A&G capitalisation, Interest capitalisation and investments during the year, as has been the past practice.

Unquote

- 6.5.11 Further, the Commission vide its Tariff Order for FY 2021-22 dated June 29, 2021 once again directed the Petitioner to comply with the Regulation 32.2 of MYT Regulations, 2019. The relevant extract is reproduced below:

Quote

7.2.3 The Commission directs the Petitioner to submit the detailed capital investment plans/ schemes/ projects of 220 kV and above and other capital expenditure of value exceeding Rs. 20 Crores for prior approval as per MYT Regulations, failing which the Commission may not allow the capex in the ARR and Tariff. Such investment approval Petitions should be accompanied with detailed techno-economic analysis preferably based on load flow study, IRR computations, if any.

Unquote

- 6.5.12 The Commission vide its MOM dated February 03, 2023 directed the Petitioner to submit the list of schemes projected for FY 2023-24. In compliance to Commission's query, the Petitioner submitted the list of schemes estimated to be capitalised in FY 2023-24.





6.5.13 The Commission observed that the Petitioner in compliance to the directions of the Commission started taking approval(s) of capital investment on quarterly basis from FY 2020-21 onwards.

6.5.14 Thus, in view of the above, the Commission has taken into consideration capital investment / expenditure for FY 2023-24 as projected by the Petitioner and accordingly approves the projected capitalisation for FY 2023-24. Further, the Commission directs the Petitioner that prior approval of all the schemes / projects as per Regulation 32.2 of MYT Regulations, 2019 should be ensured by the Petitioner.

6.5.15 The Commission observes that the Petitioner has not claimed any decapitalisation / deduction in the assets during FY 2023-24. However, the Commission has considered the projected decapitalisation / deduction equivalent to decapitalisation for FY 2021-22, subject to truing up based on actuals.

6.5.16 The interest capitalisation is considered as claimed by Petitioner, subject to prudence check at the time of truing up. Accordingly, the Commission approves the capital investment for FY 2023-24 as shown below:

Table 6-16: CAPITAL INVESTMENT COMPUTED FOR FY 2022-23 (Rs. Crore)

Particular	Derivation	FY 2022-23 (ARR)		
		Tariff Order for FY 2022-23 dated 20.07.2022	Petition (APR)	Provisionally Computed (APR)
Opening CWIP as on 01.04.2022	A	7,662.88	6,951.81	5,557.63
Investments during FY 2022-23	B	5,216.90	4,369.13	4,369.13
Employee Expenses Capitalisation	C	447.27	293.57	293.57
A&G Expenses Capitalisation	D	0.00	0.00	0.00
Interest Capitalisation on Interest on Long Term Loans	E	186.86	179.71	179.71
Total Investments	F= A+B+C+D+E	13,513.91	11,794.21	10,400.03
Transferred to GFA (Total Capitalisation)	G	3,739.95	2,948.55	2,948.55
Closing CWIP as on 31.03.2023	H= F-G	9,773.96	8,845.66	7,451.48

Table 6-17: CAPITAL INVESTMENT APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Particular	Derivation	FY 2023-24 (ARR)	
		Petition (ARR)	Approved (ARR)
Opening CWIP as on 01.04.2023	A	8,845.66	7,451.48
Investments during FY 2023-24	B	4,945.24	4,945.24
Employee Expenses Capitalisation	C	308.34	308.34
A&G Expenses Capitalisation	D	0.00	0.00
Interest Capitalisation on Interest on Long Term Loans	E	177.43	177.43
Total Investments	F= A+B+C+D+E	14,276.67	12,882.48
Transferred to GFA (Total Capitalisation)	G	3,569.17	3,569.17
Closing CWIP as on 31.03.2024	H= F-G	10,707.50	9,313.32



6.5.17 In view of the above, the Commission has considered the closing GFA of APR for FY 2022-23 (provisional) as opening GFA for FY 2023-24. Further, capitalisation and decapitalisation as approved above by the Commission for FY 2023-24 has been considered for arriving at closing GFA for FY 2023-24. The opening and closing GFA approved by the Commission for FY 2023-24 is shown as below:

Table 6-18: GFA COMPUTED FOR FY 2022-23 (Rs. Crore)

Particulars	Derivation	FY 2022-23 (ARR)		
		Tariff Order for FY 2021-22 dated 20.07.2022	Petition (APR)	Provisionally Computed (APR)
Opening GFA as on 01.04.2022	A	33,330.82	35,578.74	34,184.24
GFA Addition during FY 2022-23	B	3,739.95	2,948.55	2,948.55
Decapitalisation / Deduction during FY 2022-23	C	182.57	0.00	188.94
Closing GFA as on 31.03.2023	D=A+B-C	36,888.20	38,527.29	36,943.86

Table 6-19: GFA APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)	
		Petition (ARR)	Approved (ARR)
Opening GFA as on 01.04.2023	A	38,527.29	36,943.86
GFA Addition during FY 2023-24	B	3,569.17	3,569.17
Decapitalisation / Deduction during FY 2023-24	C	0.00	188.94
Closing GFA as on 31.03.2024	D=A+B-C	42,096.47	40,324.08

6.6 CONSUMER CONTRIBUTION, CAPITAL GRANTS AND GRANTS

Petitioner's Submission

6.6.1 The Petitioner in its Petition has considered Consumer Contribution for FY 2023-24 as Rs. 618.56 Crore, equivalent to actual value of FY 2021-22. In addition to Consumer Contribution, the Petitioner has also projected Capital Grant as 33% of investment towards assets under GEC-II during FY 2023-24. Thus, the net Consumer Contributions, Capital Grants and Capital Subsidies of Rs. 1,337.11 Crore is projected for FY 2023-24 as shown in the table below:

Table 6-20: CONSUMER CONTRIBUTION, CAPITAL GRANTS & SUBSIDIES SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)
		Petition (ARR)
Opening Balance of Consumer Contributions (CC), Grants and Subsidies towards Cost of Capital Assets as on 01.04.2023	A	2,826.19
Additions during FY 2023-24	B	1,337.11
Less: Amortisation during FY 2023-24		175.08





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Particulars	Derivation	FY 2023-24 (ARR)
		Petition (ARR)
Closing Balance of CC, Grants and Subsidies towards Cost of Capital Assets as on 31.03.2024	D=A+B-C	3,988.22

Commission's Analysis

6.6.2 The Commission has considered the opening balance of Consumer Contributions, Grants and Subsidies towards cost of capital assets of APR for FY 2022-23 as Trued-Up value of closing balance of Consumer Contributions, Grants & Subsidies towards cost of capital assets of True-Up for FY 2021-22. The addition and amortisation during FY 2022-23 is provisionally considered as claimed by the Petitioner as shown below:

**Table 6-21: CONSUMER CONTRIBUTION, CAPITAL GRANTS & SUBSIDIES COMPUTED
PROVISIONALLY FOR FY 2022-23 (Rs. Crore)**

Particulars	Derivation	FY 2022-23 (ARR)		
		Tariff Order for FY 2021-22 dated 20.07.2022	Petition (APR)	Provisionally Computed (APR)
Opening Balance of Consumer Contributions (CC), Grants and Subsidies towards Cost of Capital Assets as on 01.04.2022	A	2,343.79	2,369.25	2,455.07
Additions during FY 2022-23	B	854.31	626.35	626.35
Less: Amortisation during FY 2022-23	C	189.75	169.42	169.42
Closing Balance of CC, Grants and Subsidies towards Cost of Capital Assets as on 31.03.2023	D=A+B-C	3,008.35	2,826.19	2,912.01

6.6.3 The Commission has considered opening balance of Consumer Contributions, Grants & Subsidies towards cost of capital assets for FY 2023-24 as closing balance of Consumer Contributions, Grants & Subsidies considered for APR of FY 2022-23 (provisional). The addition and amortisation during FY 2023-24 is considered as claimed by the Petitioner. Accordingly, the Commission approves the Consumer Contributions, Grants & Subsidies towards cost of capital assets for FY 2023-24 as follows:

**Table 6-22: CONSUMER CONTRIBUTION, CAPITAL GRANTS & SUBSIDIES APPROVED BY THE
COMMISSION FOR FY 2023-24 (Rs. Crore)**

Particulars	Derivation	FY 2023-24 (ARR)	
		Petition (ARR)	Approved (ARR)
Opening Balance of Consumer Contributions (CC), Grants and Subsidies towards Cost of Capital Assets as on 01.04.2023	A	2,826.19	2,912.01
Additions during FY 2023-24	B	1,337.11	1337.11
Less: Amortisation during FY 2023-24	C	175.08	175.08





Particulars	Derivation	FY 2023-24 (ARR)	
		Petition (ARR)	Approved (ARR)
Closing Balance of CC, Grants and Subsidies towards Cost of Capital Assets as on 31.03.2024	D=A+B-C	3,988.22	4,074.04

6.7 DEBT-EQUITY RATIO OF CAPITALIZATION

Petitioner's Submission

6.7.1 The Petitioner submitted that it has considered the normative approach with Debt-Equity ratio as 70:30, i.e., 70% of capitalisation during the FY 2023-24 to be financed through term loan and balance 30% through equity. The amount of Consumer Contributions, Capital Subsidies and Grants towards cost of capital assets projected for FY 2023-24 has been separated and reduced as the same would not be charged to consumers. Accordingly, the Debt and Equity addition during FY 2023-24 as claimed by Petitioner is as follows:

Table 6-23: DEBT: EQUITY RATIO OF CAPITALIZATION SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)
		Petition (ARR)
Capitalisation during the FY 2023-24	A	3,569.17
Less: Decapitalisation/ Deduction during the FY 2023-24	B	0.00#
Less: Consumer Contribution, Grants & Capital Subsidies during the FY 2023-24	C	1,337.11
Net Capitalisation to be funded by Debt & Equity	D=A-B-C	2,232.06
Equity (%)	E	30.00%
Debt (%)	F	70.00%
Equity Funded during the FY 2023-24	G=D*E	669.62
Debt Funded during the FY 2023-24	H=D*F	1,562.44

Note: #Petitioner has not considered the Decapitalization while calculation of Net Debt and Equity addition during the FY 2023-24.

Commission's Analysis

6.7.2 The Debt-Equity ratio in respect to additional capitalisation is specified in Regulation 20 of MYT Regulations, 2019 as reproduced below: -

Quote

20 Debt-Equity Ratio

20.1 For a capital investment Scheme declared under commercial operation on or after April 1, 2020, debt-equity ratio as on the date of commercial operation shall be 70:30 of the amount of capital cost approved by the Commission under Regulation 18, after making appropriate adjustment of Assets funded by Consumer Contribution/





Deposit Works/ Capital Subsidies/ Grant subject to prudence check for determination of Tariff:

Provided that if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan for the Licensee for determination of Tariff:

Provided further that the Licensee shall submit documentary evidence for the actual deployment of equity and explain the source of funds for the equity:

Provided also that where equity actually deployed is less than 30% of the capital cost of the capitalised asset, the actual equity shall be considered for determination of Tariff:

Provided also that the equity invested in foreign currency shall be designated on the date of each investment.

20.2 In case of the Licensee, for the fixed assets capitalised on account of Capital Expenditure Scheme prior to April 1, 2020, the debt-equity ratio allowed by the Commission for determination of ARR / Tariff for the period ending March 31, 2020 shall be considered:

Provided that in case of retirement or replacement or de-capitalisation of the assets, the equity capital approved as mentioned above, shall be reduced to the extent of 30% (or actual equity component based on documentary evidence, if it is lower than 30%) of the original cost of such assets:

Provided further that in case of retirement or replacement or de-capitalisation of the assets, the debt capital approved as mentioned above, shall be reduced to the extent of outstanding debt component based on documentary evidence, or the normative loan component, as the case may be, of the original cost of such assets.

20.3 Any expenditure incurred or projected to be incurred on or after April 1, 2020, as may be admitted by the Commission as additional capital expenditure for determination of Tariff, and Renovation and Modernisation expenditure for life extension, shall be serviced in the manner stipulated in these Regulations.

Unquote

- 6.7.3 The Commission observes that the Petitioner has not taken into account the Decapitalisation / Deduction during FY 2023-24 while deriving the net capitalisation for FY 2023-24 to be funded through debt and equity.
- 6.7.4 The Commission has considered Debt-Equity ratio as 70:30 i.e. 70% of capitalisation projected during FY 2023-24 to be financed through term loan and balance 30% through equity. The amount of Consumer Contributions, Capital Subsidies and Grants



towards cost of capital assets projected during FY 2023-24 is reduced considering as approved by the Commission. In addition to above, approved Decapitalization of asset of FY 2021-22 has been considered, subject to truing up which is deducted from capitalisation to derive net equity and debt addition during FY 2023-24 as shown below:

Table 6-24: DEBT- EQUITY RATIO OF CAPITALIZATION APPROVED BY THE COMMISSION
(Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)	
		Petition (ARR)	Approved (ARR)
Capitalisation during the FY 2023-24	A	3,569.17	3,569.17
Less: Decapitalisation/ Deduction during the FY 2023-24	B	0.00#	188.94*
Less: Consumer Contribution, Grants & Capital Subsidies during the FY 2023-24	C	1,337.11	1,337.11
Net Capitalisation to be funded by Debt & Equity	D=A-B-C	2,232.06	2,043.12
Equity (%)	E	30.00%	30.00%
Debt (%)	F	70.00%	70.00%
Equity addition during the FY 2023-24	G=D*E	669.62	612.94
Debt addition during the FY 2023-24	H=D*F	1,562.44	1,430.18

Note: #Petitioner has not considered the Decapitalization while calculation of Net Debt and Equity addition during the FY 2023-24;

* This value is considered equivalent to Trued-Up value of decapitalisation of FY 2021-22 in this Order.

6.8 DEPRECIATION

Petitioner's Submission

6.8.1 For computation of allowable Depreciation for FY 2023-24, the Petitioner has considered normative closing Gross Fixed Asset Base for FY 2019-20 and subsequent addition and yearly capitalisation from FY 2020-21 to FY 2023-24. Further, the Petitioner has computed the asset-wise depreciation as per rates provided in Annexure-A of MYT Regulations, 2019 based on the normative opening and closing Gross Fixed Asset Base for FY 2023-24. Thus, the allowable depreciation for Part-A & Part-B in line with MYT Regulations, 2019 and methodology adopted by Commission in its Tariff Order for FY 2020-21 dated November 10, 2020 and Tariff Order for FY 2021-22 dated June 29, 2021 are tabulated below:

Table 6-25: GROSS DEPRECIATION FOR ASSETS UPTO 31.03.2020 (PART-A) SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Opening GFA	Additions to GFA	Deductions to GFA	Closing GFA	Depreciation Rate (%)	Allowable Depreciation
Land & Land Rights						
Unclassified	141.97	1.31	43.84	99.45	0.00%	-
Freehold Land	1.26	0.09	1.29	0.06	0.00%	-
Buildings	1,085.14	145.76	1.11	1,229.79	3.34%	38.66



Particulars	Opening GFA	Additions to GFA	Deductions to GFA	Closing GFA	Depreciation Rate (%)	Allowable Depreciation
Other Civil Works	91.63	11.91	0.00	103.54	3.34%	3.26
Plants & Machinery	12,822.19	1,435.39	630.18	13,627.40	5.28%	698.27
Lines, Cable Network etc.	11,314.74	1,707.37	48.78	12,973.34	5.28%	641.21
Vehicles	3.37	0.00	0.06	3.31	9.50%	0.32
Furniture & Fixtures	8.74	1.23	0.02	9.96	6.33%	0.59
Office Equipments	9.55	2.56	0.00	12.11	6.33%	0.69
Intangible Assets	4.27	0.03	0.00	4.30	5.28%	0.23
Assets taken over by Licensee (Pending for final Valuation)	105.44	4.74	1.84	108.34	5.28%	5.64
Total Depreciable Assets	25,445.07	3,309.00	681.99	28,072.09	6.71%	1,388.86
Total Non-Depreciable Assets	143.23	1.41	45.13	99.50	-	-
Grand Total (Assets)	25,588.30	3,310.41	721.12	28,171.59	6.71%	1,388.86

Table 6-26: GROSS DEPRECIATION FOR ASSETS FROM 01.04.2020 (PART-B) SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Opening GFA	Additions to GFA	Deductions to GFA	Closing GFA	Depreciation Rate (%)	Allowable Depreciation
Land & Land Rights						
Unclassified	103.01	19.80	0.00	122.81	0.00%	-
Freehold Land	0.15	0.18	0.00	0.33	0.00%	-
Buildings	385.51	151.36	0.00	536.87	3.34%	15.40
Other Civil Works	27.91	12.78	0.00	40.69	3.34%	1.15
Plants & Machinery	4,351.40	1,788.49	0.00	6,139.89	5.28%	276.97
Lines, Cable Network etc.	5,446.92	1,578.23	0.00	7,025.14	5.28%	329.26
Vehicles	0.50	0.47	0.00	0.97	9.50%	0.07
Furniture & Fixtures	3.39	1.22	0.00	4.61	6.33%	0.25
Office Equipments	4.14	1.33	0.00	5.47	6.33%	0.30
Intangible Assets	9.59	0.60	0.00	10.18	5.28%	0.52
Assets taken over by Licensee (Pending for final Valuation)	23.18	14.71	0.00	37.89	5.28%	1.61
Total Depreciable Assets	10,252.54	3,549.19	0.00	13,801.73	5.20%	625.54
Total Non-Depreciable Assets	103.16	19.98	0.00	123.14	-	0.00
Grand Total (Assets)	10,355.70	3,569.17	0.00	13,924.87	5.02%	625.54

6.8.2 Further, the Petitioner has projected the depreciation on assets created out of Consumer Contributions, Capital Grants and Subsidies for FY 2023-24 in the same ratio as per annual accounts of FY 2021-22. The Petitioner has reduced the equivalent depreciation amounting to Rs. 175.08 Crore for FY 2023-24 in respect of depreciation on assets created out of Consumer Contributions, Capital Grants and Subsidies.

Table 6-27: NET DEPRECIATION (PART-A + PART-B) SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)
		Petition (ARR)
Depreciation of Assets upto 31.03.2020	A	1,388.86
Depreciation of Assets from 01.04.2020 onwards	B	625.54



Particulars	Derivation	FY 2023-24 (ARR)
		Petition (ARR)
Less: Depreciation of assets created from Consumer Contribution, Capital Grants and Capital Subsidies	C	175.08
Net Depreciation	D=A+B-C	1,839.33

Commission's Analysis

6.8.3 The depreciation has been calculated in accordance with Regulation 21 of MYT Regulations, 2019 and methodology considered in Tariff Order dated November 10, 2020 for FY 2020-21. The relevant extract of MYT Regulations 2019 is reproduced as below:

Quote

21 Depreciation

21.1 The Licensee, shall be permitted to recover Depreciation on the value of fixed assets used in their respective businesses, computed in the following manner:

(a) The approved original cost of the fixed assets shall be the value base for calculation of Depreciation:

Provided that the Depreciation shall be allowed on the entire capitalised amount of the new assets after reducing the approved original cost of the retired or replaced or de-capitalised assets.

(b) Depreciation shall be computed annually based on the Straight- Line Method at the rates stipulated in the Annexure- A to these Regulations.

Provided that the Licensee shall ensure that once the individual asset is depreciated to the extent of seventy percent, remaining depreciable value as on 31st March of the year closing shall be spread over the balance Useful Life of the asset including the Extended Life, as per submission of the Licensee and approved by the Commission.

(c) The salvage value of the asset shall be considered at 10% of the allowable capital cost and Depreciation shall be allowed up to a maximum of 90% of the allowable capital cost of the asset:

Provided that land owned shall not be treated as a Depreciable asset and shall be excluded while computing Depreciation:

Provided further that Depreciation shall be chargeable from the first year of commercial operation.

Depreciation shall not be allowed on assets funded by Consumer Contributions or Subsidies/ Grants/ Deposit works.



21.2 In case of existing assets, the balance depreciable value as on April 01, 2020, shall be worked out taking into consideration the life of the asset, and by deducting the cumulative Depreciation as admitted by the Commission up to March 31, 2020, from the gross depreciable value of the assets.

21.3 In case of projected commercial operation of the assets for part of the year, depreciation shall be computed based on the average of opening and closing value of assets.

21.4 Depreciation shall be re-computed for assets capitalised at the time of Truing-Up, based on Audited Accounts and documentary evidence of assets capitalised by the Petitioner, subject to the prudence check of the Commission.

Unquote

- 6.8.4 The relevant extract of Tariff Order for FY 2020-21 dated November 10, 2020 in regard to calculation of depreciation is as follows:

Quote

7.5.7 It is observed that the Regulation 21.1 specifies for process of computation of depreciation of the new assets, wherein depreciation shall be computed annually based on the Straight- Line Method at the rates stipulated in the Regulations and the Licensee has to ensure that once the individual asset is depreciated to the extent of seventy percent, remaining depreciable value as on 31st March of the year closing has to be spread over the balance Useful Life of the asset including the Extended Life. However, the Regulations doesn't specifically say the same wrt to the existing Gross Block and further explains the treatment of existing assets in Regulation 21.2. Also, there is a huge lack of individual asset-wise details in the existing gross block since this has been carried on from FY 2007-08 after the unbundling of UPPCL and transfer scheme to UPPTCL. Further, the Licensee also started maintaining the FAR much later after repeated directions of the Commission, from FY 2014-15 onwards. Hence, the life of individual assets cannot be ascertained and as such it cannot be found whether the individual asset has depreciated to the extent of seventy percent or not.

7.5.8 Accordingly, the existing assets are to be dealt with separately as per Regulations 21.2 and their Net block (as on 31.3.2020) may be kept separate and may be considered Gross Block to apply SLM from 1.4.2020 onwards and the new assets to be dealt as per Regulations 21.1 of MYT Regulations 2019.

7.5.9 Further, UPPTCL is directed to maintain a separate individual asset wise FAR for assets capitalized after 1.4.2020 and the Gross Block and Depreciation may be computed separately from the Gross Block before 1.4.2020. Accordingly, from FY 2020-21 onwards UPPTCL to maintain

two separate Gross Blocks (one for assets upto 31.3.2020 (Part-A) and second for assets after 1.4.2020 (Part B) and two separate FAR's depicting addition of assets details from 01.04.2020 onwards for the purpose of depreciation computation for Regulatory Accounts.

7.5.10 Further, for the purpose the computation of Closing GFA for FY 2020-21, Petitioner has not claimed any de-capitalisation. However, the Commission has considered, the decapitalisation for FY 2020-21 as average of last three years (FY 2016-17, FY 2017-18 & FY 2018-19) trued-up decapitalisation.

Table 101: ASSET RETIRED OR DEDUCTED FOR FY 2020-21 (Rs. Crore)

Particulars	FY 2016-17 (% of Deductions)	FY 2016-17 (% of Deductions)	FY 2016-17 (% of Deductions)	Average % of Deductions of last 3 True-Ups
Depreciable assets	2.51%	1.18%	1.31%	1.66%

7.5.11 As per above, the Commission has computed the depreciation. The written down closing of FY 2019-20 is considered as Opening for FY 2020-21 where the gross depreciation computed for FY 2019-20 is negated from it to get the Net written down opening (considered to be opening GFA) due to the Change in methodology of Depreciation from Written Down Value to Straight Line Method.

Unquote

- 6.8.5 In compliance to above, the Petitioner submitted gross depreciation for Part-A and Part-B, separately and later combined to derive the gross depreciation for FY 2023-24. However, the Commission observes that the Petitioner has not calculated the depreciation for assets that were capitalized upto March 31, 2020 as per the methodology approved by the Commission in Tariff Order for FY 2020-21 dated November 10, 2020. Therefore, the Commission vide its 1st deficiency letter dated January 05, 2023, directed the Petitioner to submit the same as per the methodology approved by Commission.
- 6.8.6 The Petitioner vide reply dated January 30, 2023 submitted that since the methodology for calculating depreciation is changed from Written Down Value method to Straight-Line Method, it is necessary to calculate the opening Gross Fixed Assets without the impact of cumulative depreciation. The methodology adopted by Commission in its Tariff Order for FY 2020-21 dated November 10, 2020 for calculation of depreciation of Part-A is WDV method. However, as per MYT Regulations, 2019, the depreciation for both part A and Part B shall be calculated on SLM method. Further the depreciation from assets created out of consumer contribution, grant and subsidy is deducted to arrive at net allowable depreciation.



6.8.7 The Commission observes that the methodology adopted by Petitioner is not inline with the methodology as approved in Para 7.5.11 of Tariff Order of FY 2020-21 dated November 10, 2020. Para 7.5.11 clearly states that due to change in methodology of Depreciation from Written Down Value to Straight Line Method, the Written Down closing of FY 2019-20 (Trued up value) shall be considered as opening value for FY 2020-21, where the gross depreciation approved for FY 2019-20 is negated from it to get the net Written Down opening (considered to be opening GFA). Thus, the Commission computes the Gross Depreciation for Part-A i.e., assets capitalised upto March 31, 2020 accordingly.

**Table 6-28: DEPRECIATION ON GFA UPTO 31.03.2020 (PART-A) APPROVED BY THE COMMISSION
IN TARIFF ORDER FOR FY 2021-22 DATED JUNE 29, 2021 (Rs. Crore)**

Particulars	Opening GFA (FY 2019-20)	Gross Allowable Depreciation (FY 2018-19)	Written Down Opening (FY 2019-20)	Additions to GFA (FY 2019-20)	Deductions (FY 2019-20)	Closing GFA (FY 2019-20)	Average GFA (FY 2019-20)	Rate of Depreciation (%)	Gross Allowable Depreciation (FY 2019-20)
Land & Land Rights									
Unclassified	90.31	-	-	-	-	-	-	90.31	-
Freehold Land	0.03	-	-	-	-	-	-	0.03	-
Buildings	845.06	23.57	821.48	119.60	0.85	940.23	880.86	3.02%	26.60
Other Civil Works	69.40	2.02	67.38	9.77	0.00	77.15	72.27	3.02%	2.18
Plants & Machinery	9497.57	701.34	8796.23	1177.71	288.92	9685.02	9240.63	7.81%	721.69
Lines, Cable Network etc.	8832.58	434.37	8398.21	1400.87	20.61	9778.46	9088.34	5.27%	478.96
Vehicles	2.25	0.29	1.96	0.00	0.00	1.96	1.96	12.77%	0.25
Furniture & Fixtures	6.36	0.70	5.66	1.01	0.00	6.67	6.16	12.77%	0.79
Office Equipments	6.85	0.81	6.04	2.10	0.00	8.15	7.10	12.77%	0.91
Assets taken over by Licensee (Pending for final Valuation)	72.87	8.73	64.13	3.89	0.10	67.93	66.03	12.77%	8.43
Intangible Assets	3.24	0.49	2.75	0.00	0.00	2.75	2.75	15.00%	0.41
Total Assets	19426.51*	1172.31	18254.20^	2714.95	310.48	20658.67#	20042.59		1240.22
Net Gross Fixed Assets upto March 31, 2020 (Part-A) [Closing GFA (Rs. 20658.67 Crore) minus Gross Allowable Depreciation (1240.22)]									19418.45

Note: * Opening GFA includes Rs. 19336.17 (Depreciable assets) plus Rs. 90.34 Crore of Land & Land Rights (Non-Depreciable assets). ^ Written Down Opening includes Rs. 18163.36 (Depreciable assets) plus Rs. 90.34 Crore of Land & Land Rights (Non-Depreciable assets). # Closing GFA includes Rs. 20568.33 (Depreciable assets) plus Rs. 90.34 Crore of Land & Land Rights (Non-Depreciable assets)

6.8.8 For Part-A i.e., assets capitalised before April 01, 2020, the Commission computes the depreciation as per methodology as approved in Para 7.5.11 of Tariff Order of FY 2020-21 dated November 10, 2020.

6.8.9 For Part-B i.e., assets capitalised after April 01, 2020 till FY 2023-24, the Commission calculates the asset wise depreciation as per Regulation 21.1(b) of MYT Regulations, 2019 i.e., depreciation is computed based on the Straight- Line Method at the rates stipulated in the Annexure- A of MYT Regulations, 2019.

6.8.10 Further, the depreciation on asset created out of Consumer Contribution, Capital Grants and Capital Subsidies is considered as claimed by the Petitioner for FY 2023-24.



6.8.11 The Commission observes that the Petitioner has not claimed any decapitalisation / deduction in the assets during FY 2023-24 and will claim at the time of Truing-Up based on actuals. However, the Commission has considered the decapitalisation / deduction in the assets during FY 2023-24 equivalent to Trued-Up value of FY 2021-22. Accordingly, the Commission approves the Depreciation for Part A and Part B in following tables.

Table 6-29: GROSS DEPRECIATION FOR ASSETS UPTO 31.03.2020 (PART-A) APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Opening GFA	Additions to GFA	Deductions to GFA	Closing GFA	Depreciation Rate (%)	Allowable Depreciation
Land & Land Rights						
Unclassified	89.42	-	0.90	88.52	-	-
Freehold Land	0.03	-	0.00	0.03	-	-
Buildings	904.31	-	9.06	895.25	3.34%	30.05
Other Civil Works	74.23	-	0.74	73.48	3.34%	2.47
Plants & Machinery	8,536.54	-	85.53	8,451.02	5.28%	448.47
Lines, Cable Network etc.	9,179.37	-	91.97	9,087.41	5.28%	482.24
Vehicles	1.64	-	0.02	1.62	9.50%	0.15
Furniture & Fixtures	5.80	-	0.06	5.74	6.33%	0.37
Office Equipments	7.16	-	0.07	7.09	6.33%	0.45
Assets taken over by Licensee (Pending for final Valuation)	57.18	-	0.57	56.61	5.28%	3.00
Intangible Assets	2.32	-	0.02	2.29	5.28%	0.12
Total Assets	18,858.00	-	188.94	18,669.06	5.16%	967.33

Table 6-30: GROSS DEPRECIATION FOR ASSETS FROM 01.04.2020 ONWARDS (PART-B) APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Opening GFA	Additions to GFA	Deductions to GFA	Closing GFA	Depreciation Rate (%)	Allowable Depreciation
Land & Land Rights						
Unclassified	103.01	19.80	-	122.81	-	-
Freehold Land	0.15	0.18	-	0.33	-	-
Buildings	385.51	151.36	-	536.87	3.34%	15.40
Other Civil Works	27.91	12.78	-	40.69	3.34%	1.15
Plants & Machinery	4,351.40	1,788.49	-	6,139.89	5.28%	276.97
Lines, Cable Network etc.	5,446.92	1,578.23	-	7,025.14	5.28%	329.26
Vehicles	0.50	0.47	-	0.97	9.50%	0.07
Furniture & Fixtures	3.39	1.22	-	4.61	6.33%	0.25
Office Equipments	4.14	1.33	-	5.47	6.33%	0.30
Assets taken over by Licensee (Pending for final Valuation)	23.18	14.71	-	37.89	5.28%	1.61
Intangible Assets	9.59	0.60	-	10.18	5.28%	0.52
Total Assets	10,355.70	3,569.17	0.00	13,924.87	5.15%	625.54





6.8.12 The following tables summarizes the Depreciation as claimed by the Petitioner and as approved by the Commission for FY 2023-24.

Table 6-31: NET DEPRECIATION (PART-A + PART-B) APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)	
		Petition (ARR)	Approved (ARR)
Depreciation of Assets upto 31.03.2020	A	1,388.86	967.33
Depreciation of Assets from 01.04.2020 onwards	B	625.54	625.54
Less: Depreciation of assets created from Consumer Contribution, Capital Grants and Capital Subsidies	C	175.08	175.08
Net Depreciation	D=A+B-C	1,839.33	1,417.79

6.9 INTEREST ON LONG TERM LOANS

Petitioner's Submission

6.9.1 The Petitioner has considered normative closing (provisional) for FY 2022-23 as normative opening loan for FY 2023-24. Further, the loan addition during the year is considered as 70% of the projected capitalisation after adjusting the consumer contribution, capital subsidies and grant.

6.9.2 The net depreciation for the year has been considered as normative loan repayment. The weighted average rate of interest of overall long term loan portfolio for FY 2021-22 has been considered for FY 2023-24.

6.9.3 The interest capitalisation has been considered at a rate of 11.94% for FY 2023-24 as claimed for FY 2021-22 as per the audited annual accounts. The computation of interest on long term loan is depicted below:

Table 6-32: INTEREST ON LONG TERM LOANS SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)
		Petition (ARR)
Opening Loan as on 1st April of FY	A	12896.70
Addition during the FY	B	1562.44
Less: Repayment during the FY	C	1839.32
Closing Loan	D=A+B-C	12619.82
Weighted Average Interest Rate	E	11.65%
Interest on Loan	F=average (A, D)*E	1486.34
Interest Capitalisation Rate	G	11.94%
Less: Interest Capitalised	H=F*G	177.43
Net Interest Charged	I=F-H	1308.91





Commission's Analysis

6.9.4 Regulation 23 of MYT Regulations, 2019 specifies as under:

Quote

23 Interest on Long-Term Loan

23.1 The long- term loans arrived at in the manner indicated in these Regulations on the assets put to use shall be considered as gross normative loan for calculation of interest on loan:

Provided that in case of retirement or replacement or de-capitalisation of assets, the loan capital approved as mentioned above, shall be reduced to the extent of outstanding loan component of the original cost of such assets based on documentary evidence.

23.2 The normative long- term loan outstanding as on April 1, 2020, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2020, from the gross normative loan.

23.3 The repayment for each year shall be deemed to be equal to the Depreciation allowed for that year.

23.4 Notwithstanding any moratorium period availed, the repayment of loan shall be considered from the first year of commercial operation of the asset.

23.5 The rate of interest shall be the weighted average rate of interest computed on the basis of the actual long- term loan portfolio at the beginning of each year:

Provided that at the time of Truing- Up, the weighted average rate of interest of the actual long- term loan portfolio during the concerned year shall be considered as the rate of interest:

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

Provided also that if the Licensee, does not have actual long- term loan even in the past, the weighted average rate of interest of its other Businesses regulated by the Commission shall be considered:

Provided also that if the Licensee does not have actual long- term loan, and its other Businesses regulated by the Commission also do not have actual loan even in the past, then the weighted average rate of interest of the entity as a whole shall be considered:

Provided also that if the entity as a whole does not have actual long- term loan because of which interest rate is not available, then the rate





of interest for the purpose of allowing the interest on the normative long- term loan should be the weighted average SBI MCLR (1 Year) prevailing during the concerned year.

23.6 The interest on long- term loan shall be computed on the normative average long- term 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 concerned year shall be considered on the basis of the actual asset capitalisation approved by the Commission for the year.

23.7 The excess interest during construction on account of time and / or cost overrun as compared to the approved completion schedule and capital cost or on account of excess drawal of the debt funds disproportionate to the actual requirement based on Scheme completion status, shall be allowed or disallowed partly or fully on a case to case basis, after prudence check by the Commission:

Provided that where the excess interest during construction is on account of delay attributable to an agency or contractor or supplier engaged by the Licensee, any liquidated damages recovered from such agency or contractor or supplier shall be taken into account for computation of capital cost:

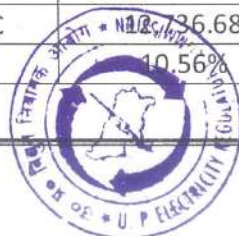
Provided further that the extent of liquidated damages to be considered shall depend on the amount of excess interest during construction that has been allowed by the Commission.

Unquote

- 6.9.5 For the purpose of arriving at the opening values of FY 2023-24, the Commission has provisionally computed the values for FY 2022-23. The Commission has considered 100% investment claimed by Petitioner during FY 2022-23 and accordingly the GFA addition is provisionally computed. Further, loan addition during the FY 2022-23 is considered as 70% of net capitalisation after reducing consumer contribution and de-capitalised assets. The closing loan base as on March 31, 2023 provisionally computed by the Commission for APR of FY 2022-23 is shown in the Table below:

Table 6-33: INTEREST ON LONG TERM LOANS COMPUTED BY COMMISSION FOR FY 2022-23 PROVISIONALLY (Rs. Crore)

Particulars	Derivation	Tariff Order for FY 2022-23 dated 20.07.2022	Petition (APR)	Provisional Computed (APR)
Opening Normative Loan as on 01.04.2022	A	12,115.64	12,947.91	12,615.11
Loan Additions during the Year	B	1,892.15	1,625.54	1,493.28
Less: Repayments (Depreciation allowable for Year)	C	1,271.11	1,676.74	1,264.96
Closing Loan Balance as on 31.03.2023	D=A+B-C	2,736.68	12,896.70	12,843.42
Weighted Average Rate of Interest (%)	E	10.56%	11.65%	10.22%





Particulars	Derivation	Tariff Order for FY 2022-23 dated 20.07.2022	Petition (APR)	Provisional Computed (APR)
Interest on long term loan	$F=(A+D)/2 \times E$	1,312.24	1,505.45	1,301.14
Interest Capitalisation Rate (%)	G	14.24%	11.94%	13.81%
Less: Interest Capitalized	$H=F \times G$	186.86	179.71	179.71
Net Interest Charged	$I=F-H$	1,125.38	1,325.74	1,121.44

6.9.6 The Commission observes that there is variation in opening loan base because the Petitioner has claimed the opening loan based on the audited value instead of approved closing value of previous year Trued-Up values. Thus, considering the regulatory accounts and provisions, the opening loan base of FY 2023-24 is considered as closing value of loan for FY 2022-23 (provisionally computed). Further, 70% of Net GFA addition (after considering deduction / de-capitalization and consumer contribution in GFA as approved for FY 2023-24 has been considered as loan addition during the year. The repayment is approved as equal to net depreciation approved during the Financial Year.

6.9.7 The Commission observes that the Petitioner has claimed interest rate of 11.65% whereas, the Commission considers the interest rate of 10.22% based on the approved value of True-Up for FY 2021-22. The following table details the Interest on Long Term Loan as submitted by the Petitioner and that approved by the Commission for FY 2023-24 as shown below.

Table 6-34: INTEREST ON LONG TERM LOAN APPROVED BY THE COMMISSION FOR FY 2023-24
(Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)	
		Petition (ARR)	Approved (ARR)
Opening Normative Loan as on 01.04.2023	A	12,896.70	12,843.42
Loan Additions during the Year	B	1,562.44	1,430.18
Less: Repayments (Depreciation allowable for Year)	C	1,839.32	1,417.79
Closing Loan Balance as on 31.03.2024	$D=A+B-C$	12,619.82	12,855.81
Weighted Average Rate of Interest (%)	E	11.65%	10.22%
Interest on long term loan	$F=(A+D)/2 \times E$	1,486.34	1,314.44
Interest Capitalisation Rate (%)	G	11.94%	13.51%
Less: Interest Capitalized	$H=F \times G$	177.43	177.43
Net Interest Charged	$I=F-H$	1,308.91	1,136.02

6.10 INTEREST ON WORKING CAPITAL

Petitioner's Submission

6.10.1 In accordance with Regulation 25 of MYT Regulations, 2019, the Petitioner has derived the value of each component of Working Capital requirement of the Transmission





Licensee. Further, the Interest Rate on Working Capital requirement is considered as weighted average SBI MCLR (1 Year) as on October 01, 2019 plus 250 basis points i.e. 10.65% as per proviso of Regulation 25 of MYT Regulations, 2019.

Table 6-35: INTEREST ON WORKING CAPITAL SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)
		Petition (ARR)
O&M Expenses for one Month	$A = O\&M/12$	136.74
Maintenance Spares at 40% of R&M Expenses for two Months	$B = 40\% * R\&M/6$	29.29
One and Half Month equivalent of the expected revenue for transmission Charges at prevailing Tariff	$C = ARR * 1.5/12$	442.44
Less: Amount held as security deposits, if any, from Transmission System Users	D	0.00
Total Working Capital	$E = A + B + C - D$	608.47
Interest Rate on Working Capital Requirement	F	10.65%
Interest on Working Capital	$G = E * F$	64.80

Commission's Analysis

6.10.2 Regulation 25 of MYT Regulations, 2019 specifies as under:

Quote

25 Interest on Working Capital

25.1 Transmission

(a) The working capital requirement of the Transmission Licensee shall cover:

- (i) Operation and maintenance expenses for one month;
 - (ii) Maintenance spares at 40% of the R&M expenses for two months;
- and

(iii) One-and-a-half-month equivalent of the expected revenue from transmission charges at the prevailing Tariff;

minus

(iv) Amount held as security deposits, if any, from Transmission System Users:

Provided further that for the purpose of Truing- Up for any year, the working capital requirement shall be re-computed on the basis of the values of components of working capital approved by the Commission in the Truing- Up;

(b) Rate of interest on working capital shall be simple interest and shall be equal to the SBI MCLR (1 Year) on October 01, 2019 plus 250 basis points:

Provided that for the purpose of Truing- Up for any year, simple interest on working capital shall be allowed at a rate equal to the weighted

average SBI MCLR (1 Year) prevailing during the concerned Year plus
250 basis points.

Unquote

6.10.3 The Commission observes that the Petitioner has computed Interest on Working Capital considering Gross O&M Expenses instead of Net O&M Expenses. However, the Commission considers 1 month's O&M Expenses approved for FY 2023-24 and Maintenance Spares at 40% of two month's R&M Expenses approved for FY 2023-24 in line with the provisions of MYT Regulations, 2019.

6.10.4 As per Regulation 25.1 (b) of MYT Regulations, 2019 rate of interest on working capital shall be simple interest and shall be equal to the SBI MCLR (1 Year) on October 01, 2019 plus 250 basis points. However, the Commission is of the view that rate of interest on Working Capital requirement is to be taken as the prevailing rate as on 1st October preceding to the date of filing as provided in the Regulations 4.1 of MYT Regulations, 2019. The SBI 1 Year MCLR as on October 01, 2022 is 7.70% (Source: SBI MCLR (1 Year) prevailing during FY 2022-23.

Link: <https://sbi.co.in/web/interest-rates/interest-rates/mclr-historical-data>). Thus, the interest rate on working capital requirement for FY 2023-24 comes out to be 10.20% (SBI 1 Year MCLR plus 2.50 basis point). The same will be revisited at the time of True-Up in line with first proviso of Regulations 25.1(b) of MYT Regulations, 2019.

6.10.5 Accordingly, the Commission computes working capital requirement and interest on working capital in line with MYT Regulations as shown below:

Table 6-36: INTEREST ON WORKING CAPITAL APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)	
		Petition (ARR)	Approved (ARR)
O&M Expenses for one Month	$A = O\&M/12$	136.74	80.92
Maintenance Spares at 40% of R&M Expenses for two Months	$B = 40\% * R\&M/6$	29.29	31.32
One and Half Month equivalent of the expected revenue for transmission Charges at prevailing Tariff	$C = ARR * 1.5/12$	442.44	450.82
Less: Amount held as security deposits, if any, from Transmission System Users	D	0.00	0.00
Total Working Capital	$E = A + B + C - D$	608.47	563.06
Interest Rate on Working Capital Requirement	F	10.65%	10.20%
Interest on Working Capital	$G = E * F$	64.80	57.43



6.11 RETURN ON EQUITY

Petitioner's Submission

- 6.11.1 The Petitioner has submitted that under the provisions of the MYT Regulations, 2019, the Petitioner is eligible for return @ 14.5% on equity base for equity base calculation debt equity ratio shall be 70:30. Where equity is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30%. Equity amounting to more than 30% shall be considered as loan. In case of actual equity employed being less than 30%, actual debt and equity shall be considered for determination of tariff. The return on equity has been computed as per methodology adopted by the Commission in the previous Tariff Orders.
- 6.11.2 In view of huge gap in the recovery of cost of supply at the Discoms level, the Petitioner is of the view that return on equity would only result in increase in arrears and accumulation of receivables. As such, the Petitioner has been claiming the return on equity @ 2% since FY 2009-10 onwards. Accordingly, return on equity has been computed on the normative equity portion (30%) of capitalised assets.
- 6.11.3 The Petitioner has computed the eligible return on equity by considering the opening normative equity as on April 01, 2023. Subsequently, it has considered the normative equity closing based on the capital additions for the FY 2023-24 and claimed return on equity for FY 2023-24 as Rs. 220.31 Crore.

Table 6-37; RETURN ON EQUITY SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)
		Petition (ARR)
Opening Equity	A	10,680.44
Equity addition during FY 2023-24	B	669.62
Closing Equity	C=A+B	11,350.07
Average Equity	D=(A+C)/2	11,015.25
Rate of Return on Equity	E	2.00%
Return on Equity	F=D*E	220.31

Commission's Analysis

- 6.11.4 The Commission for the purpose of determination of tariff has considered debt-equity ratio of 70:30 for the assets capitalized in line with MYT Regulations, 2019. The equity if less than 30%, the actual equity shall be considered and if equity is more than 30%, the amount of equity shall be limited to 30%. Therefore, the balance asset capitalized





shall be treated as normative loan for determination of tariff. The above approach has been considered.

6.11.5 Regulation 22 of MYT Regulations, 2019 specifies as under:

Quote

22 Return on Equity

22.1 Return on equity shall be computed in Rs. terms on equity base at the rate of 14.5% post-tax per annum for the Transmission Licensee and at the rate of 15% post-tax per annum for Distribution Licensee respectively as determined in accordance with Regulation 20:

Provided that assets funded by Consumer Contribution / Deposit works, Capital Subsidies / Grants and corresponding Depreciation shall not form part of the Capital Cost. Actual Equity infused by the Licensee as per book value shall be considered and shall be used for computation in these Regulations.

Unquote

6.11.6 For the purpose of arriving at the opening values of FY 2023-24, the Commission has provisionally computed the provisional values of APR for FY 2022-23. The Commission has considered 100% investment claimed by Petitioner during FY 2022-23 and accordingly the GFA addition is provisionally projected. Further equity addition during the year of FY 2022-23 is considered as 30% of net capitalisation after reducing consumer contribution and de-capitalised assets. The closing equity base as on March 31, 2023 provisionally computed by the Commission for APR of FY 2022-23 is as shown in the Table below:

Table 6-38: RETURN ON EQUITY PROVISIONALLY COMPUTED BY COMMISSION FOR FY 2022-23
(Rs. Crore)

Particulars	Derivation	FY 2022-23 (ARR)		
		Tariff Order for FY 2022-23 dated 20.07.2022	Petitioner (APR)	Provisionally Computed (APR)
Opening Equity as on 01.04.2022	A	9,208.92	9,983.78	9,430.68
Addition during the year	B	810.92	696.66	639.98
Closing Equity as on 31.03.2023	C=A+B	10,019.84	10,680.44	10,070.66
Average Equity	D=(A+C)/2	9,614.38	10,332.11	9,750.67
Rate of Return (%)	E	2.00%	2.00%	2.00%
Return on Equity	F=D*E	192.29	206.64	195.01

6.11.7 The Commission observes that there is variation in opening equity base because the Petitioner has claimed the opening equity based on the audited value instead of closing value approved by the Commission thereunder. Thus, considering the regulatory accounts and provisions, the opening equity base of FY 2023-24 is considered same as the closing of FY 2022-23. Further, 30% of Net GFA addition after





considering deduction / de-capitalization and consumer contribution in GFA as approved for FY 2023-24 has been considered as equity addition during the year.

6.11.8 Further, the Commission observes that the Petitioner has claimed the rate of Return on Equity as 2.00% instead of 14.50% as per Regulation 22.1 of MYT Regulations, 2019, citing the reason that the Distribution Licensees are already in financial stress and claiming rate of return on equity at 14.50% will further worsen the financial condition of Distribution Licensee.

6.11.9 The Commission is of the view that as per Regulation 22.1 of MYT Regulations, 2019, the Petitioner is entitled for rate on Return on Equity at 14.50%, however, the Petitioner has claimed only 2.00%. Therefore, the Commission taking into the account the plea / claim of the Petitioner considers the rate of Return on Equity as 2.00% instead of 14.50%. Accordingly, the Return on Equity approved by the Commission for FY 2023-24 is shown in the Table below:

Table 6-39: RETURN ON EQUITY APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)	
		Petitioner (ARR)	Approved (ARR)
Opening Equity as on 01.04.2023	A	10,680.44	10,070.66
Addition during the year	B	669.62	612.94
Closing Equity as on 31.03.2024	C=A+B	11,350.07	10,683.59
Average Equity	D=(A+C)/2	11,015.25	10,377.13
Rate of Return (%)	E	2.00%	2.00%
Return on Equity	F=D*E	220.31	207.54

6.12 INCOME TAX

Petitioner's Submission

6.12.1 The Petitioner has not projected any income tax for FY 2023-24.

Commission's Analysis

6.12.2 Regulation 26 of MYT Regulations, 2019 specifies as under:

Quote

26 Income Tax

26.1 Income Tax, if any, on the licensed business of the Licensee shall be treated as expense and shall be recoverable from consumers through Tariff. However, tax on any income other than that through its Licenced business shall not be a pass through, and it shall be payable by the Licensee itself.





26.2 Notwithstanding anything contained in Regulation 26.1, total Income Tax payable by the Licensee, in any year, shall be lowest of the following:

- (a) Actual payment made;
- (b) ROE allowed in that year x MAT (%) or ROE allowed in that year x Corporate tax (%), whichever is applicable.

26.3 Any under recoveries or over recoveries of Tax on income shall be adjusted every year on the basis of Income Tax assessment under the Income Tax Act 1961, subject to Regulation 26.2 above, as certified by the Statutory Auditors.

Unquote

6.12.3 The Commission observes that the Petitioner has not projected any income tax for FY 2023-24. Thus, the Commission has not considered any income tax for FY 2023-24.

6.13 NON-TARIFF INCOME

Petitioner's Submission

6.13.1 The Petitioner has projected the Non-tariff income for FY 2023-24 as Rs. 114.59 Crore. The same has been projected after deducting the estimated amount of income from Consumer Contribution from the total non-tariff income for FY 2023-24 as shown below:

Table 6-40: NON-TARIFF INCOME SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	FY 2023-24 (ARR)
	Petition (ARR)
Non-Tariff Income	114.59

Commission's Analysis

6.13.2 Regulation 35 of MYT Regulations, 2019 specifies as under:

Quote

35 Non-Tariff Income

35.1 The amount of Non-Tariff income relating to the Transmission Business as approved by the Commission shall be deducted from the ARR in determining the 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 in such form as may be stipulated by the Commission.



35.2 Non-Tariff Income shall include:
Income from rent of land or buildings;
Income from sale of scrap;
Income from investments;
Interest income on advances to suppliers/contractors;
Interest income on loans / advances to employees;
Income from rental from staff quarters;
Income from rental from contractors;
Income from hire charges from contractors and others;
Supervision charges for capital works;
Income from advertisements;
Income from sale of tender documents;
Excess found on physical verification;
Prior Period Income;
Miscellaneous receipts; and
Any other Non-Tariff Incomes:

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

Unquote

6.13.3 The Commission has considered the Non-Tariff Income for FY 2023-24 as claimed by the Petitioner. However, the Commission will carry out prudence check at the time of Truing-Up. Accordingly, the Commission approves the Non-Tariff Income for FY 2023-24 as shown below:

Table 6-41: NON-TARIFF INCOME APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	FY 2023-24 (ARR)	
	Petition (ARR)	Approved (ARR)
Non-Tariff Income	114.59	114.59

6.14 INCOME FROM OTHER BUSINESS

Petitioner's Submission

6.14.1 The Petitioner submitted that have initiated the leasing the dark fibre cable (OPGW) for optimum utilization of transmission assets by way of utilization of surplus capacity of UPPTCL's OPGW. In this regard the Petitioner had approached the Commission vide Petition No. 1848/2022 seeking permission of the Commission about engaging in Other Business for leasing of UPPTCL's OPGW infrastructure. Accordingly, the Commission had given approval of the same vide its order dated November 02, 2022 as mentioned below:



"....."

....., the Commission has allowed utilization of surplus capacity of UPPTCL's OPGW infrastructure by leasing out its dark fiber for a lease period of 15 years subject to compliance of conditions stipulated under UPERC Other Business Regulations 2004 or any subsequent amendment, re-enactment thereof. The utilization of the assets and facilities of the licensed business for other business shall not in any manner affect the license conditions, performance of obligations or quality of service required from UPPTCL under licensed business."

Further, with respect to sharing of such income, the Commission observed as:

"Accordingly, the Commission has decided that an amount equal to 70% of the gross revenue from such other business in a given financial year shall be utilised for reducing the transmission charges of the licensed business whereas, 30% of the gross revenue shall be retained with the other business. The operation and maintenance cost of leased dark fibres shall be borne by UPPTCL out of their revenue share."

Accordingly, the Petitioner has shared the 70% of the expected net revenue to the tune of Rs. 9.94 crore in FY 2023-24 from leasing of dark fibres. However, at the time of true-up for FY 2023-24 the income from other business shall be considered on actual basis for the purpose of computation of income from other business.

Table 6-42: INCOME FROM OTHER BUSINESS SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	FY 2023-24 (ARR)
	Petition (APR)
Income from Other Business	9.94

Commission's Analysis

6.14.2 Regulation 36 of MYT Regulations, 2019 specifies as under:

Quote

36 Income from Other Business

Where the Transmission Licensee has engaged in any Other Business under Section 41 of the Act for optimum utilisation of its assets, the income from such business will be deducted from the ARR in calculating the revenue requirement of the Licensee in the manner and in proportion as may be stipulated by the Commission. The proportion of revenue from Other Business that shall be utilized in the Transmission business shall be as stipulated in UPERC (Treatment of Income of Other Business of Transmission Licensees and Distribution Licensees) Regulations, 2004 or any subsequent amendment thereof:

Provided that the Transmission Licensee shall follow a reasonable basis for allocation of all joint and common costs between the Transmission Business and the Other Business and shall submit the Allocation



Statement, duly certified by the Board of Directors, to the Commission along with its Petition for determination of ARR:

Provided further that where the sum total of the direct and indirect costs of such Other Business exceeds the revenues from such Other Business, no amount shall be allowed to be added to the ARR of the Transmission Licensee on account of such Other Business."

Unquote

6.14.3 The Petitioner had filed a Petition before the Commission (Petition No. 1848 of 2022) under Section 41 of the Electricity Act, 2003 read along with Regulation 3 of UPERC (Treatment of Income of Other Businesses of Transmission Licensees and Distribution Licensee) Regulation 2004, for permission of the Commission for engaging in Other Business for optimum utilization of transmission assets by way of utilization of surplus capacity of UPPTCL's OPGW infrastructure by leasing out its dark fiber. The Commission heard the matter and had decided that an amount equal to 70% of the gross revenue from such other business in a given financial year shall be utilised for reducing the transmission charges of the licensed business whereas, 30% of the gross revenue shall be retained with the other business. The relevant extract of Commission's Order dated November 02, 2022 is reproduced below:

Quote

"Commission's view

18. The Commission heard the matter and examined the facts on record. It is observed that UPPTCL is willing to engage in other business to optimise the utilization of its transmission assets. Accordingly, UPPTCL has also invited bids for leasing out dark fiber of its OPGW network in order to optimise the utilization of OPGW network as well as monetization of spare capacity for which it had also obtained an IP-1 license registration. The revenue through leasing of dark fiber has been projected for next five years by the Petitioner in its detailed plan.

19. The Commission observed that Section 41 of the Act provides that transmission licensee may engage in any business for optimum utilisation of its assets however, a proportion of revenue derived from such business, as specified by the Commission, shall be utilised for reducing transmission charges. The relevant extract of the same is reproduced below:

"Section 41. (Other business of transmission licensee):

A transmission licensee may, with prior intimation to the Appropriate Commission, engage in any business for optimum utilisation of its assets:

Provided that a proportion of the revenues derived from such business shall, as may be specified by the Appropriate



Commission, be utilised for reducing its charges for transmission and wheeling:

Provided further that the transmission licensee shall maintain separate accounts for each such business undertaking to ensure that transmission business neither subsidies in any way such business undertaking nor encumbers its transmission assets in any way to support such business:

....."

20. Further, UPERC (Treatment of Income of Other Businesses of Transmission Licensees and Distribution Licensee) Regulation 2004 provides as follows:

"5. Financial Implications: -

.....

(3) The Licensee shall duly pay for all costs accounted for in the Licensed Business which have been incurred for Other Business and in the event of such costs being incurred commonly for both the Licensed Business and Other Business, apportion such costs and ensure due payment of apportioned costs to the Licensed Business from Other Business.

(4) In addition to the sharing of costs under sub-clause (3) above, the Licensee shall account for and ensure due payment to the Licensed Business as per the formula given below:

Payment due to the licensed business = $X(R \cdot A/C)$

Where,

R- Revenue generated in other business

A- Assets of the licenced business utilised in other business

C- Total assets of the other business (including the assets utilized of the licensed business)

X- is a factor to be decided by the Commission after receiving the accounts of other business.

(5) The payment as specified at 5 (4) received in the Licence Business, from Other Business shall be utilised for reducing the transmission and/or wheeling charges, as the case may be, of the Licensed Business."

In view of above, the Commission has to decide the revenue sharing mechanism between the other business and licensed business (transmission business) as per the formula stipulated in UPERC Other Business Regulations 2004. In the instant case, the assets of the licenced business utilised in other business (which is A in the formula) and total assets of the other business including the assets utilized of the licensed business (which is C in the formula) are equal. Therefore, the Commission has to decide the 'X' factor, based on which payment to be made to licensed business will be computed. The 'X' factor will determine the sharing of revenue of other business with the licensed business (transmission business).





21. The Commission observed that Section 41 of the Act provides that a transmission licensee can utilise its transmission assets for other business and shall share proportion of revenue of other business with licensed business for reduction of transmission charges. Since the transmission assets under consideration have been planned and developed/constructed based on the requirements of the long term customers, therefore a major portion of the revenue should be shared with the long term customers in the ARR, such that it will reduce part of the tariff burden on the consumers in line with UPERC (MYT for Distribution and Transmission) Regulations 2019.

Accordingly, the Commission has decided that an amount equal to 70% of the gross revenue from such other business in a given financial year shall be utilised for reducing the transmission charges of the licensed business whereas, 30% of the gross revenue shall be retained with the other business.

22. Considering above, the Commission has allowed utilization of surplus capacity of UPPTCL's OPGW infrastructure by leasing out its dark fiber subject to compliance of conditions stipulated under UPERC Other Business Regulations 2004 or any subsequent amendment/ re-enactment thereof. The revenue sharing as decided by the Commission shall be in force for the period from FY 2022-23 to FY 2026-27 unless reviewed or extended by the Commission. The utilization of the assets and facilities of the licensed business for other business shall not in any manner affect the performance of obligations or quality of service required from UPPTCL under licensed business.

23. Accordingly, Petition is disposed of.

Unquote

6.14.4 In compliance to the above Order dated November 02, 2022, the Commission in its MOM dated February 03, 2023 directed UPPTCL to provide the detail of gross revenue for FY 2023-24 in the following formats along with an affidavit that the OPEX expenses stated above related to leasing business of UPPTCL is not part of O&M Expenses as claimed by UPPTCL.

Particulars	Formula	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27
Gross Revenue (Rs. Crore)	A					
OPEX (Rs. Crore)	B					
Net Revenue (Rs. Crore)	C=A-B					

6.14.5 The Petitioner vide its letter dated February 15, 2023 submitted the detail of gross revenue and Opex expenses. The Petitioner further submitted that the gross revenue and Opex cost are on estimation basis and the actual details shall be submitted at the time of truing up. Further, the O&M Expenses have been claimed on normative basis in line to MYT Regulations, 2019 and do not include the Opex cost related to other

business. The same shall be submitted on affidavit once the accounts for FY 2022-23 are finalised. UPPTCL shall also maintain separate accounts for revenue and Opex for OPGW network and will be submitted before the Commission for approval at the time of truing up.

Particulars	Formula	FY 2022-23	FY 2023-24
Gross Revenue (Rs. Crore)	A	14.16	14.87
OPEX (Rs. Crore)	B	0.61	0.67
Net Revenue (Rs. Crore)	C=A-B	13.55	14.20

6.14.6 The Commission observes that the Petitioner has considered the 70% of net revenue after deduction of opex expenses instead of gross revenue as shown below: -

Table 6-43: INCOME FROM OTHER BUSINESS AS SUBMITTED BY PETITIONER FOR FY 2023-24 (Rs. Crore)

Particulars	Formula	FY 2023-24 (ARR)
		Petition (ARR)
Gross Revenue (Rs. Crore)	A	14.87
OPEX (Rs. Crore)	B	0.67
Net Revenue (Rs. Crore)	C=A-B	14.20
% consideration for income from Other Business	D= 70%	70%
Income from Other Business	E=C*D	9.94

6.14.7 It is observed that the Petitioner has not computed the income from other business in accordance to Commission's Order dated November 02, 2022 in Petition No. 1848 of 2022. Thus, the Commission has computed the income from other business for FY 2023-24 on gross revenue as per Commission's Order dated November 02, 2022 in Petition No. 1848 of 2022 as shown below: -

Table 6-44: INCOME FROM OTHER BUSINESS AS PER COMMISSION'S ORDER DATED NOVEMBER 02, 2022 IN PETITION No. 1848 OF 2022 (Rs. Crore)

Particulars	Formula	FY 2023-24 (ARR)
		Petition (ARR)
Gross Revenue (Rs. Crore)	A	14.87
OPEX (Rs. Crore)	B	0.67
Net Revenue (Rs. Crore)	C=A-B	14.20
% consideration for income from Other Business	D= 70%	70%
Income from Other Business	E=A*D	10.41



6.14.8 The Commission after taking into cognisance of the Order dated November 02, 2022 in Petition No. 1848 of 2022 and detail submitted by UPPTCL, approves income from Other Business as 70% of the gross revenue projected by UPPTCL for FY 2023-24 for reducing the transmission charges of the licensed business, subject to prudence check at the time of Truing-Up. Accordingly, the income from Other Business approved by the Commission for FY 2023-24 is shown below:

Table 6-45: INCOME FROM OTHER BUSINESS APPROVED BY THE COMMISSION (Rs. Crore)

Particulars	FY 2023-24 (ARR)	
	Petition (ARR)	Approved (ARR)
Income from Other Business	9.94	10.41

6.15 UPSLDC ARR

Petitioner's Submission

6.15.1 The Petitioner submitted that as per provisions under the Electricity Act 2003, separate Uttar Pradesh State Load Despatch Centre (UPSLDC) is to be established by the State Government to ensure integrated operation of Power System in the State. Further, MYT Regulations 2019 provide that till such time the State Government establishes separate UPSLDC, STU shall also operate UPSLDC functions and till complete segregation of accounts between UPSLDC function and transmission function, STU shall apportion its cost between (i) SLDC function and (ii) Transmission Function based on an allocation statement and basis of such apportionment shall be clearly indicated in the ARR petition. Currently the function of UPSLDC is being discharged by a separate wing within UPPTCL. Further, UPERC vide Notification no. UPERC/Secy/SLDC regulation/2020-043 dated May 14, 2020 has notified the UPERC (Fees & Charges of State Load Despatch Centre and other related matters) Regulations 2020, which provides for filing of MYT Business Plan and tariff petitions for UPSLDC for the period for FY 2021-22 to FY 2024-25.

6.15.2 The GoUP vide GO dated July 22, 2022 has approved the segregation of the UPSLDC and UPPTCL. Accordingly, UPSLDC has incorporated a separate company under name "UP SLDC LIMITED". Currently, UPSLDC is in process of finalising the transfer scheme and the same shall be submitted before the GoUP for approval and subsequent notification. Further, UPSLDC shall file a separate Petition for the ARR of SLDC before the Commission for approval. The Petitioner in this petition has projected the ARR for UPSLDC as Rs. 46.41 Crore for FY 2023-24 as tabulated below.



Table 6-46: UPSLDC ARR FOR FY 2023-24 SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	FY 2023-24 (ARR)
	Petition (ARR)
ARR UPSLDC	46.41

Commission's Analysis

- 6.15.3 The Government of Uttar Pradesh (GoUP), in exercise of the powers vested under Section 31 of the Electricity Act, 2003, vide Notification No. 78/24-U.N.N.P.-11-525/08 dated January 24, 2011 notified the "Power System Unit" as the "State Load Despatch Centre" of Uttar Pradesh for the purpose of exercising the powers and discharging the functions under Part V of the Electricity Act, 2003. UPSLDC is operating as a part of the Uttar Pradesh Power Transmission Corporation Ltd., in its capacity as the State Transmission Utility. UPSLDC is the apex body to ensure integrated operation of the power system in the State.
- 6.15.4 The GoUP vide GO dated July 22, 2022 has approved the segregation of the UPSLDC and UPPTCL. Accordingly, UPSLDC has incorporated a separate company under name "UP SLDC LIMITED". It is observed that the UPSLDC is still in process of finalising the transfer scheme. Once, the same is finalized, the same shall be submitted before the GoUP for approval and subsequent notification. Further, the Commission also notified UPERC (Fees & Charges of State Load Despatch Centre and other related matters) Regulations, 2020 on May 14, 2020 and UPSLDC shall accordingly ensure to file its ARR Petition separately from FY 2021-22 onwards. UPSLDC is required to file a separate Petition for ARR of UPSLDC before the Commission for approval, however, the same is yet to be filed by UPSLDC (by November 30, 2022).
- 6.15.5 It is observed that the ARR of UPSLDC is deducted from ARR of UPPTCL from FY 2021-22 onwards. The Petitioner has claimed UPSLDC ARR as 36.71 Crore and Rs. 33.39 Crore for FY 2021-22 and FY 2022-23 respectively. The Commission in its respective financial year tariff Order has disallowed Rs. 36.71 Crore and Rs. 50.00 Crore for FY 2021-22 and FY 2022-23 respectively and deducted the same from ARR of UPPTCL.
- 6.15.6 UPPTCL in this petition has projected the ARR for UPSLDC as Rs. 46.41 Crore for FY 2023-24, however, it is observed that the even after several reminders and direction by the Commission, UPSLDC is yet to file its Tariff Petition. Thus, to project the ARR of UPSLDC for FY 2023-24, the Commission has assessed the increase in the ARR of UPPTCL for FY 2023-24 with respect to FY 2022-23. It is observed that approved ARR of UPPTCL has increased by 16.45% from Rs. 3097.17 Crore in FY 2022-23 to Rs.



3606.58 Crore in FY 2023-24. Thus, the Commission has considered the approved ARR of UPSLDC for FY 2022-23 (Rs. 50.00 Crore) and increase the same by 16.45% while determination of ARR of UPSLDC for FY 2023-24. The ARR of UPSLDC for FY 2023-24 is computed as Rs. 58.22 Crore.

6.15.7 Further, the Commission is of the view that the expenses of UPSLDC shall not form part of UPPTCL expenses and hence the same is not considered and accordingly deducted from the ARR of UPPTCL as it is being added in its ARR by the Petitioner.

6.16 SUMMARY OF AGGREGATE REVENUE REQUIREMENT FOR FY 2023-24

Petitioner's Submission

6.16.1 The Petitioner submitted that it has calculated the ARR for FY 2023-24 as Rs. 4,594.97 Crore and has requested the Commission to approve the same.

Table 6-47: SUMMARY OF ARR SUBMITTED BY PETITIONER (Rs. Crore)

Particulars	Derivation	FY 2023-24 (ARR)
		Petition (ARR)
O&M Expenses	A=B+C+D	1,640.91
Employee Expenses	B	1,142.16
A&G Expenses	C	59.36
R&M Expenses	D	439.38
Interest on Loan Capital	E	1,486.34
Interest on Working Capital	F	64.80
Depreciation	G	1,839.33
Gross Expenditure	H=A+E+F+G	5,031.37
Less: Employee Expenses Capitalised	I	308.34
Less: A&G Expenses Capitalised	J	0.00
Less: Interest Expenses Capitalised	K	177.43
Net Expenditure	L=H-I-J-K	4,545.60
Add: Return on Equity	M	220.31
Less: Non-Tariff Income	N	114.59
Less: Income from Other Business	O	9.94
Annual Revenue Requirement	P=L+M-N-O	4,641.38
Less: UPSLDC ARR	Q	46.41
Net Annual Revenue Requirement	R=P-Q	4,594.97

Commission's Analysis

6.16.2 The Commission has considered the ARR based on the various components as approved by the Commission for FY 2023-24. Accordingly, the ARR for FY 2023-24 is projected by the Commission as follows:





Table 6-48: SUMMARY OF ARR APPROVED BY THE COMMISSION (RS. CRORE)

Particulars	Derivation	FY 2023-24 (ARR)	
		Petition (ARR)	Approved (ARR)
O&M Expenses	A=B+C+D	1,640.91	1,279.35
Employee Expenses	B	1,142.16	743.41
A&G Expenses	C	59.36	66.21
R&M Expenses	D	439.38	469.73
Interest on Loan Capital	E	1,486.34	1,313.44
Interest on Working Capital	F	64.80	57.43
Depreciation	G	1,839.33	1,417.79
Gross Expenditure	H=A+E+F+G	5,031.37	4,068.02
Less: Employee Expenses Capitalised	I	308.34	308.34
Less: Interest Expenses Capitalised	J	177.43	177.43
Net Expenditure	K=H-I-J	4,545.60	3,582.26
Add: Return on Equity	L	220.31	207.54
Less: Non-Tariff Income	M	114.59	114.59
Less: Income from Other Business	N	9.94	10.41
Annual Revenue Requirement	O=K+L-M-N	4,641.38	3,664.80
Less: UPSLDC ARR	P	46.41	58.22*
Net Annual Revenue Requirement	Q=O-P	4,594.97	3,606.58

* The expenses of UPSLDC shall not form part of UPPTCL expenses, same is not considered and accordingly deducted from the ARR of UPPTCL.

6.17 TRANSMISSION TARIFF

Petitioner submission

6.17.1 The Petitioner submitted that the distribution companies are not been allotted transmission capacity as such the transmission tariff has been calculated on the basis of numbers of units wheeled by the transmission licensee for distribution licensees. This is based on the same approach adopted by the Commission in its previous Tariff Orders. Further, the Petitioner has estimated the total energy to be delivered to distribution licensees including railways and open access consumers in FY 2023-24 as 1,43,581.90 MUs as shown below:

Table 6-49: ENERGY PROJECTIONS BY PETITIONER FOR FY 2023-24 (MUs)

Particulars	FY 2023-24 (ARR)
	Petition (ARR)
DVVNL	27,403.99
MVVNL	28,706.10
PVVNL	41,213.08
PuVVNL	32,884.03
KESCO	4,544.28
NPCL	3,696.00
Northern Railway (U.P)	2,280.63



Particulars	FY 2023-24 (ARR)
	Petition (ARR)
Open Access Customers	2,853.79
Total Energy Projections	1,43,581.90

6.17.2 The Petitioner seeks approval of transmission charges payable by all the licensees and open access consumers in the State for FY 2023-24 as computed below:

Table 6-50: TRANSMISSION TARIFF FOR FY 2023-24 AS PROJECTED BY PETITIONER (RS. /KWh)

Particulars	Derivation	FY 2023-24 (ARR)
		Petition (ARR)
Net Annual Revenue Requirement (Rs. Crore)	A	4,594.97
Energy Delivered (MUs)	B	1,43,581.90
Transmission Tariff (Rs. / kWh)	C=A*B/10	0.3200

Commission's Analysis

6.17.3 Regulation 33.2 of MYT Regulations, 2019 specifies the methodology for allocation of Annual Transmission Service Charge to its Beneficiaries as stated below:

Quote

33.2 Allocation of Annual Transmission Service Charge:

The Annual Transmission Service Charge (ATSC) shall be divided between Beneficiaries of the Transmission System on monthly basis based on the allotted Transmission Capacity or contracted capacity, as the case may be.

If a Transmission System has been created for a particular Long-term Transmission Beneficiary including dedicated transmission line(s) for a generating station, transmission charges for such Transmission System shall be payable by that Long-term Transmission Beneficiary.

For Intra-State Transmission System, the monthly transmission charges shall be pooled for sharing by Long-Term Transmission Customers in accordance with the following formula:

Transmission Charges for Intra-State System payable for a month by a Long-term Transmission Customer of that Transmission System =

$$\sum_{i=0}^N (TC_i/12) \times CL/SCL$$

Where,

TC_i = Annual Transmission Service Charges for the ith project in the State computed in accordance with these Regulations;

N = Number of Projects in the State;

CL = Allotted Transmission Capacity to the Long term Transmission Customer;

SCL = Sum of Allotted Transmission Capacities to all the Long-term Transmission Customers of the State Transmission System





In the case of Medium-term users of the Intra-State Transmission System, charges payable shall be in proportion to the MW for which Medium-term usage has been approved by the State Transmission Utility for that month.

In case of Short-term Open Access consumers, charges payable shall be calculated in accordance with the following methodology:

$$ST_RATE = [ATSC / Av\ CAP] / 365$$

Where,

ST_RATE is the rate for short-term Open Access consumers in Rs. Per MW per day;

ATSC is Annual Transmission Service Charge;

Av CAP means the average capacity in MW served by the Transmission System of the Transmission Licensee in the last Financial Year and shall be the sum of the generating capacities connected to the Transmission System and contracted capacities of other transactions handled by the system of the Transmission Licensee;

Transmission charges corresponding to any plant capacity for which a Beneficiary has not been identified and contracted shall be paid by the concerned generating Company:

Provided that till the time transmission charges for Intra- State system cannot be determined for long- term, medium- term and short- term customers as stipulated above, the Commission will determine per unit charges for energy transmitted by dividing the total ARR by the total number of units transmitted and will be same for long- term, medium- term and short- term customers.

Unquote

6.17.4 The Commission in its MOM of TVS dated February 03, 2023 directed UPPTCL to coordinate with all Distribution Licensees of the State of Uttar Pradesh to finalised the units and revise tariff accordingly. In reply dated February 15, 2023, UPPTCL has revised NPCL units for FY 2023-24. The detail of revised energy units and accordingly tariff for FY 2023-24 as submitted by the Petitioner vide letter dated February 15, 2023 is shown below:

Table 6-51: REVISED ENERGY PROJECTIONS BY PEITTIONER VIDE LETTER DATED 15.02.203 FOR FY 2023-24 (MUs)

Particulars	FY 2023-24 (ARR)
	Revised submission (ARR)
DVVNI	27,403.99
MVVNL	28,706.10
PVVNL	41,213.08
PuVVNL	32,884.03



Particulars	FY 2023-24 (ARR)
	Revised submission (ARR)
KESCO	4,544.28
NPCL	3,589.47
Northern Railway (U.P)	2,280.63
Open Access Customers	2,853.79
Total Energy Projections	1,43,475.37

Table 6-52: REVISED TRANSMISSION TARIFF FOR FY 2023-24 AS PROJECTED BY PETITIONER VIDE LETTER DATED 15.02.203 (Rs. / kWh)

Particulars	Derivation	FY 2023-24 (ARR)
		Revised submission (ARR)
Net Annual Revenue Requirement (Rs. Crore)	A	4,594.97
Energy Delivered (MU)	B	1,43,475.37
Transmission Tariff (Rs. / kWh)	C=A*B/10	0.3203

6.17.5 The MYT Regulations, 2019 provides for capacity (MW) based transmission charges. It is observed that presently, each State Distribution Licensees have not been allotted transmission capacity hence, the Transmission Tariff is calculated by the Commission on the basis of the number of units wheeled by the Transmission Licensee for the Distribution Licensees.

6.17.6 Further, the Petitioner has projected 143475.37 MU to be wheeled by Transmission System Users in FY 2023-24. The Commission has approved the projected energy to be handled at Discom periphery for State Discoms and NPCL based on the approved energy for State Distribution Licensees and NPCL in Tariff Order of FY 2023-24. In addition to above, energy wheeled for Railways and other Open Access Customers is considered as projected by Petitioner. Further, the energy wheeled considered for FY 2023-24 is subject to truing up based on actuals. Accordingly, the energy projections approved by the Commission for FY 2023-24 is shown below:

Table 6-53: ENERGY PROJECTIONS APPROVED BY THE COMMISSION FOR FY 2023-24 (MUs)

Particulars	FY 2023-24 (ARR)		
	Petition (ARR)	Revised submission* (ARR)	Approved (ARR)
DVVNL	27,403.99	27,403.99	25,388.81
MVVNL	28,706.10	28,706.10	27,115.55
PVVNL	41,213.08	41,213.08	39,750.48
PuVVNL	32,884.03	32,884.03	31,042.68
KESCO	4,544.28	4,544.28	4,538.42
NPCL	3,696.00	3,589.47	3,589.47
Northern Railway (U.P)	2,280.63	2,280.63	2,280.63
Open Access Customers	2,853.79	2,853.79	2,853.79
Total Energy Projections	1,43,581.90	1,43,475.37	1,36,559.84

Note: * Revised submission dated February 15, 2023





6.17.7 Based on energy projection and Net Annual Revenue Requirement approved above, the following table summarises the Transmission Tariff for FY 2023-24 as submitted by the Petitioner vis-à-vis the values approved by the Commission.

Table 6-54: TRANSMISSION TARIFF APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. / kWh)

Particulars	Derivation	FY 2023-24 (ARR)	
		Petitioner submission (ARR)	Approved (ARR)
Net Annual Revenue Requirement (Rs. Crore)	A	4,594.97	3,606.58
Energy Delivered (MU)	B	1,43,475.37*	1,36,559.84
Transmission Tariff (Rs. / kWh)	$C=A*10/B$	0.3203	0.2641

Note: * Revised submission dated February 15, 2023

6.18 OPEN ACCESS: TRANSMISSION TARIFF

Petitioner's Submission

6.18.1 The Petitioner has submitted that if any Discoms Consumer has availed Short Term Open Access then there will be decrease in the estimated energy of Discoms as the Discoms estimate their demands on the basis of connected load along with prospective growth of its existing consumers as well as new consumers. Further the Petitioner proposes the open access charges for FY 2023-24 as follows:

Table 6-55: INTRA STATE OPEN ACCESS CHARGES PROPOSED BY PETITIONER FOR FY 2023-24 (Rs. / kWh)

Particulars	Unit	FY 2023-24 (ARR)
Short Term Open Access Transmission Charges	Rs./ kWh	0.3200
Long Term Open Access Transmission Charges	Rs./ kWh	0.3200

6.18.2 Further the Petitioner submitted that the energy handled as projected in the above para for the purpose of uniform open access charges irrespective of voltage levels for the FY 2023-24. The same is consistent with the existing practices adopted by CERC, in which uniform rate for all voltage level is adopted and single rate is informed to Northern Region Load Despatch Centre for display and adoption in their website for short term open access users. Further, the same rates have been also approved by the Commission for open access charges irrespective of the voltage levels in its Tariff Order dated November 10, 2020.

6.18.3 In addition to the above charges, the open access customer would also be liable to bear the projected transmission losses to the tune of 3.22% for FY 2023-24 irrespective of the voltage levels at which the consumers are connected with the grid.





Commission's Analysis

6.18.4 The Commission has computed the Transmission Tariff for FY 2023-24 in the preceding Section for use of UPPTCL's network for transmission of electricity. Accordingly, the Commission approves the Intra State Open Access transmission charges as shown below:

TABLE 6-56: INTRA STATE OPEN ACCESS TRANSMISSION CHARGES APPROVED BY THE COMMISSION FOR FY 2023-24 (Rs. / kWh)

Particulars	Unit	FY 2023-24 (ARR)	
		Long-Term	Short-Term
Intra State Open Access Transmission Charges	Rs. / kWh	0.2641	0.2641

6.18.5 In addition to the above charges, the open access consumer would also be liable to bear the transmission losses in kind. In the absence of authenticated voltage level loss data, the Commission has decided that the transmission losses for FY 2023-24 would be 3.22% irrespective of the voltage levels at which the consumers are connected with the grid.





7 DIRECTIVES

7.1 COMPLIANCE OF DIRECTIVES ISSUED IN THE TARIFF ORDER DATED JULY 20, 2022

7.1.1 The Commission had issued certain directives to the Petitioner in the Tariff Order for FY 2022-23 dated July 20, 2022. The status of compliance submitted by the Petitioner with the same is as shown in the Table given below:

Table 7-1: STATUS OF COMPLIANCE/ PETITIONER'S REPLY TO COMMISSION'S DIRECTIVES

Sl. No.	Directives	Status of Compliance/ Petitioner's Reply
1.	As per Section 17(4) of the Electricity Act, 2003 prior approval should be taken for transfer / sell / renting of its Assets. The Licensee may strictly follow the same.	The Petitioner submitted that, in line with the directions of the Commission, the directives have been issued to the field units for compliance of the same in the future. Further, in case of any such transfer, the Petitioner shall take prior approval from the Commission.
2.	The Commission directs the Petitioner to submit the detailed capital investment plans / schemes/ projects of 220 kV and above and other capital expenditure of value exceeding Rs. 20 Crores for prior approval as per MYT Regulations, failing which the Commission may not allow the capex in the ARR and Tariff. Such investment approval Petitions should be accompanied with detailed techno-economic analysis preferably based on load flow study, IRR computations, if any.	The Petitioner is already taking the prior approval of the schemes from the Commission in line with the MYT Regulations 2019 for the assets planned from April 01, 2020 onwards. The Petitioner also submitted the list of schemes/assets approved by the Commission for FY 2020-21 and FY 2021-22 in order to make them part of present proceeding.
3.	The Commission directs the Petitioner to maintain a separate individual asset wise Fixed Asset Register for assets capitalized after April 01, 2020. Accordingly, from FY 2020-21 onwards UPPTCL to maintain two separate Gross Blocks (one for assets upto March 31, 2020 and second for assets after April 01, 2020) and two separate Fixed Asset Register's depicting addition of Assets details from April 01, 2020 onwards for the purpose of depreciation computation.	The Petitioner submitted the Fixed Asset Register (FAR), providing the details of assets capitalised for each financial year.





**Approval of ARR and Tariff for UPPTCL of FY 2023-24,
APR of FY 2022-23 and True-Up of FY 2021-22**

Sl. No.	Directives	Status of Compliance/ Petitioner's Reply
4.	The Commission directs the Petitioner to expedite the process to separate the SLDC from UPPTCL in order to make SLDC as an independent body. Also, SLDC shall ensure to file its ARR Petition in accordance with UPERC SLDC Regulations, 2020.	GoUP vide GO dated July 22, 2022 had approved the segregation of the UPSLDC and UPPTCL. Accordingly, UPSLDC has incorporated a separate company under the name "U P SLDC LIMITED" and incorporation certificate is also enclosed along with Petition. UPSLDC is in process of finalising the transfer scheme and the same shall be submitted before the GoUP for approval and subsequent notification. Further, SLDC shall file a separate Petition for the ARR of SLDC before the Commission.
5.	The Commission directs the Petitioner to ensure to file its ARR/ Tariff Petition on time strictly in accordance with the MYT Regulations, 2019.	The Petitioner is filing the ARR/tariff Petition as per the timelines specified in the MYT Regulations 2019 and shall also endeavour to comply with the timelines in future.
6.	The Petitioner shall upload on its website the Petition filed before the Commission along with all regulatory filings, information, particulars and related documents, which shall be signed digitally and in searchable pdf formats along with all Excel files and as per any other provision of the Regulations and Orders of the Commission. The Petitioner shall also ensure that these files are broken into such size which can be easily downloaded and will not keep them in compressed form as the stakeholders find it difficult to extract the files.	The Petitioner uploaded the petition as per the directions of the Commission at the time of the admittance.
7.	The Licensee is directed to seek innovative solutions based on energy storage systems, virtual transmission, other cutting edge technologies at the transmission level to address issues such as congestion in networks, to support voltage & frequency control, serve as the N-1 redundancy etc.	The Ministry of Power, GoI has released the "Guidelines for Procurement and Utilization of Battery Energy Storage Systems (BESS) as part of Generation, Transmission and Distribution assets, along with Ancillary Services". The BESS shall help in addressing issues such as congestion in networks, to support voltage & frequency control, etc. The Petitioner is in process of examining the above policy and suggested models for BESS, its implementation and the role of UPPTCL as a transmission licensee.





Sl. No.	Directives	Status of Compliance/ Petitioner's Reply
		UPPCL has planned to procure 500 MW/1000 MWh from Battery Energy Storage Systems projects to be established in Uttar Pradesh. Accordingly, UPPTCL has done feasibility of selected 132/33 kV Substations identified by UPPPCL based on land availability and load requirement, for the purpose of installation of BESS. Subsequently, the UPPCL has floated a RfS for "Setting up of Projects of 5X10 MW/200MWh Standalone Battery Energy Storage Systems in UP" and has decided to deploy BESS at below mentioned five 132/33 kV substations: 1. Hasayan (Hathras), 2. Boner (Aligarh), 3. Jalesar (Etah), 4. Vrindavan (Mathura), 5. Dasna (Ghaziabad).
8.	The Commission observed that the Transmission Licensee has not filled a few formats like P3, P10 etc. and in the few formats the data is incomplete. Also, it has been observed that the Excel files are not linked and formula driven which delay the proceedings. Therefore, the Petitioner is directed to ensure that all the Tariff and additional Formats are completely filled and are with formulas and links.	The Petitioner submitted that the information required as per the Format P3 and P10 is under compilation at various transmission zones. The Information available from Jhansi and Agra Zone for P3 and P10 format is submitted along with linked tariff formats in the instant petition.
9.	Recently, Central Electricity Regulatory Commission has notified CERC (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022. The Regulations specifies among others the duties and responsibilities of STU to effectively implement and meet the objective of the General Network Access (GNA) on behalf of intra-State entities including distribution licensees. UPPTCL while acting as STU of Uttar Pradesh need to comply and adhere with the Regulations. Therefore, it shall simultaneously prepare itself to ensure smooth transition/ implementation of the Regulations in order to give effect when it comes into force.	The Petitioner is complying with the duties and responsibilities of STU as specified in the CERC (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022.



Sl. No.	Directives	Status of Compliance/ Petitioner's Reply
10.	Central Electricity Regulatory Commission had issued the draft CERC (Indian Electricity Grid Code) Regulations, 2022. As per Section 86(1)(h) of the Electricity Act 2003, the State Grid Code should be consistent with the Grid Code specified by CERC. Accordingly, the Commission is also in process to amend/formulate the State Grid Code. Therefore, UPPTCL shall simultaneously prepare itself to ensure smooth transition/ implementation of Central Grid Code in order to give effect when it comes into force.	<p>The final CERC (Indian Electricity Grid Code) Regulations, 2022 is yet to be notified.</p> <p>The Petitioner shall follow and comply with the requirements as per the final regulations on the Grid Code as applicable for the UPPTCL.</p>
11	STU is mandated to plan an efficient, reliable and economical intra-State transmission system through a transparent process of extensive, informed and inclusive consultation with distribution licensees and other stakeholders and get it developed as per the provisions of the Act and Policies formulated thereunder. Therefore, as per the provisions of UPEGC, STU shall submit to the Commission an updated long term Transmission System Plan for time span of 5 years on rolling basis every year by 28th February identifying specific transmission projects which are required to be taken up along with their implementation time lines.	The Petitioner shall submit the updated transmission plan as per the timelines specified by the Commission.
12	The Licensee is directed to ensure implementation of reliable communication and data acquisition system of 132 kV and above voltage level sub-stations and submit the quarterly compliance before the Commission.	<p>In line with the Data Communication and Tele-Protection, CERC (Communication System for Inter-State transmission of Electricity) Regulations, 2017, the Petitioner is planning & constructing all the new transmission lines with OPGW and also replacing the earth wire with OPGW on existing older lines, wherever required.</p> <p>Further, under the Reliable Communication Scheme 663 kms. of OPGW will be laid and will cover all old 132kV and 220 kV substations. Presently, data of 346 nos. sub-stations are being received at UPSLDC.</p>





Sl. No.	Directives	Status of Compliance/ Petitioner's Reply
13	The Licensee is directed to ensure calibration, periodical testing and maintenance of the ABT interface metering system including replacement of existing conventional/TOO metering installed at 33kV and above feeders (T-D interface) for smooth implementation of DSM framework in the State.	<p>The calibration, periodical testing and maintenance of the ABT interface metering system is being carried out as per Central Electricity Authority (Installation and Operation of meters) Regulations 2006 and amendments thereof.</p> <p>The MRI data of interface meter is being provided to UPSLDC and in case, any discrepancy found in MRI data, the same is informed by UPSLDC, accordingly the respective ABT meter is checked and get it replaced as and when required.</p>
14	For preparing consolidated DSM accounts at UPPCL level for all the State-owned distribution licensees, the Commission in Suo Moto Proceeding No. 59, 60 & 61 of 2022 had directed UPSLDC and UPPTCL in the capacity of STU that, in case, ABT meters are not installed at T-D interface points of 33 kV feeders located in its premises, metered data of available ABT meters installed at LV (33 kV) side of 132/33 kV and 220/33 kV transformers shall be used for DSM purpose, till installation of ABT complaint meters at respective 33 kV feeders. UPPTCL/transmission licensee in whose premises interface meters at T-D points are installed, shall regularly provide metered data to UPSLDC for preparation of weekly DSM accounts.	<p>In line with the direction of the Commission, the metered data is being provided to UPSLDC for preparation of DSM accounts. Further, Letter of Intent (LoI) has been placed for installation of 4573 meters under SAMAST project and survey works is in progress and the installation of meters is expected to be completed by March 2024.</p> <p>Trial DSM bills of UPPCL was already been submitted to the Commission (from 04.04.2022 onward) in compliance to Commission's Order dated 13.06.2022. Also in compliance to Commission's Order dated 29.09.2022, DSM bills of UPPCL (from 01.10.2022 to 27.11.2022) with monthly transmission loss statement have been submitted to UPERC on 20.12.2022.</p>
15	Central Electricity Authority had issued the draft CEA (Manual on Transmission Planning Criteria), 2022 covering the planning philosophy, information required from various entities, permissible limits, reliability criteria, broad scope of system studies, modelling and analysis etc. and gives guidelines for transmission planning. Therefore, UPPTCL shall simultaneously prepare itself to ensure smooth transition/ implementation of the same in order to give effect when it comes into force.	<p>The final CEA (Manual on Transmission Planning Criteria), 2022 is yet to be notified.</p> <p>The Petitioner shall follow and comply with the requirements as per the final planning criteria applicable for the UPPTCL.</p>





Sl. No.	Directives	Status of Compliance/ Petitioner's Reply
16	<p>The Commission implemented the Intra-State ABT Mechanism in the State of U.P. in line with the ABT (DSM) Mechanism introduced by Central Electricity Regulatory Commission at the national level. Also, the Commission vide its various regulations/orders from time to time has directed that principles and methodologies in respect of scheduling, dispatch, energy accounting and UI (DSM) related matters for intra-State entities to be governed as per provisions specified under CERC DSM Regulations and UPEG/IEGC except for solar and wind generator which is governed by UPERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulation 2018.</p> <p>Recently, Central Electricity Regulatory Commission has notified CERC (Deviation Settlement Mechanism and related matters) Regulations, 2022. Therefore, UPSLDC shall simultaneously prepare itself to ensure smooth transition/ implementation of the Regulations in order to give effect when it comes into force.</p>	<p>The Intra-State ABT Mechanism in the State of U.P. is in line with ABT (DSM) Mechanism introduced by Central Electricity Regulatory Commission is being taken up by UPSLDC.</p>

7.2 DIRECTIVES ISSUED IN THIS ORDER

- 7.2.1 As per Section 17(4) of the Electricity Act, 2003 prior approval should be taken for transfer / sell / renting of its Assets. The Licensee may strictly follow the same.
- 7.2.2 The Commission directs the Petitioner to submit the detailed capital investment plans / schemes/ projects of 220 kV and above and other capital expenditure of value exceeding Rs. 20 Crores for prior approval as per MYT Regulations, failing which the Commission may not allow the capex in the ARR and Tariff. Such investment approval Petitions should be accompanied with detailed techno-economic analysis preferably based on load flow study, IRR computations, if any
- 7.2.3 The Commission directs the Petitioner to maintain a separate individual asset wise Fixed Asset Register for assets capitalized after April 01, 2020. Accordingly, from FY





2020-21 onwards UPPTCL to maintain two separate Gross Blocks (one for assets upto March 31, 2020 and second for assets after April 01, 2020) and two separate Fixed Asset Register's depicting addition of Assets details from April 01, 2020 onwards for the purpose of depreciation computation.

- 7.2.4 The Commission directs the Petitioner to ensure to file its ARR/ Tariff Petition on time strictly in accordance with the MYT Regulations, 2019.
- 7.2.5 The Petitioner shall upload on its website the Petition filed before the Commission along with all regulatory filings, information, particulars and related documents, which shall be signed digitally and in searchable pdf formats along with all Excel files and as per any other provision of the Regulations and Orders of the Commission. The Petitioner shall also ensure that these files are broken into such size which can be easily downloaded and will not keep them in compressed form as the stakeholders find it difficult to extract the files.
- 7.2.6 The Licensee is directed to seek innovative solutions based on energy storage systems, virtual transmission, other cutting edge technologies at the transmission level to address issues such as congestion in networks, to support voltage & frequency control, serve as the N-1 redundancy etc.
- 7.2.7 The Commission observed that the Transmission Licensee has not filled a few formats like P3, P10 etc. and in the few formats the data is incomplete. Also, it has been observed that the Excel files are not linked and formula driven which delay the proceedings. Therefore, the Petitioner is directed to ensure that all the Tariff and additional Formats are completely filled and are with formulas and links.
- 7.2.8 Central Electricity Regulatory Commission had issued the draft CERC (Indian Electricity Grid Code) Regulations, 2022. As per Section 86(1)(h) of the Electricity Act 2003, the State Grid Code should be consistent with the Grid Code specified by CERC. Accordingly, the Commission is also in process to amend/formulate the State Grid Code. Therefore, UPPTCL shall simultaneously prepare itself to ensure smooth transition/ implementation of Central Grid Code in order to give effect when it comes into force.
- 7.2.9 STU is mandated to plan an efficient, reliable and economical intra-State transmission system through a transparent process of extensive, informed and inclusive consultation with distribution licensees and other stakeholders and get it developed as per the provisions of the Act and Policies formulated thereunder. Therefore, as per the provisions of UPEGC, STU shall submit to the Commission an updated long term Transmission System Plan for time span of 5 years on rolling basis every year by 28th





February identifying specific transmission projects which are required to be taken up along with their implementation time lines.

7.2.10 The Licensee is directed to complete metering at all T-D interface points under SAMAST and ensure implementation of reliable communication and data acquisition system of 132 kV and above voltage level sub-stations and submit the quarterly compliance before the Commission.

7.2.11 The Licensee is directed to ensure calibration, periodical testing and maintenance of the ABT interface metering system including replacement of existing conventional / TOD metering installed at 33kV and above feeders (T-D interface) for smooth implementation of DSM framework in the State.



8 APPLICABILITY OF THE ORDER

The Petitioner in accordance with Regulation 5.10 of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019, shall publish the Tariff approved by the Commission in at least two (2) English and two (2) Hindi daily newspapers having wide circulation in the area of supply and shall upload the approved Tariff on its internet website. The Petitioner is also required to submit the copies of the newspapers and screen shots of the website within seven (7) days of publication.

The Tariff so published shall be in force after seven days from the date of such publication and shall, unless amended or revised, continue to be in force for such period as may be stipulated therein. The Commission may issue clarification / corrigendum / addendum to this Order as it deems fit from time to time with the reasons to be recorded in writing.


(Dr. Sanjay Kumar Singh)
Member


(Vinod Kumar Srivastava)
Member (Law)


(Raj Pratap Singh)
Chairman

Place: Lucknow
Date: May 24, 2023





9 ANNEXURE 1: ADMITTANCE ORDER



BEFORE

THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION,
LUCKNOW

Petition No. 1907 / 2022

(Date of Order: 28-02-2023)

• IN THE MATTER OF:

Truing-Up for FY 2021-22, Annual Performance Review (APR) for FY 2022-23 and Approval of Aggregate Revenue Requirement (ARR) / Tariff for the FY 2023-24 - (Petition No. - 1907 of 2022) of Uttar Pradesh Power Transmission Corporation Limited (UPPTCL)

ORDER

BACKGROUND:

As per provisions of Section 64 of the Electricity Act, 2003, it is incumbent upon the Licensee to make an application to the State Electricity Regulatory Commission for determination of Tariff in such manner as may be specified by the Commission as per the applicable Regulations.

The Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution and Transmission) Regulations, 2019 (hereinafter referred to as 'MYT Regulations, 2019') were notified on September 23, 2019. These Regulations are applicable for determination of tariff in all cases covered under these Regulations from April 1, 2020 to March 31, 2025 unless otherwise extended by the Commission.

As per the provisions stipulated in the Regulation 4 of MYT Regulations, 2019, the Petition for determination of True-Up, Annual Performance Review (APR) and Aggregate Revenue Requirement (ARR)/Tariff, complete in all respect have to be filed by the Transmission Licensee for each year of the Control Period (FY 2020-21 to FY 2020-25) before the Commission on or before November 30 of each year.

The Transmission Licensee namely Uttar Pradesh Power Transmission Corporation Limited (hereinafter referred to as "Petitioner"), filed the Petition for determination of Annual Revenue Requirement / Tariff for FY 2023-24, Annual Performance Review for FY 2022-23 and True-Up for the FY 2021-22 on November 11, 2022.

PRELIMINARY OBSERVATION:

A preliminary analysis of the Petition was conducted, wherein the Commission vide letter dated January 05, 2023 sought certain queries related to capital expenditure and capitalisation, CAG Report for FY 2021-22, de-capitalized assets, computation of interest rate





on long term loan, calculation of depreciation, reasons for non-compliance of directives issued by the Commission's in its previous Tariff Orders along with various other deficiencies.

LICENSEES RESPONSE:

The Petitioner submitted its response to the deficiencies in respect to True-Up of FY 2021-22, APR of FY 2022-23 and ARR of FY 2023-24 on January 30, 2023.

The Technical Validation Session covering all the Petition was conducted on February 03, 2023, which was attended by the senior officials of the Commission and the Petitioner. During the Technical Validation Session, the Petitioner made a presentation of the True up, APR and ARR / Tariff submission and explained various issues/points raised in the deficiencies. Subsequently, minutes of meeting (MOM) along with pending data / information was issued and the Petitioner was directed to submit the pending information within seven days. The Petitioner is required to submit the CAG audit report for FY 2021-22, list of Open Access Consumers for FY 2021-22, list of project/ scheme carried out in FY 2021-22, gross revenue projected for FY 2022-23 and FY 2023-24 by leasing out spare dark fibers, reason for non-compliance of Commission's earlier directives and other matters captured in the minutes. The Petitioner submitted its response on February 15, 2023.

COMMISSION'S DIRECTIONS:

Taking above into consideration, the Commission admits the Petition for further processing. Further, the Commission directs the Petitioner to submit the pending responses and also directs them to furnish further information / clarifications, if any, as deemed necessary by the Commission during the processing of the Petition and provide the same to the satisfaction of the Commission within the time frame as stipulated by the Commission, failing which the Commission may proceed to dispose of the matter as it deems fit based on the information available with it.

The Petitioner in accordance with the Regulation 5.8 of MYT Regulations, 2019 shall publish a Public Notice within three working days of issue of the Admittance Order in at least two English and two Hindi daily newspapers having wide circulation in its licence area, outlining the ARR, proposed Tariff, APR, True Up and other such matters, if any, as directed by the Commission, and invite suggestions and objections within 21 days from the date of publication of the Public Notice(s) from the stakeholders and public at large.

The Public Notice should also indicate that the stakeholders should regularly check the websites of the Petitioner and the Commission for further intimation / submissions made in respect to these proceedings.

The Petitioner shall upload on its website the Petition filed before the Commission along with all replies to deficiencies, regulatory filings, information, particulars and related documents, which shall be signed digitally and will be in searchable pdf formats along with all Excel files as per provisions of the Regulations and Orders of the Commission. The Petitioner shall also





ensure that these files are broken into such size so that they can be easily downloaded. The Petitioner shall also ensure that for downloading the same, there should be no requirement of providing personal information. The Petitioner shall not provide or put up any such information, particulars, or documents, which are confidential in nature, without the prior approval of the Commission.

The Petitioner shall inform the Commission, about the details of publication of the Public Notice in the newspapers and uploading on the website along with the links. The Petitioner is also required to submit the copies of the newspapers and screen shots of the website within 7 days of publication of the Public Notice.

The Commission proposes to hold the Public Hearings in April, 2023, the details of which will be provided subsequently on the Commission's website www.uperc.org.

The Licensee shall take all necessary steps to ensure the necessary arrangements for smooth conduct of the same in accordance with the guidelines / instructions issued in this regard by the Commission from time to time.

The Commission reserves the right to seek any further information / clarifications as deemed necessary during the processing of this Petition.

(Vinod Kumar Srivastava)

Member

(Raj Pratap Singh)

Chairman

Place: Lucknow

Date: February 28, 2023





10 ANNEXURE 2: PUBLIC NOTICE ISSUED BY THE COMMISSION FOR PUBLIC HEARING -

	U.P. Electricity Regulatory Commission Vidyut Niyamak Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow - 226010	
Ph : 0522-2720426, Fax : 0522-2720423, E-mail: secretary@uperc.org, www.uperc.org		
Ref: UPERC/D(Tariff)/2023-24/1782	Dated: March 21, 2023	
Public Notice		
<p>The Distribution licensees, viz. Dakshinanchal Vidyut Vitran Nigam Ltd. (DVVNL), Madhyanchal Vidyut Vitran Nigam Ltd. (MVVNL), Pashchimanchal Vidyut Vitran Nigam Ltd. (PVVNL), Purvanchal Vidyut Vitran Nigam Ltd. (PuVNL), Kanpur Electricity Supply Company Ltd. (KESCO), Noida Power Company Ltd (NPCL) and the Transmission Licensee viz. Uttar Pradesh Power Transmission Company Limited, Lucknow (UPPTCL) have filed Petitions for determination of Aggregate Revenue Requirement (ARR) / Tariff for FY 2023-24, Annual Performance Review for FY 2022-23 and True-Up for FY 2021-22 before the Uttar Pradesh Electricity Regulatory Commission (UPERC / Commission).</p>		
<p>The Commission vide Orders dated February 28, 2023, has admitted the Petitions and has decided to hold "Public Hearings" for inviting suggestions and objections from the stakeholders and public at large. The "Public Hearings" will be conducted as per below details:</p>		
Licensees Covered	Date & Time of Public Hearing	Place of Public Hearing
PuVNL	April 10, 2023 (Monday) @ 11:30 Hrs	Varanasi - Commissioner Office Auditorium Opposite Vikas Bhavan, Hamrautia, Varanasi, Uttar Pradesh 221002
MVVNL & UPPTCL	April 21, 2023 (Friday) @ 11:30 Hrs	Lucknow - Auditorium (3 rd Floor) of Uttar Pradesh Electricity Regulatory Commission, Vidyut Niyamak Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow - 226010
DVVNL & KESCO	April 27, 2023 (Thursday) @ 11:30 Hrs	Agra - Rao Krishna Pal Singh Auditorium R.B.S. College, Pushpa Vihar Colony, Khandari, Agra, Uttar Pradesh -282002
PVVNL & NPCL	April 28, 2023 (Friday) @ 11:30 Hrs	Greater Noida - Auditorium 3, Gautam Budh University, Opposite Yamuna Expressway, Greater Noida, Uttar Pradesh -201312
<p>The licensee has already published the summary of the Petitions in newspapers, inviting suggestions and objections. The stakeholders & Public at large should regularly check the websites of Commission i.e. www.uperc.org & concerned Licensee for updates / information and details in regard to the venues of the 'Public Hearings'. All stakeholders and public at large are invited to attend the 'Public Hearings'.</p>		
<p>All the Stakeholders who are participating in the Public Hearing shall also submit their written suggestions and objections in hard copies (one original + 5 sets of copies) along with verified affidavit (as prescribed) to the Secretary, UPERC within three (3) days of the Public Hearing. The submission should also be sent in PDF and Word / Excel format on the email id: office@uperc.org. It should be ensured that the Licensee name for whom the submission pertains to, is written in the subject line, otherwise it may not be taken into consideration.</p>		
		 Secretary





11 ANNEXURE 3: LIST OF PERSONS WHO ATTENDED PUBLIC HEARING

11.1.1 The list of persons who attended public hearing in the matter of Tariff Petition No. 1907 of 2022 of UPPTCL for Determination of APR for FY 2022-23, ARR for FY 2023-24 and True Up of ARR for FY 2021-22 are listed below:

ATTENDANCE SHEET

Public Hearing Lucknow

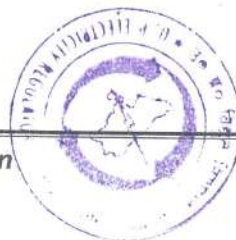
DATE: 21.04.2023 AT 11:30 HRS.

SL. NO.	NAME	DESIGNATION	APPEARING ON BEHALF OF
01	Arunk Rai	SE	MVNL
02	Rajesh Kumar	SE	MVNL
03	अवध विद्युत निगम, अहमद - राज्य सरकार अहमद - उप राज्य विद्युत निगम, अहमद		
04	Shailendra Kumar	SDO	MVNL
05	Pankaj Singh	Commissioner	MVNL UPPC
06	Vinay Kr. Dubey	J&M Traction	UP METRO RAIL CORP
07	Chameet Singh	CEEW CSO, Consumer	CEEW
08	Bharat Sharma	CSO, Lucknow	CEEW
09	Subash Kr Sharma	Chief Comm UP MVNL	MVNL
10	Sanyasathi	Advocate	Arise





Sl. No.	NAME	DESIGNATION	APPEARING ON BEHALF OF
11	Shekhar Saklani	Mgr Power	NPCL
12	DIVYANSHU BHATT	Advocate	UP Metro Rail Corporation Ltd.
13	NIRDOSH GUPTA RUSMIPA BELLANI VIKAS DUBEY	Representative	UP Metro Rail Corporation Ltd.
14	Nihar Vaghney	Vice President Kumjhim Ispat Kampur	Kumjhim Ispat Kampur
15	M.K. NARAYAN	Dir (Fin) UPPTCL	UPPTCL
16	Ajay Samal	Secretary U.P. Roller Flour Mills Azamgarh	U.P. Roller Flour Mills
17	Vinit Bohra Proc	AO, UPPTCL	UPPTCL
18	Prabhat Gupta	D.CAO, UPPTCL	UPPTCL
19	S. L. Gupta	TTA Chairman	TTA
20	Simran Kaur	Public	Public





NO.	NAME	DESIGNATION	APPEARING ON BEHALF OF
21	ANUP YADAV	Joint	J.V. Trew Lth IT Coor
22	V.N. Garg	Associate Chairman of U.P.	Secretary General
23	A. Singh	Deputy Chief Representative	Joint
24	Rajesh Kumar	Associated Chairman of Council	Joint Secretary
25	Vinod Kumar	J.F.	BLD C Housing
26	M. K. GUPTA	EE	SLDC
27	Arunish Jaiswal	E	Hindustan
28	U. Singh	TJS	Hindustan
29	RAMESH	UPRCL	Prof. BHATT
30	Nitin + Manoj	Partner	Assocham





NO.	NAME	DESIGNATION	APPEARING ON BEHALF OF
31	Rohit Kumar Yadav	Manager Accounts	Employee
32	Ujjwal (UG)	Engg.	UPCL
33	Jyoti Selhu		Association UP
34	सुरेश	अधीक्षक	उपनिवेश
35			
36			
37			
38			
39			
40			

