



Approval of ARR and Tariff for UPPTCL for FY 2021-22, APR of FY 2020-21 and True-up of FY 2019-20



UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

LUCKNOW

Petition No. 1656 / 2020

APPROVAL OF AGGREGATE REVENUE REQUIREMENT (ARR) AND TARIFF FOR FY 2021-22

AND

TRUE-UP OF ARR AND REVENUE FOR FY 2019-20

FOR

Uttar Pradesh Transmission Corporation Limited. (UPPTCL) – (Petition No. –1656 / 2020)

ORDER UNDER SECTION 62 & 64 OF

THE ELECTRICITY ACT, 2003

June 29, 2021



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Before

UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION

Petition No.: 1656 / 2020

IN THE MATTER OF:

Determination of Annual Revenue Requirement (ARR) for the FY 2021-22, Annual Performance Review (APR) for FY 2020-21 and True-up for the FY 2019-20 (Petition No. - 1656 of 2020) of Uttar Pradesh Power Transmission Corporation Ltd., 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 Requirement (ARR) for the FY 2021-22, Annual Performance Review (APR) for FY 2020-21 and True-up for FY 2019-20 filed by UPPTCL and also the subsequent filings by the Petitioner, during the course of Proceedings after the Petition thereafter admitted on April 08, 2021 and having considered the views / comments / suggestions / objections / representations received from the stakeholders in writing and during the Public Hearings held on May 21, 2021, 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 signed, dated and issued on June 29, 2021.

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 Tariffs 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.



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 the Government of Uttar Pradesh (GoUP) in one of the first steps of reforms and restructuring process of the power sector in the State. Thereafter, 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, the 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 1, 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 UP 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. SLDC is operating as a part of the Uttar Pradesh Power Transmission Corporation Ltd., in its capacity as the State Transmission Utility. SLDC 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 SLDC from UPPTCL in order to make SLDC as an independent Organization. Also, SLDC shall ensure to file its ARR Petition in accordance with UPERC (Fees & Charges of State Load Despatch Centre and other related matters) Regulations, 2020.



1.2 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 1, 2015 to March 31, 2020, unless otherwise extended by the Commission. Embarking upon the MYT framework, the Commission has divided the period of five years (i.e. April 1, 2015 to March 31, 2020) into two periods namely –
- a. Transition period (April 1, 2015 to March 31, 2017)
 - b. Control period (April 1, 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 1, 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 BUSINESS PLAN, ARR & TARIFF PERIOD FOR MYT CONTROL PERIOD FROM FY 2017-18 TO FY 2019-20

2.1.1 The Commission, vide its Order dated November 30, 2017, approved the ARR and Transmission Tariff for MYT Control Period (FY 2017-18, FY 2018-19 and FY 2019-20) for UPPTCL. In the said Order, the Commission also approved the true up for FY 2014-15.

2.2 DETERMINATION OF ANNUAL PERFORMANCE REVIEW (APR) FOR FY 2019-20 AND AGGREGATE REVENUE REQUIREMENT (ARR) FOR FY 2020-21 AND PETITION FOR TRUE UP OF ARR FOR FY 2017-18 & FY 2018-19 FILED BY THE LICENSEE

2.2.1 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 approved the true up for FY 2017-18 & FY 2018-19.

2.3 DETERMINATION OF ANNUAL PERFORMANCE REVIEW (APR) FOR FY 2020-21 AND AGGREGATE REVENUE REQUIREMENT (ARR) FOR FY 2021-22 AND PETITION FOR TRUE UP OF ARR FOR FY 2019-20 FILED BY THE LICENSEE

2.3.1 As per the provisions of the MYT Transmission Regulations, 2014 and MYT Distribution and Transmission Regulations, 2019, the Transmission Licensees' were required to file their ARR / Tariff Petitions before the Commission latest by November 30th each year so that the Tariff can be determined and be made applicable for the subsequent financial year.

2.3.2 The True Up Petition for FY 2019-20, Annual Performance Review for FY 2020-21 and Aggregate Revenue Requirement for FY 2021-22 was filed by UPPTCL (hereinafter referred to as the 'Licensee' or the 'Petitioner') under Section 64 of the Electricity Act, 2003 on December 03, 2020 (Petition No. 1656/ 2020).

2.4 PRELIMINARY SCRUTINY OF THE PETITIONS

2.4.1 A preliminary analysis was conducted of the Petition, wherein various deficiencies were observed in Petition and the deficiencies were communicated vide letters dated January



29, 2021. A reminder letter requesting the Petitioner to furnish the responses immediately to the deficiencies observed by the commission, was also sent on March 12, 2021. Further, the Petitioner submitted its response to the deficiencies in respect to True-up of FY 2019-20, Apr of FY 2020-21 and ARR of 2021-22 on March 30, 2021.

2.4.2 UPPTCL submitted their response to the deficiencies in respect to True Up Petition for FY 2019-20, Annual Performance Review for FY 2020-21 and Aggregate Revenue Requirement for FY 2021-22. The Technical Validation Session covering all the Petitions was conducted on April 01, 2021 which was attended by the senior officials of UPPTCL and during the Technical Validation Session, UPPTCL explained various issues raised in the deficiencies.

Further, second deficiency was raised by the Commission vide e-mail dated June 10, 2021 and as per the discussion during the Technical Validation Session held on April 01, 2021. UPPTCL has submitted their reply vide letter dated 23rd June 2021.

2.5 ADMITTANCE OF THE PETITIONS

2.5.1 The Commission admitted the Petition vide its Order dated April 8, 2021 (Annexed as: Annexure-1) and directed the Petitioner to publish a Public Notice consisting of the summary and highlights of the proposed Aggregate Revenue Requirement and Tariff for FY 2021-22, Annual Performance Review for FY 2020-21 and True-Up for FY 2019-20 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.

2.6 PUBLICITY OF THE PETITIONS

2.6.1 The Public Notice detailing the salient features of the Petitions were published by the Petitioner in daily newspapers as detailed below, inviting objections from the public at large and all stakeholders:

| | | |
|------------------------------|---|----------------|
| Amar Ujala (Hindi) | : | April 10, 2021 |
| The Times of India (English) | : | April 10, 2021 |
| Dainik Jagran (Hindi) | : | April 10, 2021 |
| Hindustan Times (English) | : | April 10, 2021 |



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 10.05.2021 for Public hearing on its website and the same was also published in the following daily newspapers:

| | | |
|------------------------------|---|--------------|
| Amar Ujala (Hindi) | : | May 11, 2021 |
| The Times of India (English) | : | May 11, 2021 |
| Dainik Jagran (Hindi) | : | May 11, 2021 |
| Hindustan Times(English) | : | May 11, 2021 |

3.1.4 In wake of prevailing pandemic of COVID-19 (the Corona Virus), and subsequent requirement of social distancing, the Commission, held the “Public Hearing” through Video Conferencing (VC) for UPPTCL on May 21, 2021 after informing all the stakeholders and public at large through advertisements in newspaper and in Commission website. 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 2019-20, APR for FY 2020-21 and ARR for FY 2021-22. 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 was conducted by the Commission on 21st June 2021. 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 2020-21, ARR FOR FY 2021-22 AND TRUE UP OF ARR FOR FY 2019-20.

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 Petitions filed by UPPTCL on True up of ARR for FY 2019-20, APR for FY 2020-21 and ARR for FY 2021-22 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

A. Comment/Suggestion of the stakeholders

3.2.2 Shri Avadesh Kumar Verma, Chairman, UP Rajya Vidyut Upbhokta Parishad submitted that UPPTCL has proposed the transmission losses of 3.33% for FY 2021-22 which is high and the same should be approved in line with the states like Andhra Pradesh, Maharashtra and Rajasthan.

B. Petitioner's Response

3.2.3 UPPTCL submitted that transmission losses claimed for FY 2021-22 i.e. 3.33% is in line with the losses approved by the Commission in the Business Plan Order dated 15th October 2020. The Petitioner further mentioned that, the actual transmission losses for FY 2019-20 were 3.43% which has reduced with respect to the past year loss level i.e. 3.56% (for FY 2018-19), due to consistent efforts of the Petitioner.

3.2.4 UPPTCL submitted that the actual transmission losses are variable & dynamic in nature and it depends on the quantum and direction of energy flow from generation point to load point. The Petitioner mentioned that the transmission losses also depends on the types of load, type of generation dispatch voltage, reactive power compensation, voltage profile, seasonal variation etc. Further, the Petitioner submitted that the quantum of generation and load are source decision and does not fall within the domain of UPPTCL.

3.2.5 UPPTCL submitted that the transmission losses depend upon the voltage level at which the power is transmitted. The transmission losses are higher where the percentage of lower voltage (132kV or below) transmission system is higher. The Petitioner has



submitted a comparison of the average transmission losses and transmission assets at low voltage level (132 kV) of a few state transmission licensees.

Table 3-1: TRANSMISSION LOSS (%) OF OTHER STATES OF LOW VOLTAGE LINES UPTO 132 KV FOR FY 2019-20

| States | % of Low voltage Lines (up to 132 kV) | | | Transmission Losses for FY 2019-20 (%) |
|----------------------|---------------------------------------|--------------------------------|--------------------------------------|----------------------------------------|
| | Transmission Lines up to 132 kV (Ckm) | Total Transmission Lines (Ckm) | % of Transmission Lines up to 132 kV | |
| Andhra Pradesh | 11,435 | 28,432 | 40% | 2.91 |
| Maharashtra | 19,936 | 48,321 | 41% | 3.17 |
| Rajasthan | 17,852 | 40,203 | 44% | 3.33 |
| Uttar Pradesh | 23,732 | 44,044 | 54% | 3.43 |
| Gujarat | 39,034 | 65,608 | 59% | 3.72 |

3.2.6 Transmission losses as approved by the Commission for FY 2019-20 were 3.56% and actual transmission loss for FY 2019-20 are 3.43% which are within the limit as approved by the Commission. Further, the losses approved for FY 2020-21 are 3.40% and the actual losses for the year are expected to remain within the approved limit. Further, as per the MoU for the 'UDAY' Scheme, UPPTCL had to reduce the intra-State transmission losses up to 3.95% by 31.03.2020 which has already been achieved. The Petitioner further submitted that number of actions like Reactive power management, up-gradation of conductors and substations and other system strengthening has been taken up to eliminate overloading of lines & transformers which will result in further reduction of transmission losses.

C. Commission's View

3.2.7 The Commission has considered the objections of the Stakeholders and the reply of the Petitioner on the issue of Transmission loss. The Commission's decision on the Transmission loss for FY 2019-20 to FY 2021-22 is detailed in the relevant sections of this Order.

TRANSMISSION TARIFF

A. Comment/Suggestion of the stakeholders

3.2.8 Shri Avadesh Kumar Verma submitted that UPPTCL has claimed the transmission charges



of Rs. 0.2942/ kWh for FY 2021-22 against the transmission charges of Rs. 0.237/ kWh for FY 2020-21, which is an increase of 23% and requested the Commission to reject the same.

B. Petitioner's Response

- 3.2.9 The Petitioner submitted that it has claimed the ARR of Rs. 3,547.12 crore for FY 2021-22 in line with the provisions of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Transmission Tariff) Regulations 2019. The Petitioner further submitted that, the transmission tariff of Rs. 0.2942/kWh claimed for FY 2021-22 is derived based on the ARR and projected energy of 1,20,568 MU to be handled during the FY 2021-22.
- 3.2.10 Further, the Commission vide Tariff Order dated 10th November 2020 had allowed the transmission tariff of Rs. 0.2378/kWh. The Petitioner made emphasis that the Commission in the said order has made significant disallowance in the O&M expenses for the true-up year i.e. for FY 2017-18 & FY 2018-19 thereby reducing the O&M expenses of the base year for computation of the O&M expenses for the FY 2020-21.
- 3.2.11 UPPTCL submitted that in the current ARR petition it has considered the normative O&M expenses for the base year in line with the MYT Regulations 2019 and accordingly claimed the O&M expenses for the FY 2021-22. The overall increase in the allowable ARR for FY 2021-22 with respect to the APR petition for FY 2020-21 is ~8%.

C. Commission's View

- 3.2.12 The Commission has considered the objections / suggestions made by the stakeholder and the reply of the Petitioner. The Commission's decisions on the various components of the ARR and the Transmission Tariff for FY 2021-22 are detailed in the subsequent sections of this Order.

TRANSMISSION SYSTEM AVAILABILITY

D. Comment/Suggestion of the stakeholder

- 3.2.13 Shri Avadesh Kumar Verma mentioned that all India transmission system availability is 99.89% whereas in Uttar Pradesh it is 98%. It is a cause of concern and it should be taken seriously.



E. Petitioner's Response

3.2.14 UPPTCL submitted that the average transmission system availability of UPPTCL for the past few years has remained above 99% as mentioned below:

Table 3-2: TRANSMISSION SYSTEM AVAILABILITY AS SUBMITTED BY PETITIONER

| FY | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|-------------------------------------------------------------------------------------|---------|---------|---------|---------|
| Normative Annual Transmission System Availability factor as per the Regulations (%) | 98% | 98% | 98% | 98% |
| Actual Transmission System Availability (%) | 99.03% | 99.07% | 99.01% | 99.47% |

F. Commission's View

3.2.15 The Commission has noted the comments of the Stakeholder and reply of the Petitioner on Transmission System Availability.

O&M EXPENSE

G. Comment/Suggestion of the stakeholders

3.2.16 Shri Avadesh Kumar Verma submitted that the Commission for FY 2020-21 approved Rs. 607.29 Crore towards employee cost where as in Tariff Petition the Petitioner has claimed Rs. 1020 Crore. He further submitted that earlier the approved O & M expenses was Rs. 962 Crores where as they have proposed Rs. 1560 for FY 2021-22 Crore which is not correct and should be rejected.

H. Petitioner's Response

3.2.17 The Petitioner submitted that it has claimed the normative O&M expenses for the FY 2021-22 as per the provisions of the Regulation 34 of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution and Transmission) Regulations, 2019 and methodology approved by the Commission in its Tariff Order dated 10th November 2020.

3.2.18 The Petitioner has submitted that the Commission in the Tariff Order dated 10th



November 2020 had considered the lower of the normative and actual expenses for the past years (i.e. FY 2017-18 & FY 2018-19), which is not in line with the provisions of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Transmission) Regulations, 2014. The Petitioner has already filed a review Petition in the said Order for reviewing the UPERC approach of the Commission for allowing the O&M expenses for FY 2017-18 & FY 2018-19.

3.2.19 The Petitioner further submitted that, on the basis of the approved O&M expenses for FY 2017-18 & FY 2018-19 the Commission has computed the O&M expenses for the FY 2020-21 which is Rs. 962.01 crore against Rs. 1319.71 crore claimed by the Petitioner. The disallowance in the true-up expenses for the FY 2017-18 & FY 2018-19 has significantly reduced the O&M expenses for the base year, thereby reducing allowable O&M expenses for the FY 2020-21.

I. Commission's View

3.2.20 The Commission has noted the comments of the Stakeholder and reply of the Petitioner on O&M Expense. The Commission has subsequently dealt the issue in the relevant sections of this Order.

Requirement of Transformation Capacity

J. Comment/Suggestion of the stakeholders

3.2.21 Shri Avadesh Kumar Verma submitted that the capacity of 132 kV substation is 52727 MVA which means 4 Crore 74 Lakh kW where as for 2 Crore 93 Lakh consumers, 6 Crore 32 Lakh kW load is required that means there is a gap of 2 Crore kW and above that electricity theft accounts almost 1 Crore kW. This is system mismatch which leads to low quality of power supply.

K. Petitioner's Response

3.2.22 The Petitioner submitted that the transmission system is generally planned for the following:

- a) For evacuation of power from generating stations within the state.
- b) To handle the expected peak demand of Discoms and Long Term Open Access consumers.



- c) 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.

3.2.23 The Petitioner submitted that the state transmission network is planned as per the Central Electricity Authority's ("CEA") Transmission Planning Criteria which provides for creation of transmission infrastructure to sustain even during contingencies and to cater the Peak Demand of the State. UPPTCL has met the peak demand of the State in the past years as mentioned below:

Table 3-3: PAST YEAR'S PEAK DEMAND AS SUBMITTED BY PETITIONER

| FY | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |
|----------------------------------------|------------|------------|------------|------------|------------|------------|------------|
| Peak Demand Met (MW) | 12,327 | 13,003 | 14,503 | 16,110 | 18,061 | 20,062 | 21,632 |
| Generation Capacity within state (MW)* | 14,394 | 15,087 | 18,632 | 23,662 | 25,011 | 25,130 | 26,162 |
| Investments (in Rs. Crores) | 1568 | 1377 | 2,759 | 3,942 | 3,280 | 3,428 | 3,920 |

**This includes of total of state, central and private sector as per CEA*

3.2.24 The Petitioner Submitted that the peak demand handled has increased ~75% during FY 2013-14 to FY 2019-20. Further, the generation capacity within the state has also grown by ~80%. The planned capacity of UPPTCL's network is required to be increased suitably to meet the projected peak demand of 30,819 MW (As per the projections of the UPERC in the Business Plan Order dated 15th October 2020) for state Discoms and other long term customers by 2024-25. Thus, to meet this 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 the FY 2021-22.

3.2.25 The Petitioner further submitted that the system mismatch and connected load data, 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. The Petitioner further stated that the transmission network is planned in accordance with peak demand projections provided by the Discoms. Further the Discoms installed MVA



capacity at the 33 kV for the state in FY 2018-19 was 45,354 MVA against which the transformation capacity of UPPTCL at 132/33 kV was 48,001 MVA, through which the Petitioner has adequately handled the peak demand during the year and in past years as provided in the table above without any significant peak/energy deficit.

- 3.2.26 The Petitioner stated that if the transformation capacity of UPPTCL at 132/33 kV is set-up equivalent to the connected load at Discom level i.e. up to 63,200 MVA, 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.

L. Commission's View

- 3.2.27 The Commission has noted the comments of the Stakeholder and reply of the Petitioner on Transformation Capacity. The Commission has subsequently dealt the issue in the relevant sections of this Order.
- 3.2.28 The list of consumers, who attended the Public Hearings, is appended at Annexure 2.



4 TRUING UP OF AGGREGATE REVENUE REQUIREMENT FOR FY 2019-20

- 4.1.1 The Commission, in its Tariff Order dated November 10, 2020 in Petition No. 1515/2020 & 1571/2020 approved the True up of ARR for FY 2017-18 & FY 2018-19, Annual Performance Review (APR) for FY 2019-20 and Aggregate Revenue Requirement (ARR) and Tariff for FY 2020-21 for UPPTCL. In this Section, the Commission has analysed all the elements of actual revenue and expenses for FY 2019-20, and has undertaken the truing up of expenses and revenue after prudence check of the data made available by the Petitioner. The Commission has allowed the true up for FY 2019-20 considering the principles laid down in the UPERC (Multi Year Transmission Tariff) Regulations, 2014.
- 4.1.2 It was observed that, initially the Petitioner submitted provisional accounts along with the True-Up petitions, then on direction of the Commission, submitted the Audited Accounts for FY 2019-20 on June 3, 2021 to the Commission and further submitted that CAG audit reports are not available.

4.2 TRANSMISSION SYSTEM AVAILABILITY

Petitioner's submission

- 4.2.1 The Petitioner submitted that the transmission availability for UPPTCL's Transmission System was 99.47 % in FY 2019-20.

Commission's Analysis

- 4.2.2 The Regulation 16 of UPERC (MYT for Transmission Tariff) Regulations, 2014 specifies that:

Quote

16 Target availability

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

(1) AC System : 98%

Unquote

- 4.2.3 The Commission has gone through the details of Transmission Availability for FY 2019-20 submitted by UPPTCL and approves the same.



4.3 CAPITAL EXPENDITURE, CAPITALIZATION & INTEREST ON LOAN

Petitioner's submission

- 4.3.1 The Petitioner has submitted that the Commission, in the past Tariff Orders had considered a normative tariff approach with a gearing of 70:30. Considering this approach, 70% of the capital expenditure undertaken in any year was considered to be financed through loan and balance 30% was considered to be financed through equity contributions. The portion of capital expenditure financed through consumer contributions, capital subsidies and grants were separated, and the depreciation and interest thereon were not charged. Subsequently, the financing of the capital investment was worked out based on the gearing ratio of 70:30 and allowable depreciation was considered as normative loan repayment. The Commission also considered the same approach while approving the ARR for the 1st Control period in the MYT Order dated November 30, 2017 and subsequent Tariff Orders dated January 8, 2019 and August 27, 2019. Further, the Petitioner has claimed the interest and finance charges based on the same philosophy.
- 4.3.2 The Petitioner submitted that during tariff proceedings it submitted the capitalisation details, fixed assets register and other details as desired by the Commission including submissions in respect of queries raised by the Commission from time to time.
- 4.3.3 Further the Petitioner submitted that, during True-up of FY 2017-18 & FY 2018-19 last year, despite of UPPTCL's presentations/submissions the Commission had disallowed 25% of the Capital Investment, stating that the UPPTCL did not take prior approval from the Commission for any of the schemes with capital expenditure greater than INR 10 Crore. It further submitted that the disallowance of capital expenditure of the assets integrated in the state transmission system adversely impacts the cash flows, depreciation, interest, RoE, etc. not only for the Trued up year but also for the ensuing years. Further, the Commission should allow the Licensee to recover the expenditure incurred towards providing reliable supply to the consumer of the State.
- 4.3.4 The Petitioner also submitted that, the Commission may not have abruptly disallowed the capital investment and it is of the view that before disallowing the investment, Commission may have considered that the expenses have been actually incurred or whether the Licensee or the consumer has actually received any benefit from such expenditure. Further the investment / capex may not have disallowed on the sole reason that UPPTCL did not take prior approval from the Commission for any of the schemes with capital expenditure greater than INR 10 Crore.



4.3.5 The Petitioner requested the Commission to allow the actual capital expenditure made by the Petitioner and consider the CWIP, GFA balance, capitalisation and capital expenditure as per the actuals for FY 2019-20. The Petitioner has submitted that considering the Capital Work in Progress (CWIP) and Gross Fixed Asset (GFA) as per annual accounts, it has derived the actual capital investments undertaken by it in FY 2019-20. The details are provided in the table below:

TABLE 4-1: CAPITAL INVESTMENTS IN FY 2019-20 AS SUBMITTED BY UPPTCL (RS. CRORE)

| Particulars | Derivation | 2019-20 |
|--------------------------------------------------------|---------------------|-----------------|
| Opening WIP as on 1 st April | A | 6805.05 |
| Investments | B | 3919.70 |
| Employee Expenses Capitalisation | C | 255.21 |
| A&G Expenses Capitalisation | D | 0.00 |
| Interest Capitalisation on Interest on long term loans | E | 168.20 |
| Total Investments | F= A+B+C+D+E | 11148.16 |
| Transferred to GFA (Total Capitalisation) | G | 3310.41 |
| Closing WIP | H= F-G | 7837.75 |

4.3.6 The table below gives details of the amounts received towards consumer contributions, capital grants and subsidies claimed by the Petitioner in FY 2019-20:

TABLE 4-2: CONSUMER CONTRIBUTIONS, CAPITAL GRANTS AND SUBSIDIES IN FY 2019-20 AS SUBMITTED BY UPPTCL (RS. CRORE)

| Particulars | 2019-20 |
|------------------------------------------------------------------------------------------------|----------------|
| Opening Balance of Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets | 1319.32 |
| Additions during the year | 396.72 |
| Less: Amortisation | 102.92 |
| Closing Balance | 1613.13 |

4.3.7 The financing of the capital investment as claimed by UPPTCL is depicted in the table below:



TABLE 4-3: FINANCING OF THE CAPITAL INVESTMENTS IN FY 2019-20 AS SUBMITTED BY UPPTCL (RS. CRORE)

| Particulars | Derivation | 2019-20 |
|--------------------------------------|------------|---------|
| Investment | A | 3919.70 |
| Less: | | |
| Consumer Contribution | B | 396.72 |
| Investment funded by debt and equity | C=A-B | 3522.98 |
| Debt Funded | 70% | 2466.09 |
| Equity Funded | 30% | 1056.89 |

4.3.8 The Petitioner submitted that it made an investment of Rs. 3,919.70 Crore in FY 2019-20. The total of consumer contributions, capital subsidies and grants received during the corresponding period is Rs. 396.72 Crore. Thus, balance of Rs. 3522.98 Crore have been funded through debt and equity. Considering a debt equity ratio of 70:30, Rs. 2,466.09 Crore or 70% of the capital investment is through debt and balance 30% equivalent to Rs. 1056.89 Crore is through equity. Allowable depreciation for the year has been considered as normative loan repayment.

4.3.9 The Petitioner further submitted that the actual weighted average rate of 10.93% (being the weighted average rate of interest on long term loan portfolio as per annual accounts) has been considered for computing the eligible interest expenses. The interest capitalisation has been considered at the same levels as per the Annual Accounts of FY 2019-20. The opening balance of long-term loan has been considered as per the normative closing loan balance as considered in the FY 2018-19 True-Up Petition.

4.3.10 Considering the above, the Petitioner has submitted that the gross interest on long term loan is Rs. 1332.83 Crore. The interest capitalisation has been considered at the same rate as per annual accounts. The computations for interest on long term loan are depicted below:

TABLE 4-4: INTEREST ON LONG TERM LOAN FOR FY 2019-20 AS SUBMITTED BY UPPTCL (RS. CRORE)

| Particulars | FY 2019-20 |
|--------------------------------------------------------|----------------|
| Opening Loan | 11582.42 |
| Loan Additions (70% of Investments) | 2466.09 |
| Less: Repayments (Depreciation allowable for the year) | 1233.60 |
| Closing Loan Balance | 12814.94 |
| Weighted Average Rate of Interest | 10.93% |
| Interest on long term loan | 1332.83 |
| Interest Capitalisation Rate | 12.62% |
| Less: Interest Capitalised | 168.20 |
| Net Interest Charged | 1164.63 |



Commission's Analysis

CAPEX and INVESTMENT

4.3.11 In the Multi Year Tariff Order dated 30.11.2017, for the 1st Control Period from FY 2017-18 to FY 2019-20 of UPPTCL, the Commission had observed that the capital investment claimed by the Licensee was not in accordance with the UPERC (Multi Year Transmission Tariff) Regulations, 2014. However, the Commission approved the full capital investment proposed by the licensee for catering the demand addition under the UDAY and 24 x 7 Power For All schemes. Further, the Commission had observed that if the Licensee failed to submit the capital investment plan while filing the APR for FY 2017-18, the Commission may disallow 30% of the proposed capital investment. The relevant extract is provided below as per chapter 7.7.10 of the MYT Order dated 30.11.2017:

Quote

"7.7.10 For the control period, the Commission observes that the capital investment claimed by the Licensee is not in accordance with the Transmission MYT Regulations, 2014 as reproduced above and hence, the Commission vide its deficiency notes sought the remaining information from the Licensee, however UPPTCL did not submit any of the sought information. The Commission in its previous orders has been approving 70% of the claimed capital investment on account of incomplete submission of capital investment plan. However, the Commission has observed that the Licensee has proposed such intensive capital investment for catering the upcoming demand addition inked under UDAY and 24 x 7 Power For ALL schemes. Hence, in view of the above, the Commission approves full capital investment as proposed by the Petitioner, however the Commission directs the petitioner to submit the complete capital investment plan at the time of APR for FY 2017-18. It is to be noted that if the Licensee fails to submit the capital investment plan while filing the Annual Performance Review (APR) petition, the Commission may disallow the 30% of proposed capital investment in order to reprimand the petitioner."

Unquote

4.3.12 Further, with respect to the Regulation 19A of the MYT Regulations, the Commission in Tariff Order for FY 2019-20 dated 27.08.2019 viewed as under:

Quote



7.5.2 The Commission analysed that the Petitioner is not adhering to the UPERC (Multi Year Transmission Tariff) Regulation 19 A, according to which Licensee should seek project wise prior approval of the Commission for capital expenditure greater than Rs. 10 Crore. Further, the UPPTCL has submitted that they had submitted the project wise details in the Business Plan which was approved by the Commission vide its Tariff Order dated November 30, 2017. However, in the Business Plan too the Regulation 19 A was not followed. Further, the Commission directs the Licensee to strictly comply to the Regulation 19 A, otherwise strict action will be taken by the Commission.

7.5.3 The UPPTCL has submitted a more detailed Capital Investment Plan which is yet to be vetted by the Commission. The deficiencies and queries are being finalized & being sent to UPPTCL, meanwhile the Commission is allowing only 70% of the claimed Capital Investment. Therefore, in line with the above the Commission has considered the following assumptions to arrive at the allowed GFA and CWIP:

- The Commission considers 70% of the claimed capital investments for FY 2017-18, FY 2018-19 and FY 2019-20.
- Taking 25% of total investments where total investments includes opening CWIP, Employee capitalisation, A&G capitalisation, Interest capitalisation and investments during the year.

Unquote

4.3.13 Further, the Regulation 19A of UPERC MYT Transmission Regulations, 2014 states that:

Quote

19 A. Capital Expenditure

- Capital expenditure shall be considered on scheme wise basis.*
- For capital expenditure greater than INR 10 Crore, the Transmission Licensee shall seek prior approval of the Commission.*
- The Transmission Licensee shall submit detailed supporting documents while seeking approval from the Commission.*

Provided that supporting documents shall include but not limited to purpose of investment, capital structure, capitalization schedule, financing plan and cost-benefit analysis:



- d. *The approval of the capital expenditure by the Commission for the ensuing year shall be in accordance with load growth, system extension, rural electrification, transmission loss reduction or quality improvement as proposed in the Transmission Licensee's supporting documents.*
- e. *The Commission may also undertake a detailed review of the actual works compared with the works approved in the previous Tariff Order while approving the capital expenditure for the ensuing year.*
- f. *In case the capital expenditure is required for emergency work, the licensee shall submit an application, containing all relevant information along with reasons justifying the emergent nature of the proposed work, seeking post facto approval by the Commission.*
- g. *The Transmission Licensee shall take up the work prior to receiving the approval from the Commission provided that the emergent nature of the scheme has been certified by its Board of Directors.*
- h. *If capital expenditure is less than INR 10 Crore, the Transmission Licensee shall undertake the execution of the plan with simultaneous notification to the Commission with all of the relevant supporting documents.*
- i. *Consumer's contribution towards cost of capital asset shall be treated as capital receipt and credited in current liabilities until transferred to a separate account on commissioning of the assets.*

Unquote

4.3.14 The Petitioner in the current True-Up proceedings of FY 2019-20 has submitted the capitalisation details, Fixed Asset Register for FY 2019-20 along with the Audited Balance Sheet. The Commission through data gaps asked the Petitioner that whether it has taken prior approval of the schemes greater than Rs. 10 Crores in terms of Regulation 19A of UPERC MYT Transmission Regulations, 2014

4.3.15 In reply, the Licensee submitted the DPRs and other necessary documents for projects above 10 Crores as under:



Table 4-5: LIST OF DPR SUBMITTED BY THE PETITIONER FOR FY 2019-20

| S. No | Description | Location | Type of Scheme | Requirement | Voltage Level (kV) | Amount (Rs. Crore) | COD |
|-------|-------------------------------------------------------------------------------------------------------------------|-------------------|------------------|------------------------------------------------------|--------------------|-------------------------|------------|
| 1 | Construction of 2x500MVA, 400/220kV Noida Sec-148 GIS s/sand its associated lines | Gautam budh Nagar | New Construction | Load growth and strengthening of the existing system | 400 | 369.88 | 03.04.2019 |
| 2 | Construction of 2x160+2x40MVA, 220/132/33kV Substation Amethi and associated lines | Amethi | New Construction | | 220 | 153.26 | 27.04.2019 |
| 3 | Construction of 3x60MVA, 220/33kV Substation, Botanical Garden Noida Sec-38(A) and its associated lines | Gautam budh Nagar | New Construction | | 93.8 | 07.06.2019 | |
| 4 | Construction of 3x60MVA, 220/33kV Substation DahiChowkiand associated lines. | Unnao | New Construction | | 50.94 | 14.10.2019 | |
| 5 | Construction of 2x160+2x40MVA, 220/132/33kV Substation Gola and associated lines. | Gorakhpur | New Construction | | 111 | 23.04.2019 | |
| 6 | Construction of 2x160+2x40MVA, 220/132/33kV Substation Partapur Jagritivihar(Meerut)and associated lines. | Meerut | New Construction | | 116.79 | 09.08.2019 | |
| 7 | Construction of 1x160,3x60MVA, 220/132kV, 220/33kV Hybrid Substation Partapvihar (Ghaziabad)and associated lines. | Ghaziabad | New Construction | | 84.49 | 30.10.2019 & 16.01.2020 | |
| 8 | Construction of 2x60MVA, 220/33kV PhoolbaghSubstation and associated lines | Kanpur | New Construction | | 118.22 | 15.11.2019 | |



Approval of ARR and Tariff for UPPTCL for FY 2021-22, APR of FY 2020-21 and True-up of FY 2019-20

| S. No | Description | Location | Type of Scheme | Requirement | Voltage Level (kV) | Amount (Rs. Crore) | COD |
|-------|------------------------------------------------------------------------------------------|---------------|------------------|-------------|--------------------|--------------------|------------|
| 9 | Construction of 2x160+2x40MVA, 220/132/33kV Substation Raja katalaband associated lines. | Varanasi | New Construction | | | 145.3 | 19.07.2019 |
| 10 | Construction of 132 kV Hanuman GIS substation Setu,Lucknow & associated lines | Lucknow | New Construction | | | 192.62 | 19.06.2019 |
| 11 | Construction of 2X40MVA 132 KV substation Lambhua, Sultanpur and associated lines | Sultanpur | New Construction | | | 29.2 | 31.01.2020 |
| 12 | Construction of 132 kV substation Narkhi, Firozabad & associated lines | Firozabad | New Construction | | | 25.34 | 07.05.2019 |
| 13 | Construction of 2X40MVA 132 kV substation Rudauli Ayodhya & associated lines | Ayodhya | New Construction | | | 42.74 | 29.02.2020 |
| 14 | Construction of 132 KV substation Sonkh Road , Mathura and associated lines | Mathura | New Construction | | 132 | 24.43 | 22.11.2019 |
| 15 | Construction of 132KV substation Baghra, Muzaffarnagar and associated lines | Muzaffarnagar | New Construction | | | 20.54 | 17.12.2019 |
| 16 | Construction of 132KV substation Kabrai , Mahoba and associated lines | Mahoba | New Construction | | | 17.63 | 10.04.2019 |
| 17 | Construction of 132 kV substation Bansdih(Balia) & its associated lines | Balia | New Construction | | | 57.82 | 18.04.2019 |
| 18 | Construction of 132 kV substation Fatehpursikri & associated lines | Agra | New Construction | | | 33.16 | 07.03.2020 |



| S. No | Description | Location | Type of Scheme | Requirement | Voltage Level (kV) | Amount (Rs. Crore) | COD |
|-------------------|---------------------------------------------------------------------------------------|----------|------------------|-------------|--------------------|--------------------|------------|
| 19 | Construction of 2x40 MVA, 132/33kV Substation Hasanganj (Unnao) and associated lines. | Unnao | New Construction | | | 42.38 | 28.02.2020 |
| 20 | Construction of 2x20 MVA, 132/33kV Substation Kalwari (Basti) and associated lines. | Basti | New Construction | | | 26.4 | 23.11.2019 |
| TOTAL COST | | | | | | 1755.94 | |

4.3.16 The Commission has observed that the Petitioner did not take the prior approval of the schemes executed during FY 2019-20 from the Commission in terms of Regulation 19A of UPERC MYT Transmission Regulations, 2014. Moreover, it is pertinent to note that the Petitioner has submitted DPR of schemes of Rs. 1755.94 Crore instead of Rs. 3919.70 Crore. The DPRs submitted by the Petitioner is of Rs. 1755.94 Cr, however the claimed investment during the year is of Rs. 3,919.70 Cr in the True-Up Petition.

Table 4-6: DPR SUBMITTED BY PETITIONER AND GAP IN CLAIM OF FY 2019-20

| DPR Submitted for Projects (Rs. Cr.) | Investment During the year claimed in Petition (Rs. Cr.) | Gap (Rs. Cr.) |
|--------------------------------------|----------------------------------------------------------|---------------|
| 1755.94 | 3,919.70 | 2,163.76 |

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. Accordingly, the Commission has derived the capital investments, closing CWIP and capitalization for FY 2019-20 in the Table below:

TABLE 4-7: CAPITAL INVESTMENTS FOR FY 2019-20 APPROVED BY THE COMMISSION (RS. CRORE)

| Particulars | Derivation | Tariff Order dt. 27.08.2019 | True-Up Petition | Approved upon True-Up |
|--------------------------------------------------------|---------------------|-----------------------------|------------------|-----------------------|
| Opening CWIP as on 1 st April | A | 8280.99 | 6805.05 | 5877.72 |
| Investments during the year | B | 5018.96 | 3919.70 | 2939.78 |
| Employee Expenses Capitalisation | C | 734.98 | 255.21 | 191.41 |
| A&G Expenses Capitalisation | D | 0.00 | 0.00 | 0.00 |
| Interest Capitalisation on Interest on long term loans | E | 904.73 | 168.20 | 137.88 |
| Total Investments | F= A+B+C+D+E | 14939.66 | 11148.16 | 9146.78 |
| Transferred to GFA (Total Capitalisation)* | G | 4426.58 | 3310.41 | 2716.11 |
| Closing CWIP | H= F-G | 10513.08 | 7837.75 | 6430.67 |

*Actual Percentage capitalisation comes out to be 30% as per the Petitioner's submission and hence the same is being used for approval of FY 2019-20.

4.3.20 The Commission, as per MYT Regulations 2014, has considered a normative approach with Debt: Equity ratio of 70:30, 70% of the capital expenditure undertaken in the year has been considered to be financed through loan and balance 30% has been considered to be financed through equity contribution. The portion of capital expenditure financed through Consumer Contributions, capital subsidies and grants has been separated and reduced, as the same would not be charged to the consumers. The Commission has approved the amounts received as Consumer Contributions, capital subsidies and grants based on the Audited Accounts of the Petitioner, as summarised in the Table below:



TABLE 4-8: APPROVED CONSUMER CONTRIBUTIONS, CAPITAL GRANTS AND SUBSIDIES IN FY 2019-20 (RS. CRORE)

| Particulars | Tariff Order dt. 27.08.2019 | True-Up Petition | Approved Upon Truing Up |
|------------------------------------------------------------------------------------------------|-----------------------------|------------------|-------------------------|
| Opening Balance of Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets | 900.91 | 1319.32 | 1326.67 |
| Additions during the year | 398.70 | 396.72 | 396.72 |
| Less: Amortisation | 63.46 | 102.92 | 97.66** |
| Closing Balance | 1236.15 | 1613.13 | 1625.73 |

** For FY 2019-20, the depreciation on assets made by consumer contributions claimed by UPPTCL as per Audited Accounts is based on SLM method. However, the same has been recomputed based on WDV method & applicable rates as per UPERC MYT Regulations, 2014.

4.3.21 The approved financing of the Capital Investment is as shown in the Table given below:

TABLE 4-9: APPROVED FINANCING OF THE CAPITAL INVESTMENTS IN FY 2019-20 (RS. CRORE)

| Particulars | Derivation | Tariff Order dt. 27.08.2019 | True-Up Petition | Approved Upon Truing Up |
|--------------------------------------|------------|-----------------------------|------------------|-------------------------|
| Investment | A | 5018.96 | 3919.70 | 2939.78 |
| Less: | | | | |
| Consumer Contribution | B | 398.70 | 396.72* | 396.72 |
| Investment funded by debt and equity | C=A-B | 4620.26 | 3522.98 | 2543.05 |
| Debt Funded | 70% of C | 3234.18 | 2466.09 | 1780.14 |
| Equity Funded | 30% of C | 1386.08 | 1056.89 | 762.92 |

*Out of Rs. 396.72 Cr., Consumer Contribution is of Rs. 384.89 Cr. and Grant is of 11.83 Cr.

INTEREST ON LONG TERM LOAN

4.3.22 From the above tables, it can be observed that UPPTCL has made an investment of Rs. 3919.70 Crore in FY 2019-20. The consumer Contributions, capital subsidies and grants received during the corresponding period is Rs. 396.72 Crore. Thus, balance investment of Rs. 3522.98 Crore has been funded through debt and equity. Considering a debt equity ratio of 70:30, Rs. 2466.09 Crore or 70% of the capital investment is approved to be funded through debt of Rs. 2466.09 Crore and balance 30% equivalent to Rs. 1056.89 Crore through equity. Allowable depreciation for the year has been considered as normative loan repayment.



4.3.23 The Commission on prudence check found that the actual weighted average interest rate is 10.12% wrt the actual loans from REC and PFC claimed by the Petitioner is somewhat different from the balance sheet figures. On prudence, the Commission found that even though the opening and closing values of both the loans were claimed as per the Balance sheet, the actual amount of interest for the year was not as per the audited balance sheet.

Table 4-10: CALCULATION OF INTEREST ON LONG TERM LOANS FOR FY 2019-20

| Loan No. | Lender | Opening as on 01.04.2019 | Addition | Repayment | Closing as on 31.03.2020 | Interest paid (Claimed by Petitioner) | Interest paid (as per balance sheet) |
|-------------------------------------------------|--------|--------------------------|----------|-----------|--------------------------|---------------------------------------|--------------------------------------|
| Loan 1 | PFC | 5086.42 | 916.25 | 343.37 | 5659.30 | 573.84 | 474.00 |
| Loan 2 | REC | 6799.98 | 1248.31 | 720.55 | 7327.74 | 785.00 | 784.16 |
| | Total | 11,886.40 | 2,164.56 | 1,063.92 | 12,987.04 | 1,358.84 | 1,258.17 |
| Weighted Avg. Interest Rate for Long Term Debts | | | | | | 10.93% | 10.12% |

4.3.24 The same was enquired from the Petitioner. The Petitioner replied that the interest cost (included in finance cost) in Annual Accounts are not reported on actual payment basis, but are reported on accrual basis. Annual Accounts of the company have been prepared as per the Generally Accepted Accounting Principles and relevant Rules applicable to Electricity Company as per Companies Act. These principles and rules require us to show expenses on accrual basis duly adjusted for cost not borne by the company. Considering this, the interest payments against last year's provision has been reduced and provision for interest accrued but not due for payment has been added. The figures are also adjusted for any aid from GoUP as the interest cost to that extent has not been borne by the company. However the Commission has considered the normative loan and the interest on loan has been calculated on the basis of actual figures reflected in the balance sheet.

4.3.25 Considering the above, the gross interest on long-term loan is approved. Further, the interest capitalisation has been considered at the same rate as per the Audited Accounts. The closing loan balance as approved at the end of FY 2018-19 has been considered as the opening loan for FY 2019-20. The interest on long-term loan approved for FY 2019-20 is as shown in the Table given below:



TABLE 4-11: ALLOWABLE INTEREST ON LONG TERM LOAN FOR FY 2019-20 AS APPROVED BY THE COMMISSION (RS. CRORE)

| Particulars | Tariff Order dt. 27.08.2019 | True-Up Petition | Approved Upon Truing Up |
|--------------------------------------------------------|-----------------------------|------------------|-------------------------|
| Opening Loan | 10698.55 | 11582.42 | 10481.30 |
| Loan Additions (70% of Investments) | 3234.18 | 2466.09 | 1780.14 |
| Less: Repayments (Depreciation allowable for the year) | 1205.52 | 1233.56 | 1142.56 |
| Closing Loan Balance | 12727.21 | 12814.94 | 11118.88 |
| Weighted Average Rate of Interest | 11.16% | 10.93% | 10.12% |
| Interest on long term loan | 1307.28 | 1332.83 | 1092.60 |
| Interest Capitalisation Rate | 59.40% | 12.62% | 12.62% |
| Less: Interest Capitalized | 904.73 | 168.20 | 137.88 |
| Net Interest Charged | 402.55 | 1164.63 | 954.72 |

4.4 FINANCE CHARGES

Petitioner's submission

- 4.4.1 The Petitioner further submitted that it has incurred finance charges to the tune of Rs. 0.09 Crore as per annual accounts towards expenditures like bank charges, finance charges, etc and the same may be allowed in the true up for FY 2019-20.

Commission's Analysis

- 4.4.2 The Commission approves the finance charges as per the Audited Accounts to the extent of Rs. 0.09 Crore for FY 2019-20.

4.5 INTEREST ON WORKING CAPITAL

Petitioner's Submission

- 4.5.1 The Petitioner submitted that the UPERC (MYT for Transmission Tariff) Regulations, 2014 provides that for normative interest on working Capital based on the methodology outlined in the Regulations. The interest on working capital has been computed based on the methodology specified in the Regulation 24.
- 4.5.2 The Petitioner has considered the interest rate of 13.80% for the purpose of computing Interest on Working Capital for FY 2019-20, which is the SBAR as on May 30, 2019 (i.e. the date of issuance of Admittance Order of ARR/Tariff Petitions for FY 2019-20). The



Petitioner has, in accordance with the above-mentioned MYT Transmission Regulations, considered the interest on working capital. In the Tariff Order for FY 2019-20, the Commission had allowed Rs. 54.99 Crore towards interest on working capital. The MYT Transmission Regulations provide for the normative interest on working capital. Accordingly, the Petitioner has claimed Rs. 113.77 Crore towards interest on working capital for FY 2019-20 as computed in the table below:

TABLE 4-12: ALLOWABLE INTEREST ON WORKING CAPITAL FOR FY 2019-20 AS SUBMITTED BY THE PETITIONER (RS. CRORE)

| Particulars | Claimed for 2019-20 |
|---------------------------------------------------------------|---------------------|
| One Month of O&M Expenses | 126.89 |
| Maintenance spares @ 40% of R&M expenses for two months | 33.05 |
| Receivable equivalent to 60 days average billing of consumers | 664.49 |
| Less: Security deposits from consumers | - |
| Total Working Capital Requirement | 824.43 |
| Interest rate (%) | 13.80% |
| Interest on working capital | 113.77 |

Commission's Analysis:

4.5.3 As per the first proviso of Regulation 24 of UPERC Multi Year Transmission Tariff Regulation, 2014:

Quote

"24 The Transmission Licensee shall be allowed interest on estimated level of working capital for the financial year, computed as follows:

O&M expenses for one month.

Two months equivalent of expected revenue.

Maintenance spares @ 40% of R&M expenses for two month.

Less:

Security deposits from consumers, if any-

Provided that the interest on working capital shall be on normative basis and rate of interest shall be equal to the State Bank Advance Rate (SBAR) as of the date on which petition for determination of tariff is accepted by the Commission."

Unquote



4.5.4 From the above it can be understood that the interest on working capital shall be on normative basis and rate of interest shall be equal to State Bank Advance Rate (SBAR) as of the date (30.05.2019) on which Petition for determination of the tariff is admitted (i.e. Admittance Order dated May 30, 2019) by the Commission. Accordingly, the Commission has considered the interest rate on working capital requirement at 13.80%. The link for the same is: <https://www.sbi.co.in/portal/web/interest-rates/benchmark-prime-lending-rate-historical-data>

4.5.5 The Commission, in accordance with the Transmission MYT Regulations, 2014, has considered the interest on working capital as shown in the Table given below:

TABLE 4-13: APPROVED INTEREST ON WORKING CAPITAL FOR FY 2019-20 (RS. CRORE)

| Particulars | Tariff Order dt. 27.08.2019 | Claimed | Approved upon Truing Up |
|---------------------------------------------------------------|-----------------------------|---------------|-------------------------|
| One Month of O&M Expenses | 30.69 | 126.89 | 80.19 |
| Maintenance spares @ 40% of R&M expenses for two months | 30.48 | 33.05 | 30.68 |
| Receivable equivalent to 60 days average billing of consumers | 337.28 | 664.49 | 513.75 |
| Less: Security deposits from consumers | - | - | - |
| Total Working Capital Requirement | 398.46 | 824.43 | 624.62 |
| Interest rate (%) | 13.80% | 13.80% | 13.80% |
| Interest on working capital | 54.99 | 113.77 | 86.20 |

4.5.6 The following table summarises the total interest and finance charges approved by the Commission for True-up of FY 2019-20 as against those claimed by the Petitioner in the Tariff Order for UPPTCL for FY 2019-20:

TABLE 4-14: APPROVED INTEREST AND FINANCE CHARGES FOR FY 2019-20 (RS. CRORE)

| Particulars | Tariff Order dt. 27.08.2019 | True-up Petition | Approved Upon Truing- Up |
|----------------------------------|-----------------------------|------------------|--------------------------|
| A: Interest on Long Term Loans | | | |
| Gross Interest on Long Term Loan | 1307.28 | 1332.83 | 1092.60 |
| Less: Interest Capitalisation | 904.73 | 168.20 | 137.88 |
| Net Interest on Long Term Loans | 402.55 | 1164.63 | 954.72 |
| | | | |
| B: Finance and Other Charges | 0.56 | 0.09 | 0.09 |
| | | | |
| C: Interest on Working Capital | 54.99 | 113.77 | 86.20 |
| | | | |
| Total (A+B+C) | 458.09 | 1278.49 | 1041.00 |



4.6 DEPRECIATION

Petitioner's Submission

4.6.1 The Petitioner submitted that the Regulation 22 of the UPERC (MYT for Transmission Tariff) Regulation, 2014 provide for the basis of charging depreciation. The relevant excerpt is reproduced below:

Quote

22 Treatment of Depreciation:

(a) Depreciation shall be calculated for each year of the control period on the written down value of the fixed assets of the corresponding year.

(b) Depreciation shall not be allowed on assets funded by consumer contributions or subsidies / grants.

.....

(d) The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset.

(e) Depreciation shall be charged from the first year of operation of the asset.

.....

Unquote

4.6.2 The Petitioner submitted that the UPERC (MYT for Transmission Tariff) Regulations, 2014 provides for calculating depreciation based on the written down value (WDV) of the fixed assets of the corresponding year based on rate of deprecation as provided in the Annexure C of the MYT Transmission Regulations, 2014 for respective asset category. The Commission in its Order dated November 30, 2017, January 8, 2019 and August 27, 2019 had approved the allowable depreciation for each asset category for the Control Period and the Petitioner has considered the same approach while claiming the depreciation for truing up of FY 2019-20. Further, the Petitioner has considered the normative closing gross fixed asset base for FY 2018-19 as the opening GFA balance of FY 2019-20 for computing the allowable depreciation.



TABLE 4-15: ALLOWABLE DEPRECIATION FOR FY 2019-20 AS SUBMITTED BY UPPTCL (RS. CRORE)

| Depreciable Assets | Opening GFA as on 1.4.2019 (Depreciable Assets) | Cumulative Depreciation upto 31.3.2019 | Written Down Opening | Addition | Deletion | Net Addition (Depreciable Assets) | Closing GFA as on 31.3.2020 (Depreciable Assets) | Rate of Depreciation (%) | Gross Allowable Depreciation | Consumer Contribution* | Net Allowable Depreciation |
|-----------------------------|-------------------------------------------------|----------------------------------------|----------------------|-----------------|---------------|-----------------------------------|--------------------------------------------------|--------------------------|------------------------------|------------------------|----------------------------|
| Buildings | 1,085.14 | 266.83 | 818.31 | 145.76 | 0.85 | 144.92 | 1,230.05 | 3.02% | 26.90 | 102.92 | 1233.56 |
| Other Civil Works | 91.63 | 22.53 | 69.10 | 11.91 | 0.00 | 11.91 | 103.54 | 3.02% | 2.27 | | |
| Plant & Machinery | 12,822.04 | 3,152.90 | 9,669.14 | 1,435.39 | 288.92 | 1,146.47 | 13,968.66 | 7.81% | 799.94 | | |
| Lines, Cables, Network etc. | 11,314.74 | 2,782.26 | 8,532.48 | 1,707.37 | 20.61 | 1,686.76 | 13,001.50 | 5.27% | 494.11 | | |
| Vehicles | 3.37 | 0.83 | 2.54 | 0.00 | 0.00 | 0.00 | 3.37 | 12.77% | 0.32 | | |
| Furniture & Fixtures | 8.74 | 2.15 | 6.59 | 1.23 | 0.00 | 1.23 | 9.98 | 12.77% | 0.92 | | |
| Office Equipment | 9.55 | 2.35 | 7.20 | 2.56 | 0.00 | 2.56 | 12.11 | 12.77% | 1.08 | | |
| Other assets | 4.27 | 1.05 | 3.22 | 0.00 | 0.00 | 0.00 | 4.27 | 15.00% | 0.48 | | |
| Intangible Assets | 105.44 | 25.93 | 79.51 | 4.77 | 0.10 | 4.67 | 110.12 | 12.77% | 10.45 | | |
| Total | 25,445.07 | 6,256.83 | 19,188.10 | 3,309.00 | 310.48 | 2,998.52 | 28,443.60 | 6.46% | 1,336.48 | | |

*Less: Equivalent amount of depreciation on assets acquired out of the consumer contribution

4.6.3 The Petitioner further submitted that in compliance to the provisions of Ind AS-18 accounting standards, from FY 2016-17 onwards the Consumer Contribution reserve has been recognized as revenue i.e. equal annual income over the useful life of the underlying asset/term of the arrangement with consumers. However, the Commission, in its Tariff Order dated January 8, 2019 and its subsequent Order dated August 27, 2019, while approving the revised ARR for FY 2019-20 has allowed the net depreciation after deducting the equivalent amount of depreciation on assets acquired out of the consumer contribution. The petitioner submitted that it has considered the same approach while claiming the net depreciation amount for the MYT period. The Income from Consumer Contribution recognized as revenue (or equivalent depreciation amount) in FY 2019-20 has been considered as per the annual accounts.

4.6.4 The Petitioner submitted that it seeks approval of Rs. 1233.60 Crore towards the depreciation expenses for final True-up of FY 2019-20. The Petitioner further submitted that the Fixed Asset Register (FAR) upto FY 2019-20 has been finalised and a copy of the same is being submitted by the Petitioner.

Commission's Analysis

4.6.5 The Commission has computed the depreciation in line with Regulations 22 of the Transmission MYT Regulations, 2014. From FY 2017-18 onwards, the Methodology for Computation of Depreciation has changed from SLM to WDV Method. In order to arrive



at the Written Down Value (WDV) Opening, the Accumulated Depreciation since the inception of the Licensee is required to be computed.

Quote

22 Treatment of Depreciation

a) Depreciation shall be calculated for each year of the control period on the written down value of the fixed assets of the corresponding year.

b) Depreciation shall not be allowed on assets funded by consumer contributions or subsidies / grants.

c) Depreciation shall be calculated annually on the basis of rates as detailed in Annexure – C or as may be notified by the Commission vide a separate order.

d) The residual value of assets shall be considered as 10% and depreciation shall be allowed to a maximum of 90% of the original cost of the asset.

Provided that Land shall not be treated as a depreciable asset and its cost shall be excluded while computing 90% of the original cost of the asset.

e) Depreciation shall be charged from the first year of operation of the asset.

Provided that in case the operation of the asset is for a part of the year, depreciation shall be charged on proportionate basis.

f) Provision of replacement of assets shall be made in the capital investment plan.

Unquote

4.6.6 For, Written Down Value computation, the Petitioner has considered Net Cumulative Depreciation (i.e. without consumer contribution) of Rs. 6,256.83 Crores and deducted the same with GFA base of Rs. 25,445.07 Crores (which includes consumer contribution). However, the Commission has considered Gross Allowable Depreciation (i.e. with consumer contribution) of Rs. 1172.31 Crores and deducted the same with written down closing GFA base of Rs. 19,336.17 Crores (which includes consumer contribution) of FY 2018-19. Hence, the net written down opening value for FY 2019-20 computed is Rs. 18163.86 Crores.

4.6.7 Further, addition and deletion to the GFA during the year has been considered same as allowed and Depreciation has been computed on the average GFA as per the WDV rates given in the Regulations. Accordingly, Gross Depreciation for the year, as computed by



the Petitioner is Rs. 1,336.48 Crores and Gross Depreciation computed by the Commission is Rs. 1,240.22 Crores.

4.6.8 Further, for computation of Net Depreciation (Gross Depreciation – Dep. of Consumer Contribution), the Petitioner has considered the Depreciation amount of Rs. 102.92 Crores for Consumer Contribution (amortization) as per Audited Accounts is based on SLM method. However, the same has been recomputed in-house based on WDV method & rates as per UPERC MYT Regulations, 2014 to Rs. 97.66 Crores.

4.6.9 Accordingly, the Net Depreciation claimed by the petitioner is Rs. 1,233.56 Crores and the in-house Depreciation proposed to be allowed is Rs. 1,142.56 Crores. The details are as under:

TABLE 4-16: GROSS DEPRECIATION APPROVED BY THE COMMISSION FOR FY 2019-20 (RS. CRORE)

| S. No | Depreciable Assets | Opening GFA | Gross Allowable Depreciation of FY 2018-19 | Written Down Opening | Additions to GFA | Deductions | Closing GFA | Average GFA | Rate of Depreciation (%) | Gross Allowable Depreciation (for the year) |
|-------|------------------------------|-----------------|--------------------------------------------|----------------------|------------------|---------------|-----------------|------------------|--------------------------|---------------------------------------------|
| 1 | Buildings | 845.06 | 23.57 | 821.48 | 119.60 | 0.85 | 940.23 | 880.86 | 3.02% | 26.60 |
| 2 | Other Civil Works | 69.40 | 2.02 | 67.38 | 9.77 | 0.00 | 77.15 | 72.27 | 3.02% | 2.18 |
| 3 | Plant & Machinery | 9497.57 | 701.34 | 8796.23 | 1177.71 | 288.92 | 9685.02 | 9,240.63 | 7.81% | 721.69 |
| 4 | Lines, Cables, Networks etc. | 8832.58 | 434.37 | 8398.21 | 1400.87 | 20.61 | 9778.46 | 9,088.34 | 5.27% | 478.96 |
| 5 | Vehicles | 2.25 | 0.29 | 1.96 | - | 0.00 | 1.96 | 1.96 | 12.77% | 0.25 |
| 6 | Furnitures & Fixture | 6.36 | 0.70 | 5.66 | 1.01 | 0.00 | 6.67 | 6.16 | 12.77% | 0.79 |
| 7 | Office Equipments | 6.85 | 0.81 | 6.04 | 2.10 | 0.00 | 8.15 | 7.10 | 12.77% | 0.91 |
| 8 | Other Assets | 72.87 | 8.73 | 64.13 | 3.89 | 0.10 | 67.93 | 66.03 | 12.77% | 8.43 |
| 9 | Intangible Assets | 3.24 | 0.49 | 2.75 | 0.00 | 0.00 | 2.75 | 2.75 | 15.00% | 0.41 |
| 10 | Total | 19336.17 | 1172.31 | 18163.86 | 2714.95 | 310.48 | 20568.33 | 19,366.09 | 6.40% | 1,240.22 |

4.6.10 The Commission in view of above discussion, approves the Net Depreciation for FY 2019-20 is as under:



TABLE 4-17: NET APPROVED DEPRECIATION FOR FY 2019-20 (RS. CRORE)

| Particulars | Tariff Order dt. 27.08.2019 | Claimed | Allowable |
|---------------------------------------------------------------------------------------------|--------------------------------|----------------|----------------|
| Gross allowable Depreciation | 1268.76 | 1336.47 | 1240.22 |
| Less: Equivalent amount of depreciation on assets acquired out of the Consumer Contribution | 63.46 | 102.92 | 97.66 |
| Net allowable Depreciation | 1205.52 | 1233.56 | 1142.56 |

4.7 O&M EXPENSES

4.7.1 Operation and Maintenance Expenses (O&M) comprises of Employee Expenses, Repair and Maintenance (R&M) expenses and Administrative and General (A&G) expenses. Each element of O&M expenses has been examined in detail in the succeeding paragraphs. The Regulation 21 of the MYT Transmission Regulations, 2014 stipulates as under:

Quote

“21. Operation & Maintenance Expense

- a) Operation & Maintenance expenses comprise of Employee Costs, Administrative & General Expenses, and Repair & Maintenance expenses. The regulation 21 of the MYT Transmission Regulations issued by the Hon’ble Commission stipulates:*
- b) The Commission shall stipulate a separate trajectory of norms for each of the components of O&M expenses viz., employee cost, repairs and maintenance (R&M) expense and Administrative and General Expense (A&G expense). Provided that such norms may be specified for a specific Transmission Licensee or a class of Transmission Licensees.*
- c) Norms shall be defined in terms of combination of number of personnel per ckt/km (for different categories of transmission lines for e.g. HVDC, 765 KV, 400 KV, > 66 KV & 400 KV, etc. lines) and number of personnel per bay (for different categories of bay for e.g. 765 KV, 400 KV, > 66 KV & 400 KV, etc bays) along with annual expenses per personnel for Employee expenses; combination of A&G expense per personnel and A&G expense per ckt/km and bay for A&G*



expenses and R&M expense as percentage of gross fixed assets for estimation of R&M expenses.

- d) One-time expenses such as expense due to change in accounting policy, arrears paid due to pay commissions etc., shall be excluded from the norms in the trajectory.*
- e) The expenses beyond the control of the Transmission Licensee such as dearness allowance, terminal benefits etc. in Employee cost etc., shall be excluded from the norms in the trajectory.*
- f) The One-time expenses and the expenses beyond the control of the Transmission Licensee shall be allowed by the Commission over and above normative Operation & Maintenance Expenses after prudence check.*
- g) The norms in the trajectory shall be specified over the control period with due consideration to productivity improvements.*
- h) The norms shall be determined at constant prices of base year and escalation on account of - inflation shall be over and above the baseline.*
- i) The Transmission Licensee specific trajectory of norms shall be identified by the Commission on the basis of simple average of previous five years audited figures, duly normalized for any abnormal variation.....”*

Unquote

Petitioner’s Submission

Employee Expenses for FY 2019-20:

4.7.2 The Petitioner submitted that it has computed the Employee expenses for FY 2019-20 as per the Regulation 21.1 of the MYT Transmission Regulations as below:

Quote

Employee cost shall be computed as per the approved norm 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., governed by the following formula:

*EMP_n = (EMP_b * CPI inflation) + Provision*

Where:



EMP_n: Employee expense for the year n.

EMP_b: Employee expense as per the norm CPI inflation: is the average increase in the Consumer Price Index (CPI) for immediately preceding three financial years.

Provision: Provision for expenses beyond control of the Transmission Licensee and expected one-time expenses as specified above.

Unquote

- 4.7.3 The Petitioner submitted that it has considered the approach adopted by the Commission while allowing the employee expenses in the MYT ARR for the 1st Control Period (FY 2017-18 to FY 2019-20) in its Order dated November 30, 2017. Further, it has submitted that the Commission approved the employee expense norms for transmission lines and norms for bays for the MYT period in its Order dated November 30, 2017 for computation of normative employee expenses. The Petitioner has considered the same methodology and norms, approved by the Commission in the Tariff Order for FY 2019-20, for the Truing-up of Employee expenses for FY 2019-20. Normative Employee expenses approved by the Commission and claimed for FY 2019-20 has been shown in the Table below:

TABLE 4-18: EMPLOYEE EXPENSES FOR FY 2019-20 AS SUBMITTED BY PETITIONER (RS. CRORE)

| Particulars | FY 2019-20 | | |
|----------------------------------------------------------------------|-------------------------------|---------------------|------------------|
| | Approved in T.O 27.08.2019 | Audited Accounts | True-up Petition |
| Norms per ckt kms (Rs. Crore) | 0.0057 | 640.21 | 0.0057 |
| Line Length (ckt kms) | 47,270.25 | | 44,044.78 |
| Employee Expenses (ckt kms) (Rs. Crore) | 270.60 | | 252.13 |
| Norms per Bay (Rs. Crore) | 0.1667 | | 0.1974 |
| Number of Bays (nos) | 4,576 | | 4,944 |
| Employee Expenses (Bays) (Rs. Crore) | 762.97 | | 975.81 |
| Add: Arrears (Rs. Crore) | 30.55 | | - |
| Total Employee Expenses (Rs. Crore) | 1,064.13 | | |
| Gross Employee Costs after 30% Disallowance (Rs in Crore) | 744.89 | | |
| Employee Expenses Capitalised (Rs. Crore) | 734.98 | 255.21 | 255.21 |
| Net Employee Expenses (Rs. Crore) | 9.91 | 385.00 | 972.74 |

- 4.7.4 The Petitioner further submitted that the actual gross employee expenses were Rs. 640.21 Crore as against Rs. 744.89 Crore as approved by the Commission in the Tariff Order for FY 2019-20. The Employee expenses capitalised as per annual accounts are to the tune of Rs. 255.21 Crore as against Rs. 734.98 Crore as approved in the Tariff Order.



Thus, the net employee expenses as per annual accounts are Rs. 385.00 Crore as against Rs. 9.91 Crore approved in the Tariff Order. However, the Petitioner has claimed the normative employee's expenses of Rs. 1227.95 Crore for Truing up of FY 2019-20, computed based on the actual number of bays and line length of the transmission lines upto March 2020. The net employee expenses claimed for FY 2019-20 are Rs. 972.74 Crore.

- 4.7.5 Further, the actual employee's expenses for FY 2019-20 are within the limit as allowed in the Tariff Order. The Petitioner submitted that the normative employee expenses are allowed to it in terms of the extant UPERC Multi Year Transmission Tariff Regulations, 2014.

Administrative and General Expenses

- 4.7.6 The Petitioner has submitted that it has computed the Administrative and General Expenses for the FY 2019-20 as per the Regulation 21.3 of the UPERC Multi Year Transmission Tariff Regulations, 2014 as below:

Quote

A&G expense shall be computed as per the norm escalated by 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, and shall be governed by following formula:

$$A\&G_n = (A\&G_b * WPI \text{ inflation}) + Provision$$

Where:

A&G_n: A&G expense for the year n A&G_b: A&G expense as per the norm WPI inflation: is the average increase in the Wholesale Price Index (WPI) for immediately preceding three financial years Provision: Cost for initiatives or other one-time expenses as proposed by the Licensee and validated by Transmission the Commission.

Unquote

- 4.7.7 Further, the Petitioner submitted that it has claimed the normative A&G expenses of Rs. 54.16 Crore as per the approach adopted by the Commission while approving the ARR for the 1st Control Period (FY 2017-18 to FY 2019-20) in its MYT Tariff Order dated November 30, 2017 (henceforth referred as 'MYT Order 2017'). The Commission had approved A&G



expense norms for transmission lines and the norms for bays in the said MYT Order 2017 for computation of normative A&G expenses.

- 4.7.8 The A&G Expenses have been claimed for True Up of FY 2019-20 based on the norms approved by the Commission in the said MYT Order dated 30.11.2017. The detailed computation of the A&G Expenses is provided below:

TABLE 4-19: A&G EXPENSES FOR FY 2019-20 AS SUBMITTED BY PETITIONER (RS. CRORE)

| Particulars | Approved in MYT Order | Audited Accounts | True-up Petition |
|-------------------------------------------------|-----------------------|------------------|------------------|
| Norms per ckt kms (Rs. Crore) | 0.0002 | | 0.0002 |
| Line Length (ckt kms) | 47270.25 | | 44044.78 |
| A&G Expenses for Transmission Lines (Rs. Crore) | 9.85 | | 10.02 |
| Norms per Bay (Rs. Crore) | 0.0048 | | 0.0052 |
| Number of Bays (nos) | 4576.00 | 67.46 | 4944.00 |
| A&G Expenses for Bays (Rs. Crore) | 21.88 | | 25.80 |
| Norms per Employee (Rs. Crore) | 0.0009 | | 0.0010 |
| Number of Employees (nos) | 6300.00 | | 6372.00 |
| A&G Expenses for Employees (Rs. Crore) | 5.50 | | 6.08 |
| Total A&G Expenses (Rs. Crore) | 37.23 | | 54.16 |
| A&G Expenses Capitalised (Rs. Crore) | 0.00 | 0.00 | - |
| Less: 30% Disallowance | 11.17 | - | - |
| Net A&G Expenses (Rs. Crore) | 26.06 | 67.46 | 54.16 |

- 4.7.9 The Petitioner submitted that as per audited accounts, the actual gross A&G expenses were Rs. 67.46 Crore against Rs. 26.06 Crore approved in the Tariff Order. No A&G expenses capitalisation has been claimed for FY 2019-20 as per annual accounts. The erstwhile policy for capitalisation of the administrative and general expenses has been discontinued with effect from FY 2015-16 based on the observations of the AG Audit. Thus, the net A&G expenses as per annual accounts are Rs. 67.46 Crore as against Rs. 26.06 Crore approved in the Tariff Order dated 27.08.2019. However, the Petitioner has claimed Rs. 54.16 Crore as computed based on norms.

R&M Expenses

- 4.7.10 The Petitioner submitted that it has computed the Repair & Maintenance expenses for FY 2019-20 as per the Regulation 21.2 of the UPERC (MYT for Transmission Tariff) Regulations, 2014 as below:



4.7.11 Repairs and Maintenance expense shall be calculated as percentage (as per the norm defined) of Average Gross Fixed Assets for the year governed by following formula:

Quote

$$R\&Mn = Kb * GFAn$$

Where:

R&Mn: Repairs & Maintenance expense for nth year

GFAn: Average Gross Fixed Assets for nth year

Kb: Percentage point as per the norm.

Unquote

4.7.12 As per UPERC (MYT for Transmission Tariff) Regulations, 2014, the R&M expenses for any year of the MYT period are a percentage or fraction of the average GFA base of that year. This percentage or the factor 'K_b' may be determined by the Commission. The 'K_b' factor approved by the Commission for the FY 2019-20 is 1.83% respectively. The R&M Expenses have been claimed for the FY 2019-20 based on the 'K_b' factor approved by the Commission in the said MYT order i.e. 1.83%. The detailed computation of the R&M expenses is provided below:

TABLE 4-20: R&M EXPENSES FOR FY 2019-20 SUBMITTED BY THE PETITIONER (RS. CRORE)

| Particulars | Approved in T. O 27.08.2019 | Audited Accounts | True-up Petition |
|-----------------------------------|--------------------------------|---------------------|------------------|
| Average GFA (Rs. Crore) | 25922.92 | | 27065.70 |
| K _b - Factor (%) | 1.83% | 460.19 | 1.83% |
| R&M Expense (Rs. Crore) | 474.79 | | 495.73 |
| Less: Deductions | 142.44 | | - |
| R&M Expense (Rs.Crore) | 332.35 | 460.19 | 495.73 |

4.7.13 The actual Repair and Maintenance expenses for FY 2019-20 were Rs. 460.19 Crore as against Rs. 332.35 Crore approved by the Commission in the Tariff Order dated 27.08.2019. However, the Petitioner has claimed Rs. 495.73 Crore computed based on norms.

Sharing of Efficiency Gain of Loss

4.7.14 The Petitioner has submitted that in line with the Regulation 11 of the MYT Regulations 2014, it is claiming the O&M expenses based on norms, it is sharing the net gain in the



Normative operation and maintenance (O&M) expenditure as compared to the actual O&M expenditure incurred during the FY 2019-20. The net gain is in respect of the O&M expenditure is Rs. 609.98 Crores and the Petitioner is sharing 50% of gain with the consumers, i.e. Rs. 304.98 crore. Hence, net O&M expenses claimed after gain sharing is Rs. 1217.64 Crores.

Table 4-21: GAIN SHARING AS SUBMITTED BY THE PETITIONER FOR FY 2019-20

| Particulars | T.O. dated 27.08.2019 | Audited Accounts | True-up Petition |
|------------------------------------------------|--------------------------|---------------------|---------------------|
| Net allowable O&M Expenses | 368.32 | 912.65 | 1,522.63 |
| Net Gain | | | 609.98 |
| Total gain sharing | | | 304.98 |
| Net O&M Expenses after gain sharing | | | 1,217.64 |

Commission`s Analysis

4.7.15 As per the provisions of the aforesaid Regulations, the Commission in MYT Order dated November 30, 2017 had approved the norms for Employee Expenses, A&G Expenses and R&M Expenses. The relevant extract of the Order is as follows:

Quote

Employee Expenses:

7.6.11 *Considering the methodology provided in Transmission MYT Regulations, 2014 the detailed calculation of Employee Expense is as follows:*

7.6.12 *The norms for preceding five years for which audited accounts is available i.e. FY 2010-11 to FY 2014-15 is calculated by using following formulae:*

| SI No | Formulae |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | Assumption: 25% of Gross Employee expenses is attributed to Transmission lines and remaining 75% for bays as per methodology followed in CERC 2014 Tariff Regulations. |
| (A) | Norms per ckt km = (25% of Gross Employee Expense for year / ckt kms) |
| (B) | Norms per bay= (75% of Gross Employee expense for a year / Number of Bays) |
| (C) | Average of (A) from FY 2010-11 to FY 2014-15. (5 years) |
| (D) | Average of (B) from FY 2010-11 to FY 2014-15. (5 years) |



7.6.13 It is observed that the value of (C) & (D) is considered as the values for base year FY 2014-15. Hence, (C) & (D) are escalated using CPI escalation to arrive at the values for FY 2017-18.

| Particulars | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | Average of FY 2011-2015 |
|-------------------------------------------------------|------------|------------|------------|------------|------------|-------------------------|
| Employee Expenses (25%) (Audited) (A1) (Rs Crore) | 88.62 | 87.87 | 86.24 | 98.82 | 99.22 | |
| Line Length (Ckt kms) (A2) | 24,405 | 25,301 | 25,920 | 26,876 | 28,678 | |
| Employee Expenses (75%) (Audited) (A3) (Rs Crore) | 265.85 | 263.60 | 258.72 | 296.46 | 297.66 | |
| Number of Bays (A4) (nos.) | 2098.00 | 2169.00 | 2271.00 | 2434.00 | 2445.00 | |
| Norms per ckt kms (A)= (A1/A2)*1000 (Rs Crore) | 0.0036 | 0.0035 | 0.0033 | 0.0037 | 0.0035 | 0.0035 (C) |
| Norms per Bays (B)= (A3/A4) (Rs Crore) | 0.1267 | 0.1215 | 0.1139 | 0.1218 | 0.1217 | 0.1211 (D) |

7.6.14 CPI escalation for a year is calculated considering CPI inflation for FY 2012-13 to FY 2014-15 i.e. preceding three years from the base year as per Regulations.

| Particulars | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |
|-------------------------------------------------------|------------|--------------------------------------|----------------------------------|-------------------------------|----------------------------------|-------------------------------|----------------------------------------------------------------------------------|------------|------------|
| CPI Indices* | 194.83 | 215.17 | 236.00 | 250.83 | 265.00 | 275.92 | - | - | - |
| Percentage increase over previous year- CPI Inflation | | 10.44% (= (215.17-194.83)/194.83) | 9.68% (= (236-215.17)/215.17) | 6.29% (= (250.83-236)/236) | 5.65% (= (265-250.83)/250.83) | 4.12% (= (275.92-265)/265) | 8.80% (Avg of previous 3 years from base year) ((= 10.44%+9.68%+6.29%)/3) | | |

*Source: <http://labourbureau.nic.in/indtab.html>

7.6.15 Thereafter year wise (i.e. FY 2017-18, FY 2018-19 and FY 2019-20) Employee Expense (per ckt km) and Employee Expense (per bay) is calculated considering norms per ckt km and norms per bay (calculated above) using following formulae:

$$\text{Employee Expense (Consumers)} = (\text{Norms per ckt km} * \text{ckt kms})$$

$$\text{Employee Expense (Bay)} = (\text{Norms per bay} * \text{Number of bays})$$

| | Base Value | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---------------|------------|---------|---------|---------|---------|---------|
| CPI Inflation | | 5.65% | 4.12% | 8.80% | 8.80% | 8.80% |



| | Base Value | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|-------------------------------------------------|---------------|----------|----------|----------|----------|----------|
| Pay Commission impact | | | 15% | | | |
| Norms per ckt kms (Rs Crore) | 0.0035 | 0.0039 | 0.0044 | 0.0048 | 0.0053 | 0.0057 |
| Line Length (ckt kms) | | 30151.41 | 35522.41 | 44618.41 | 49200.41 | 52937.41 |
| Employee Expense for Lines (F)(Rs Crore) | | 116.12 | 157.88 | 215.77 | 258.86 | 303.04 |
| | | | | | | |
| Norms per bay (Rs Crore) | 0.1211 | 0.1328 | 0.1532 | 0.1667 | 0.1814 | 0.1974 |
| No of bays | | 3428.00 | 3733.00 | 3955.00 | 4417.00 | 4663.00 |
| Employee Expense for Bays (G) (Rs Crore) | | 455.18 | 572.06 | 659.43 | 801.27 | 920.35 |

*Impact of 7th pay revision has been considered while calculation of norms from 2015-16 onwards

7.6.16 Further, UPPTCL has considered the impact of the 7th pay revision while computing the norms for the employee expenses by 15% and has accordingly claimed the onetime arrears of FY 2015-16 and FY 2016-17 payable due to the 7th pay revision of Rs. 44.74 Crore each in FY 2017-18 and FY 2018-19 respectively. Accordingly, the arrears of 7th Pay Commission the same is allowed under Regulation 21.1 of the Transmission MYT Regulations, 2014 as "provision" i.e. provision for expenses beyond the control of the Transmission Licensee as one-time expenses.

7.6.17 The computation of total Employee Expense is calculated by taking the average of Employee Expense (ckt kms) and Employee Expense (Bay), as shown under:

| Particulars | Control Period | | |
|---------------------------------------------------|----------------|---------------|---------------|
| | FY 2017-18 | FY 2018-19 | FY 2019-20 |
| Norms per ckt kms (Rs Crore) | 0.0048 | 0.0053 | 0.0057 |
| Line Length (ckt kms) | 44618.41 | 49200.41 | 52937.41 |
| Employee Expenses (ckt kms) (F) (Rs Crore) | 215.77 | 258.86 | 303.04 |
| Norms per Bay (Rs Crore) | 0.1667 | 0.1814 | 0.1974 |
| Number of Bays (nos) | 3955.00 | 4417.00 | 4663.00 |
| Employee Expenses (Bays) (G) (Rs Crore) | 659.43 | 801.27 | 920.35 |
| Add: Arrears (H) | 44.74 | 44.74 | |



| Particulars | Control Period | | |
|---------------------------------------------------|----------------|----------------|----------------|
| | FY 2017-18 | FY 2018-19 | FY 2019-20 |
| Total Employee Expenses (F+G+H) (Rs Crore) | 919.94 | 1104.88 | 1223.39 |

A&G Expenses:

7.6.26 Considering the methodology provided in Transmission MYT Regulations, 2014 the detailed calculation of A&G Expense is as follows:

7.6.27 The norms for five years (i.e. for last five years for which audited accounts are available i.e. from FY 2010-11 to FY 2014-15) are calculated by using formulae as follows:

| Sl No | Formulae |
|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| • | Assumption: 25% of Gross A&G expenses are attributed to Transmission lines, 25% of Gross A&G for employee expenses and remaining 50% for bays as per methodology followed in CERC 2014 Tariff Regulations. |
| (A) | Norms per ckt km= (Gross A&G expense for a year /Length of ckt kms) * 1000 |
| (B) | Norms per Bay= (Gross A&G expense for a year / Number of Bays) |
| (B1) | Norms per Employee= (Gross A&G expense for a year / Number of Employees) |
| (C) | Average of (A) from FY 2011-12 to FY 2015-16 (5 years) |
| (D) | Average of (B) from FY 2011-12 to FY 2015-16 (5 years) |
| (E) | Average of (B1) from FY 2011-12 to FY 2015-16 (5 years)* |

*Note- The A&G Expenses have been computed considering number of bays and circuit km and employee expenses as submitted by the petitioner vide affidavit dated 2.5.2017.

7.6.28 The values (C), (D) & (E) are considered escalated using WPI escalation for FY 2014-15 to FY 2015-16 to arrive at value for FY 2017-18. As per Regulation the A&G Expenses should be calculated considering Norms per ckt/km, norms per bay and norms per employee.

| Particulars | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | Average of FY 2011-2016 |
|----------------------------------------------|------------|------------|------------|------------|------------|-------------------------|
| A&G Expenses (25%) (Audited) (A1) (Rs Crore) | 3.66 | 3.69 | 4.01 | 7.26 | 8.52 | |
| Line Length (ckt kms) (A2) | 24405 | 25301 | 25920 | 26876 | 28678 | |



Approval of ARR and Tariff for UPPTCL for FY 2021-22, APR of FY 2020-21 and True-up of FY 2019-20

| Particulars | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | Average of FY 2011-2016 |
|------------------------------------------------------|------------|------------|------------|------------|------------|-------------------------|
| A&G Expenses (75%) (Audited) (A3) (Rs Crore) | 7.31 | 7.39 | 8.02 | 14.52 | 17.05 | |
| Number of Bays (A4) (nos.) | 2098.00 | 2169.00 | 2271.00 | 2434.00 | 2445.00 | |
| A&G Expenses (25%) (Audited) (A5) (Rs Crore) | 3.66 | 3.69 | 4.01 | 7.26 | 8.52 | |
| Number of Employees (A6) | 5654 | 5973 | 5833 | 6856 | 6778 | |
| Norms per ckt kms (A)= (A1/A2)*1000 (RsCrore) | 0.0001 | 0.0001 | 0.0002 | 0.0003 | 0.0003 | 0.0002 |
| Norms per Bay (B)= (A3/A4) (Rs Crore) | 0.0035 | 0.0034 | 0.0035 | 0.0060 | 0.0070 | 0.0047 |
| Norms per Employee (C)= (A5/A6) (Rs Crore) | 0.0006 | 0.0006 | 0.0007 | 0.0011 | 0.0013 | 0.0008 |

7.6.29 The WPI escalation for a year is calculated considering WPI inflation for FY 2012-13 to FY 2014-15 i.e. preceding three years from the base year.

| Particulars | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |
|------------------------------------------------------|------------|------------|------------|------------|------------|------------|-----------------------------------------------------------------------------------------|------------|------------|
| WPI Indices* | 100 | 107 | 113 | 114 | 110 | 112 | | | |
| Percentage increase over previous year-WPI Inflation | | 6.90% | 5.53% | 0.94% | -3.65% | 1.73% | 4.46% (Avg of previous 3 years from the base year) (= 6.90+5.53%+0.94%)/3) | | |

*Source- <http://eaindustry.nic.in/#>

The new WPI series has been issued by the government and the new series of Wholesale Price Index (WPI) with base 2011-12 is effective from April 2017. The same has been considered for escalation purposes during the MYT control period.

7.6.30 The year wise (i.e. FY 2017-18, FY 2018-19 and FY 2019-20) total A&G Expenses are calculated considering A&G Expense (ckt kms), A&G Expense (Bay) and A&G Expense (Employee) as shown below:

- A&G Expense (ckt kms) = (Norms per ckt kms * ckt kms)
- A&G Expense (Bay) = (Norms per Bay * Number of Bays)
- A&G Expense (Employee- (Norms per Employee * Number of Employees)



Approval of ARR and Tariff for UPPTCL for FY 2021-22, APR of FY 2020-21 and True-up of FY 2019-20

| Particulars | Base Year | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |
|---------------------------------------|-----------|------------|------------|------------|------------|------------|
| WPI Inflation | | -3.65% | 1.73% | 4.46% | 4.46% | 4.46% |
| Norms per Ckt kms (Rs Crore) | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 | 0.0002 |
| Line Length (ckt kms) | | 30151.00 | 35522.41 | 44618.41 | 49200.41 | 52937.41 |
| A&G Expense (F) (Rs Crore) | | 5.91 | 7.09 | 9.30 | 10.71 | 12.04 |
| 0 | | | | | | |
| Norms per Bay (Rs Crore) | 0.0047 | 0.0045 | 0.0046 | 0.0048 | 0.0050 | 0.0052 |
| No of Bays (nos.) | | 3428.00 | 3733.00 | 3955.00 | 4417.00 | 4663.00 |
| A&G Expense (G) (Rs Crore) | | 15.43 | 17.09 | 18.91 | 22.06 | 24.33 |
| 0 | | | | | | |
| Norms per Employee (Rs Crore) | 0.0009 | 0.0008 | 0.0008 | 0.0009 | 0.0009 | 0.0010 |
| No of Employees (nos.) | | 6887.00 | 6068.00 | 6411.00 | 6718.00 | 7231.00 |
| A&G Expense (H) (Rs Crore) | | 5.66 | 5.08 | 5.60 | 6.13 | 6.90 |

7.6.31 The total A&G expense for UPPTCL is calculated by taking the average of A&G Expense (ckt kms), A&G Expense (bay) and A&G Expense (Employee) as follows:

| Computed | MYT Control Period | | |
|-------------------------------------------------------------|--------------------|------------|------------|
| | FY 2017-18 | FY 2018-19 | FY 2019-20 |
| Norms per ckt kms (Rs Crore) | 0.0002 | 0.0002 | 0.0002 |
| Line Length (ckt kms) | 44618.41 | 49200.41 | 52937.41 |
| Administration & General Expenses (ckt km) (F) (Rs Crore) | 9.30 | 10.71 | 12.04 |
| Norms per Bay (Rs Crore) | 0.0048 | 0.0050 | 0.0052 |
| Number of Bays (nos) | 3955.00 | 4417.00 | 4663.00 |
| Administration & General Expenses (Bay) (G) (Rs Crore) | 18.91 | 22.06 | 24.33 |
| Norms per Employee (Rs Crore) | 0.0009 | 0.0009 | 0.0010 |
| Number of Employees (nos) | 6411.00 | 6718.00 | 7231.00 |
| Administration & General Expenses (Employee) (H) (Rs Crore) | 5.60 | 6.13 | 6.90 |



Approval of ARR and Tariff for UPPTCL for FY 2021-22, APR of FY 2020-21 and True-up of FY 2019-20

| Computed | MYT Control Period | | |
|-----------------------------------------------------------------------|--------------------|--------------|--------------|
| | FY 2017-18 | FY 2018-19 | FY 2019-20 |
| Total Administration & General Expenses (F+G+H) (Rs Crore) | 33.81 | 38.90 | 43.26 |

R&M Expenses:

7.6.19 Considering the methodology provided in Transmission MYT Regulations, 2014 the detailed calculation of R&M Expense is as follows:

7.6.20 The value of K_b is calculated considering audited figures for the preceding five years (i.e. FY 2010-11 to FY 2014-15) as follows:

$$K_b = \% \text{ of (Actual R\&M Expense / Average GFA)}$$

| -Particulars | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|
| Average GFA (A) (Rs Crore) | 7299.38 | 7849.07 | 8414.74 | 9252.58 | 10419.35 |
| R&M Expenses (B) (Rs Crore) | 98.06 | 118.8 | 143.14 | 162.7 | 195.96 |
| $K_b (D= B/A)$ | 1.34% | 1.51% | 1.70% | 1.76% | 1.88% |

7.6.21 Thereafter, the average of K_b is calculated for the preceding five years is calculated. This is considered as value of K_b factor FY 2014-15 (base year). The value is escalated by using increase in WPI for the corresponding years.

| Particulars | FY 2010-11 | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|
| $K_b (D= B/A)$ | 1.34% | 1.51% | 1.70% | 1.76% | 1.88% |
| Average of 5 years | | | | | 1.64% |

7.6.22 The WPI escalation for a year is calculated by considering the average increase in WPI for FY 2012-13 to FY 2014-15 i.e. preceding three years from the base year.

| Particulars | FY 2011-12 | FY 2012-13 | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |
|-------------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------------------------------------------------------------------------------------|------------|------------|
| WPI Indices* | 100 | 107 | 113 | 114 | 110 | 112 | | | |
| Percentage increase over previous year-WPI Inflation | | 6.90% | 5.53% | 0.94% | -3.65% | 1.73% | 4.46% (Avg of previous 3 years from the base year) (=(6.90%+5.53%+0.94%)/3) | | |



*Source- <http://eaindustry.nic.in/#>

The new WPI series has been issued by the government and the new series of Wholesale Price Index (WPI) with base 2011-12 is effective from April 2017. The same has been considered for escalation purposes during the MYT control period.

7.6.23 The total R&M Expense is calculated by using following formulae:

$$\text{Total R\&M Expense} = K_b * \text{Average GFA}$$

| Particulars | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 |
|------------------------|------------------------------|------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Average GFA (Rs Crore) | 11,862.38 | 14,498.84 | 18,475.35 | 23,389.44 | 29,211.51 |
| WPI Inflation | -3.65% | 1.73% | 4.46% | 4.46% | 4.46% |
| K_b | 1.58% (= 1.64%*(1-3.65%)) | 1.61% (= 1.58%*(1+1.73%)) | 1.68% (=1.61%*(1+4.46%)) | 1.75% (=1.68%*(1+4.46%)) | 1.83% (=1.75%*(1+4.46%)) |

7.6.24 The calculation of R&M Expense for UPPTCL is as follows:

| S. No. | Particulars | Control Period | | |
|--------|-----------------------------------|----------------|---------------|---------------|
| | | FY 2017-18 | FY 2018-19 | FY 2019-20 |
| 1 | Average GFA (Rs Crore) | 18475.35 | 23389.44 | 29211.51 |
| 2 | K _b | 1.68% | 1.75% | 1.83% |
| 3 | R&M Expense (Rs Crore) | 310.12 | 410.10 | 535.02 |

Unquote

4.7.16 The Commission has dealt with each component of O&M expenses i.e. Employee expenses, R&M expenses and A&G expenses individually in subsequent paras. It is to mention that in the Tariff Order dated August 27, 2019 for FY 2019-20, the Petitioner did not claim the O&M expenses in accordance with the norms stipulated under the MYT Regulations, 2014 (the Petitioner claimed the norms for FY 2017-18 instead of FY 2019-20). However, in the current True-Up Petition, the Petitioner has claimed the Norms approved for FY 2019-20 in the MYT Order.

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

4.7.18 Accordingly, Actual O&M expenses (Employee expenses, R&M expenses and A&G expenses) as per Audited Accounts and Normative values computed as per Regulations are as below:

TABLE 4-22: NORMATIVE EMPLOYEE EXPENSES FOR FY 2019-20 (RS. CRORE)

| Particulars | Approved in Tariff Order | Audited Accounts | True-up Petition | Normative as per Commission |
|--------------------------------------------------|--------------------------|------------------|------------------|-----------------------------|
| Norms per ckt kms (Rs. Crore) | 0.0057 | 640.21 | 0.0057 | 0.0057 |
| Line Length (ckt kms) | 47270.25 | | 44044.78 | 44,044.78 |
| Employee Expenses (ckt kms) (Rs. Crore) | 270.60 | | 252.13 | 252.13 |
| Norms per Bay (Rs. Crore) | 0.1667 | | 0.1974 | 0.1974 |
| Number of Bays (nos) | 4576 | | 4944 | 4,944 |
| Employee Expenses (Bays) (Rs. Crore) | 762.97 | | 975.81 | 975.81 |
| Add: Arrears (Rs. Crore) | 30.55 | | - | |
| Total Employee Expenses (Rs. Crore) | 1064.13 | | | 1227.95 |
| Less 30% Disallowance | 319.24 | | | |
| Employee Expenses after Disallowance (Rs. Crore) | 744.89 | | | |
| Employee Expenses Capitalised (Rs. Crore) | 734.98 | | 255.21 | 255.21 |
| Net Employee Expenses (Rs. Crore) | 9.91 | 640.21 | 972.74 | 972.74 |



TABLE 4-23: NORMATIVE A&G EXPENSES FOR FY 2019-20 (RS. CRORE)

| Particulars | Approved in Tariff Order | Audited Accounts | True-up Petition | Normative as per Commission |
|-------------------------------------------------|--------------------------|------------------|------------------|-----------------------------|
| Norms per ckt kms (Rs. Crore) | 0.0002 | 67.46 | 0.0002 | 0.0002 |
| Line Length (ckt kms) | 47270.25 | | 44044.78 | 44,044.78 |
| A&G Expenses for Transmission Lines (Rs. Crore) | 9.85 | | 10.02 | 9.18 |
| Norms per Bay (Rs. Crore) | 0.0048 | | 0.0052 | 0.0052 |
| Number of Bays (nos) | 4576.00 | | 4944.00 | 4,944 |
| A&G Expenses for Bays (Rs. Crore) | 21.88 | | 25.80 | 25.80 |
| Norms per Employee (Rs. Crore) | 0.0009 | | 0.0010 | 0.0010 |
| Number of Employees (nos) | 6300.00 | | 6372.00 | 6,372 |
| A&G Expenses for Employees (Rs. Crore) | 5.5030 | | 6.08 | 6.08 |
| License Fee | | | 12.27 | 12.27 |
| Total A&G Expenses (Rs. Crore) | 37.23 | | 54.16 | 53.33 |
| Less: 30% Disallowance | 11.17 | - | - | |
| Net A&G Expenses | 26.06 | 67.46 | 54.16 | 53.33 |

TABLE 4-24: GFA COMPUTATION FOR FY 2019-20 (RS. CRORE)

| Particulars | FORMULA | Normative as per Commission |
|--------------------|------------------|-----------------------------|
| Opening GFA | A | 24788.10 |
| Addition to GFA | B | 2716.11 |
| Deductions to GFA | C | 355.61 |
| Closing GFA | D=A+B-C | 27148.60 |
| Average GFA | E=(A+D)/2 | 25,968.35 |

TABLE 4-25: R&M EXPENSES FOR FY 2019-20 (RS. CRORE)

| Particulars | Approved in T. O. 27.08.2019 | Audited Accounts | True-up Petition | Normative as per Commission |
|-------------------------|------------------------------|------------------|------------------|-----------------------------|
| Average GFA (Rs. Crore) | 25922.92 | 460.19 | 27065.70 | 25968.35* |
| Kb - Factor (%) | 1.83% | | 1.83% | 1.83% |
| R&M Expense (Rs. Crore) | 474.79 | | 495.73 | 475.62 |
| Less: 30% Disallowance | 142.44 | - | - | - |



| Particulars | Approved in T. O. 27.08.2019 | Audited Accounts | True-up Petition | Normative as per Commission |
|------------------------------------------|------------------------------|------------------|------------------|-----------------------------|
| R&M Expenses after Deductions (Rs.Crore) | 332.35 | 460.19 | 495.73 | 475.62 |

*The 25% disallowance in Capex for FY 2019-20 will directly affect the capitalisation or addition of assets to GFA.

Summary of O&M Expenses

- 4.7.19 It is observed that the Petitioner has submitted that it has reduced the actual O&M expenses wrt the normative O&M expenses and hence it has claimed the amount on account of sharing of the gains due to efficiency in the operation and maintenance (O&M) expenditure as compared to the actual O&M expenditure incurred during FY 2019-20. The net gain claimed due to efficiency is Rs. 609.98 crore, 50% of gain is shared with the consumers i.e. Rs. 304.98 Crores as per the Regulation 11 of UPERC MYT Regulations, 2014.
- 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.
- 4.7.22 The Commission, keeping in view the benefit of the consumers, while allowing the O&M expenses, has considered the “lower of normative or actual expense for each element of O&M, i.e. Employee Expense, R&M & A&G” separately. Accordingly, the Commission has approved the O&M expenses in the Tables below:



TABLE 4-26: Approved O&M EXPENSES APPROVED BY THE COMMISSION FOR FY 2019-20 (RS. CRORE)

| Particulars | Approved in Tariff Order | Annual Accounts | Normative (computed) | True-up Petition | Approved upon Truing Up |
|--------------------------------------------------------------------|--------------------------|-----------------|----------------------|------------------|-------------------------|
| Gross Employee Expenses | 1064.13 | 640.21 | 1,227.95 | 1227.95 | 640.21 |
| Employee expenses capitalized | 734.98 | 255.21 | 255.21 | 255.21 | 191.41 |
| Gross Employee Expenses after 30% disallowance | 744.89 | | | | |
| A. Net Employee Expenses | 9.91 | 385.00 | 972.74 | 972.74 | 448.80 |
| Gross A&G Expenses | 37.23 | 67.46 | 41.06 | 41.89 | 41.06 |
| Gross A&G Expenses after 30% Disallowance (Rs. Crore) | 26.06 | | | | |
| A&G expenses License Fee for FY 2017-18 (Rs. Crore) | 0.00 | 0.00 | 12.27 | 12.27 | 12.27 |
| B. Net A&G Expenses | 26.06 | 67.46 | 53.33 | 54.16 | 53.33 |
| C. R&M Expenses | 474.79 | 460.19 | 475.62 | 495.73 | 460.19 |
| Repair & Maintenance Expenditure after 30% Disallowance (Rs Crore) | 332.35 | | | | |
| Total O&M Expenses (A+B+C) | 368.32 | 912.65 | 1501.69 | 1522.63 | 962.32 |
| Net (Gain)/Loss | | | | | |
| Less: Net (Gain)/Loss sharing | | | | | |
| Net O&M Expenses | 368.32 | 912.65 | 1501.69 | 1522.63 | 962.32 |

4.8 PRIOR PERIOD EXPENSES

Petitioner's Submissions

4.8.1 The Petitioner has not claimed any amount under the Petition for True up of FY 2019-20. However, the Petitioner in the Annual Accounts has shown of Rs. 15.54 Crores as Prior Period Items, Debits, write-offs & other Expenses, other comprehensive income.

Commission's Analysis

4.8.2 Prior period expenses and incomes are the outcomes of omissions / errors in recording the transactions in the accounting statements. The items booked under the prior period expenses are essentially ARR items like O&M expenses, interest and finance charges, etc. Each item of ARR has a distinct methodology of treatment in the ARR and True Up determination. The Commission has not considered any prior period expenses / income



in True Up for FY 2019-20 as the same has not been claimed by the Petitioner.

4.9 RETURN ON EQUITY

Petitioner's Submission

- 4.9.1 Under the provisions of the MYT Transmission Regulations, the Petitioner is allowed a return of @ 15.5% on equity base; for equity base calculation debt equity ratio shall be 70:30. Where equity involved 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.
- 4.9.2 In view of the huge gap in the recovery of cost of supply at the Discom level, the Petitioner was of the view that return on equity would only result in accumulation of receivables. As such, the Licensee has been claiming return on equity @ 2% since the financial years 2009-10 onwards. Return on equity has been computed on the normative equity portion (30%) on capitalized assets.
- 4.9.3 Further the Petitioner submitted that the Commission in its Order dated November 10, 2020 has disallowed 25% Capital Investments, which has translated to a reduction in the transfer to GFA and thus the GFA Opening & closing equity of the subsequent years. Also in regards to allowance of the CWIP, GFA balance, capital expenditure and capitalisation on actuals upto FY 2019-20 and considering same for allowing the normative expenses for the FY 2019-20, the Petitioner has accordingly considered opening equity for FY 2019-20.
- 4.9.4 The Petitioner while truing up the return on equity has considered the opening equity as on 1st April, 2007 based on the equity balance which devolved upon the licensee in the Transmission Transfer Scheme. Equity additions in FY 2007-08 to FY 2018-19 equivalent to normative 30% of the capitalized assets respective true-up orders/petitions. The closing equity balance for FY 2018-19 is considered as per the true-up petition for FY 2018-19. A rate of 2% has been considered for computing return on eligible equity. The allowable equity for FY 2019-20 computed by Petitioner is Rs. 183.36 crore as provided in the table below:



Table 4-27: RETURN ON EQUITY AS SUBMITTED BY PETITIONER FOR FY 2019-20 (Rs. Crore)

| Particulars | FY 2019-20 |
|-----------------------------------------------------|---------------|
| Equity Base at the beginning of the year | 8,676.88 |
| Assets Capitalised | 3310.41 |
| Addition to Equity Base (30% of assets capitalised) | 993.12 |
| Closing Equity Base | 9670.00 |
| Average Equity Base | 9173.44 |
| Rate of Return | 2.00% |
| Allowable Return on Equity | 183.47 |

Commission's Analysis

4.9.5 As per Regulation 26 of the UPERC MYT Regulations, 2014, Return on Equity is computed as under:

Quote

"Treatment of Return on equity

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

Provided that assets funded by consumer contribution, capital subsidies / grants and corresponding depreciation shall not form part of the capital base. Actual equity infused in the Transmission Licensee as per book value shall be considered as perpetual and shall be used for computation in these regulations.

..."

Unquote

4.9.6 The closing of FY 2018-19 approved, has been considered as the opening for FY 2019-20. Further, in order to arrive at the closing equity for FY 2019-20, 30% of the equity addition during the FY 2019-20 has been added & 30% of the Consumer Contribution received during the year has been deducted. Accordingly, Return on Equity is computed on average of the above-mentioned opening and closing equity.

4.9.7 The Commission in Tariff Order of FY 2019-20 dated 27.08.2019 has disallowed 50% of



RoE quoting:

Quote

7.11.6 The Return on Equity computed by the Commission for FY 2019-20 comes out to be Rs. 176.26 Crore, however as UPPTCL has not followed the UPERC (Multi Year Transmission Tariff) Regulation 19 A and the Commission showing its displeasure has allowed only 70% of Capital Investment & 70% of O&M expenses and further the Commission allows only 50% of the Return on Equity claimed by the Petitioner i.e. 1% which comes out to be as Rs. 86.13 Crore.

Unquote

4.9.8 The Return on Equity approved by the Commission for FY 2019-20 is as shown in the table below:

TABLE 4-28: ALLOWABLE RETURN ON EQUITY FOR FY 2019-20 AS APPROVED BY THE COMMISSION (RS. CRORE)

| S.No | Particulars | FORMULA | FY 2019-20 | | |
|-----------------------------------------------|---------------------------------------------------------------|-----------|-----------------------------|-------------------------|-------------------------|
| | | | Tariff Order dt. 27.08.2019 | Petitioner's Submission | Approved upon Truing Up |
| Assets to be deducted regarding Equity | | | | | |
| 1 | Assets Capitalised (during the year) | A | 4426.58 | 3310.41 | 2716.11 |
| 2 | Assets created out of consumer contribution (during the year) | B | 398.70 | 102.87 | 102.87 |
| 3 | Net Assets Capitalised (during the year) | C=A-B | 4027.88 | 3207.54 | 2613.24 |
| 4 | 30% on Net Assets Capitalised (during the year) | D=30%*C | 1208.37 | 962.26 | 783.97 |
| Return on Equity (Rs.Crore) | | | | | |
| 7 | Equity at the beginning of the year | E | 7948.86 | 8676.88 | 7998.19 |
| 8 | Net Addition to Equity (during the year) | F=D | 1327.98 | 993.12 | 783.97 |
| 9 | Closing Equity | G=E+F | 9276.83 | 9670.00 | 8782.16 |
| 10 | Average Equity | H=(E+G)/2 | 8612.84 | 9173.44 | 8390.17 |
| 11 | Rate of Return (%) | I | 2.00% | 2.00% | 2.00% |
| 12 | Return on Equity (during the year) | J=H*I | 172.26 | 183.47 | 167.80 |



| S.No | Particulars | FORMULA | FY 2019-20 | | |
|------|-----------------------------------------|--------------|-----------------------------|-------------------------|-------------------------|
| | | | Tariff Order dt. 27.08.2019 | Petitioner's Submission | Approved upon Truing Up |
| 13 | Disallowance (50%) | K | 86.13 | - | - |
| 14 | Allowable Return on Equity (ROE) | L=J-K | 86.13 | 183.47 | 167.80 |

4.10 NON-TARIFF INCOME

Petitioner's Submission

4.10.1 The Petitioner submitted that against the projected non-tariff income of Rs. 66.26 Crore in the Tariff Order, the actual non-tariff income as per the annual accounts of FY 2019-20 is Rs. 326.26 Crore. Later, the Petitioner in the Presentation to the Commission has added the PoC Charges of CERC lines of Rs.7.87 Crore as a part of Non-Tariff Income. Accordingly, the total Non-Tariff Income amounts to Rs. 334.10 Crores. Further, as per the FY 2019-20 annual accounts the income from Consumer Contribution is to the tune of Rs. 102.92 Crore is also recognized under the other income which has been already deducted from the gross allowable depreciation in the section above. Further, the non-tariff for FY 2019-20 also includes one-time income of Rs. 81.03 crore received as repayment of loan principal from GoUP. Thus, the net non-tariff considered for FY 2019-20 is Rs. 231.18 Crore.

Commission's Analysis

4.10.2 The Regulation 28 of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Transmission Tariff) Regulations, 2014 provides as under:

Quote

28 Non-Tariff Income

a) All incomes being incidental to electricity business and derived by the Licensee from sources, including but not limited to profit derived from disposal of assets, rents, delayed payment surcharge, meter rent (if any), income from investments other than contingency reserves, miscellaneous receipts from the consumers and income to Licensed business from the Other Business of the Transmission Licensee shall constitute Non-Tariff Income of the Licensee.



b) Interest earned on security deposits, in excess of the rate specified by the Commission shall be considered as Non-Tariff income of the Licensees.

c) The amount received by the Licensee on account of Non-Tariff Income shall be deducted from the aggregate revenue requirement in calculating the net revenue requirement of such Licensee.

Provided further that any expenditure incurred for generating/ earning Non- Tariff Income may be reduced from such income.

Unquote

4.10.3 The Non-Tariff Income comprises of items such as interest on loans and advances to employees, income from fixed rate investment deposits and interest on loans and advance to staff etc.

4.10.4 Thus, the Commission approves the Non-Tariff Income of Rs. 231.18 Crores for FY 2019-20.

TABLE 4-29: NON-TARIFF INCOME FOR FY 2019-20 AS APPROVED BY THE COMMISSION (RS. CRORE)

| S.No | Particulars | FY 2019-20 | | | |
|------|---------------------------------------------------------------|--------------------------------|---------|-------------------------|-------------------------|
| | | Tariff Order dt. 27.08.2019 | Audited | Petitioner's Submission | Approved upon Truing Up |
| 1 | Interest Incomes on: | | | | |
| a | Fixed Deposits | | | | |
| b | Loan to staff | | | | |
| c | Others | | | | |
| | Sub-Total | | 32.10 | 32.10 | 32.10 |
| 2 | Maintenance & Shutdown Charges | | 18.90 | 18.90 | 18.90 |
| 3 | Other Non-Operating Income | | | | |
| a | Income from Contractors/Suppliers | 66.26 | 43.02 | 43.02 | 43.02 |
| b | Incomes from Consumer Contribution Reserve | | 102.92 | 102.92 | 102.92 |
| c | Supervision Charges | | 0.13 | 0.13 | 0.13 |
| d | Rental from Staff | | 3.73 | 3.73 | 3.73 |
| e | Miscellaneous Reciepts | | 81.03 | 81.03 | 81.03 |
| f | Income from subsidies & Grants (Repayment of Loan Prinicipal) | | 44.40 | 44.40 | 44.40 |
| | Sub-Total | | 275.24 | 275.24 | 275.24 |



| S.No | Particulars | FY 2019-20 | | | |
|------|---------------------------------------|--------------------------------|---------------|-------------------------|-------------------------|
| | | Tariff Order dt. 27.08.2019 | Audited | Petitioner's Submission | Approved upon Truing Up |
| 4 | PoC Charges of CERC lines | | 7.87 | 7.87 | 7.87 |
| 4 | Total | | 334.10 | 334.10 | 334.10 |
| | Less: | | | | |
| | Consumer Contribution during the year | | 102.92 | 102.92 | 102.92 |
| 6 | Non-Tariff Income | 66.26 | 231.18 | 231.18 | 231.18 |

4.11 REVENUE FROM TRANSMISSION OF POWER

Petitioner's Submission

4.11.1 The Petitioner has submitted that the gross transmission charges in FY 2019-20, are to the tune of Rs. 2214.93 crore. Further, as part of separate function of SLDC, it is maintaining separate accounts for SLDC. It has recovered SLDC charges to the tune of Rs. 5.36 crore in FY 2019-20. The open access charges are to the tune of Rs. 39.26 crore as considered in annual accounts for FY 2019-20 which includes the short-term open access charges recovered in FY 2019-20 for approved inter-state and intra-state transactions by NRLDC and UPSLDC respectively and the share of UPPTCL in POC charges for utilization of its assets as interstate transmission system as disbursed by PGCIL during FY 2019-20. Thus, the total revenue receipts of the Petitioner for FY 2019-20 are to the tune of Rs. 2,214.93 crore. The net revenue pertaining to FY 2019-20 is provided in the table below:

TABLE 4-30: REVENUE FROM OPERATIONS PERTAINING TO FY 2019-20 AS SUBMITTED BY UPPTCL (RS. CRORE)

| Particulars | Amount |
|--------------------------------------------------------------------------|----------------|
| Transmission Charges for FY 2019-20 | 2143.95 |
| Open Access Charges for FY 2019-20 | 56.81 |
| SLDC Charges & other application fees for FY 2019-20 | 13.83 |
| Total Revenue considered for revenue side truing up in FY 2019-20 | 2214.59 |

Commission's Analysis



4.11.2 The Commission has considered the revenue from Interstate Transmission Lines as part of Non-Tariff Income, and has not considered as part of the Revenue from Transmission of Power for FY 2019-20.

TABLE 4-31: DETAILED BREAKUP OF REVENUE FROM OPERATIONS PERTAINING TO FY 2019-20 AS APPROVED BY THE COMMISSION (RS. CRORE)

| S.NO. | Particulars | FY 2019-20 | |
|------------------------------|------------------------------------------|-----------------------|--------------------|
| | | Energy delivered (MU) | Amount (Rs. Crore) |
| Distribution Licensee | | | |
| 1 | DVVNL | 24706.50 | 464.54 |
| 2 | MVVNL | 22851.68 | 430.19 |
| 3 | PVVNL | 34432.42 | 648.32 |
| 4 | PuVVNL | 26651.59 | 501.31 |
| 5 | KESCO | 3582.73 | 67.46 |
| 6 | NPCL | 2259.13 | 32.11 |
| 7 | Sub-Total | 114484.06 | 2143.93 |
| Open Access Consumer | | | |
| 8 | LTC (other than distribution licensee) | 320.36 | 5.06 |
| 9 | NR-UP (Inclusive of STOA Energy) | 1225.55 | 20.96 |
| 10 | STOA | 701.84 | 30.79 |
| 11 | Sub-Total | 2247.75 | 56.81 |
| SLDC Charges | | | |
| 12 | SLDC Charges | | 5.36 |
| 13 | Other States & LTOA Application Fee etc. | | 8.47 |
| 14 | Sub-Total | | 13.83 |
| 15 | Total (15=7+11+14) | | 2214.57 |

4.12 AGGREGATE REVENUE REQUIREMENT

4.12.1 The Aggregate Revenue Requirement for FY 2019-20 after truing up is summarised in the Table below:

TABLE 4-32: ARR FOR FY 2019-20 AFTER FINAL TRUING UP AS APPROVED BY THE COMMISSION (RS. CRORE)

| Particulars | Tariff Order | True-up Petition | Approved Upon Truing Up |
|-----------------------------|--------------|------------------|-------------------------|
| Employee cost | 744.89 | 1,227.95 | 640.21 |
| A&G expenses | 26.06 | 54.16 | 53.33 |
| R&M expenses | 332.35 | 495.73 | 460.19 |
| Interest on Loan Capital | 1,307.28 | 1,332.83 | 1092.60 |
| Interest on Working Capital | 54.99 | 113.77 | 86.20 |
| Finance Charges | 0.56 | 0.09 | 0.09 |
| Depreciation | 1,205.52 | 1,233.56 | 1142.56 |



| Particulars | Tariff Order | True-up Petition | Approved Upon Truing Up |
|------------------------------------------------------------------------------------|-----------------|------------------|-------------------------|
| Gross Expenditure | 3,671.65 | 4,458.07 | 3475.16 |
| <i>Less: Employee cost capitalized</i> | 734.98 | 255.21 | 191.41 |
| <i>Less: A&G Capitalisation</i> | 0.00 | - | - |
| <i>Less: Interest Capitalisation</i> | 904.73 | 168.20 | 137.88 |
| Net Expenditure | 2,031.94 | 4,034.68 | 3145.88 |
| <i>Provision for Bad & Doubtful debts</i> | - | - | |
| Prior Period Items, Debts, write-offs & other expenses, other comprehensive income | - | - | |
| Net Expenditure with provisions | 2,031.94 | 4,034.68 | 3145.88 |
| Add: Return on Equity | 86.13 | 183.47 | 167.80 |
| Less: Non-Tariff Income | 66.26 | 231.18 | 231.18 |
| Annual Revenue Requirement (ARR) | 2,051.81 | 3,986.97 | 3082.50 |
| Revenue from Operations pertaining to FY 2019-20 | | 2,214.59 | 2214.57 |
| Net Gap / (Surplus) | | 1,772.38 | 867.93 |
| Net Gain Sharing w.r.t O&M Expenses | | 304.98 | - |
| Balance ARR Recoverable | | 1,467.40 | 867.93 |

4.12.2 The Commission allows UPPTCL to recover the net gap allowed of Rs. 867.93 Crores on True Up for FY 2019-20 in 4 monthly instalments from the date of this Order in the proportion of amount billed to the Distribution Licensees and other entities in FY 2019-20.

4.13 TRANSMISSION TARIFF

4.13.1 The Transmission MYT Regulations, 2014 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.

4.13.2 Presently, the State Discoms 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.

4.13.3 Further, the Petitioner has submitted that 1,16,731.81 MUs were delivered to Distribution Licensees and other Long-Term Open Access Consumers during FY 2019-20.

4.13.4 The trued up ARR for FY 2019-20 and Transmission Tariff is computed as shown in the



Table below:

TABLE 4-33: TRUED UP TRANSMISSION TARIFF FOR FY 2019-20 (RS. CRORE)

| Particulars | Legend | Tariff Order | True-up Petition | Approved upon Truing Up |
|--------------------------------|------------|---------------|------------------|-------------------------|
| ARR for FY 2019-20 | A | 2051.81 | 3986.97 | 3082.50 |
| Energy Handled (MU) | B | 1,11,013.97 | 1,16,731.81 | 116731.81 |
| Transmission Tariff (Rs. /kWh) | $C=A*10/B$ | 0.1848 | 0.3415 | 0.2641 |

4.13.5 Thus, the Trued-up Transmission ARR approved for FY 2019-20 is Rs. 3082.50 Crore as against Rs. 3986.97 Crore claimed by the Petitioner. After considering the transmission charges and associated revenue already recovered for FY 2019-20 amounting to Rs. 2214.57 Crore, the revenue gap approved for FY 2019-20 is to the tune of Rs. 867.93 Crore.

Table 4-34: REVENUE GAP RECOVERY FOR FY 2019-20

| S.No | Particulars | FY 2019-20 | |
|------|-------------------------------------------------------------------|-----------------------|--------------------|
| | | Energy Delivered (MU) | Amount (Rs. Crore) |
| 1 | Distribution Licensee + LTOA +STOA | 1,16,731.81 | 2,200.74 |
| 2 | Other Charges | - | 13.83 |
| 3 | Total | 1,16,731.81 | 2,214.57 |
| 4 | Weighted avg. Transmission Tariff at collected revenue (Rs. /kWh) | | 0.1897 |
| 5 | Transmission Tariff after True-Up (Rs. / kWh) | | 0.2641 |
| 6 | Gap Allowed in True up of FY 2019-20 (Crore) | | 867.93 |
| 7 | Tariff allowed for recovery of Gap (Rs. /kWh) | | 0.0744 |



5 ANNUAL PERFORMANCE REVIEW FOR FY 2020-21

Petitioner's Submission

5.1.1 The Petitioner in the present petition is filing the Annual Performance Review (APR) of the ARR for FY 2020-21 as per the provisions of the MYT Regulations 2019 and projections of the expenses and capital expenditure as per the revised estimates. The petitioner had filed the ARR and tariff petition for FY 2020-21 on 11th March 2020 in line with the MYT Regulations 2019 and as per capital investment proposed in the Business Plan petition for the MYT Period from FY 2020-21 to FY 2024-25 submitted on 3rd March 2020 and in the subsequent revised submissions. The Commission vide Tariff Order dated 10th November 2020 had approved the ARR for FY 2020-21. The Petitioner is seeking APR for FY 2020-21.

Commission's Analysis

5.1.2 Regulation 7 of the MYT Regulations, 2019 specifies that under the MYT framework, the performance of the Licensee shall be subject to Annual Performance Review (APR) 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

5.1.3 The Commission in this Order has not carried out the detailed analysis of various components of APR for FY 2020-21. The Commission has carried out comparison of each component of APR as claimed by the Petitioner with that approved Tariff Order for FY 2020-21. The Commission will carry out the detailed prudence check of various components of ARR for FY 2020-21 while carrying out the true-up for FY 2020-21.



5.2 OPERATION & MAINTENANCE EXPENSES FOR 2020-21

5.2.1 Operation & Maintenance expenses comprise of Employee costs, Administrative & General (A&G) Expenses and Repair & Maintenance (R&M) expenses. The Regulation 34 of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019, issued by the Hon'ble Commission stipulates:

Quote

“34. Operation & Maintenance Expenses

- a) The Operation and Maintenance expenses for the Transmission Business shall be computed as stipulated in with these Regulations.*
- b) 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.*
- c) 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.*
- d) 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.*

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

Petitioner’s Submission

5.2.2 The Petitioner submitted that the O&M expenses include Employee expenses, R&M expenses and A&G expenses. In line with the Regulation 34 of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019, the Petitioner has worked out the base year O&M expenses i.e. for FY 2019-20. The Petitioner submitted that it has considered the True-up O&M expenses from FY 2015-16 to FY 2016-17 as allowed by the Commission in the True-up Orders. Further, the Petitioner has considered the normative O&M Expenses as per the true-up Petitions from FY 2017-18 to FY 2019-20. The Commission in its Tariff Order dated 10th November 2020 while truing-up of the O&M expenses from FY 2017-18 & FY 2018-19 had considered the lower of the normative and actual O&M expenses. In light of the same, the Petitioner has considered the normative O&M Expenses as per the true-up Petitions for FY 2017-18 to FY 2019-20 for arriving at the base year norms. The base year O&M expenses for FY 2019-20 are as mentioned below:

Table 5-1: BASE YEAR O&M EXPENSES AS PER THE MYT REGULATIONS 2019

| Particulars | True-up Expenses (Rs. crore) | | | | | Avg. Expenses for Mid-year | Normative Expenses Considered (upto base year) | |
|-------------------|------------------------------|------------|-------------|------------|-------------|----------------------------|------------------------------------------------|---------------------|
| | FY 2015-16 | FY 2016-17 | FY 2017-18* | FY 2018-19 | FY 2019-20* | FY 2017-18 | FY 2018-19 | FY 2019-20 |
| 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 | 460.19 [#] |

*Normative Expenses as per the True-up Petitions

[#]Actual as per the Actual Accounts for FY 2019-20

5.2.3 The Petitioner further submitted that the normative base year R&M expenses computed



for FY 2019-20 as per the methodology in the Regulation 34 is Rs. 365.77 crore, which is significantly lower than actual R&M expenses of the past year or the allowable normative R&M expenses of the past year. It is also important to mention that the allowable R&M expenses for any next financial year cannot be less than allowable expenses in the previous year. Therefore, the Petitioner has considered the base year (FY 2019-20) R&M expenses as per the actuals.

5.2.4 Accordingly, the Petitioner has computed O&M expenses for FY 2020-21 as depicted in the table below:

TABLE 5-2: O&M EXPENSES FOR FY 2020-21 AS PER PETITIONER'S SUBMISSION (Rs. Crore)

| Employee Expenses | FY 2019-20 (Base-Year) | Approved in Order dated 10th November, 2020 | Revised Estimates |
|--------------------------------------------|-----------------------------------|-----------------------------------------------------------------------|--------------------------|
| CPI Inflation Index (%) | - | 5.35% | 5.30% |
| Gross Employee Costs and Provisions | 920.06 | 607.29 | 968.81 |
| <i>Less: Employee expenses capitalized</i> | 255.21 | 371.63 | 386.18 |
| Net Employee Expenses | 664.85 | 235.66 | 582.63 |
| A&G Expenses | FY 2019-20 (Base-Year) | Approved in Order dated 10th November, 2020 | Revised Estimates |
| WPI Inflation Index (%) | - | 2.96% | 2.96% |
| A&G Expenses | 49.36 | 47.08 | 50.82 |
| <i>Less: A&G Expenses Capitalised</i> | 0.00 | 0.00 | 0.00 |
| Net A&G Expenses | 46.36 | 47.08 | 50.82 |
| R & M Expenses | FY 2019-20 (Base-Year) | Approved in Order dated 10th November, 2020 | Revised Estimates |
| WPI Inflation Index (%) | - | 2.96% | 2.96% |
| R & M Expenses | 460.19 | 307.64 | 473.82 |
| Net O&M Expenses | 1174.40 | 590.38 | 1107.28 |

5.2.5 The Petitioner also submitted that the employee expenses capitalized for FY 2020-21 have been considered at the same rate as per the annual accounts of FY 2019-20.

Commission's Analysis

5.2.6 The overall O&M expenses claimed by the Petitioner have increased as compared to the O&M expenses approved in Tariff Order dated November 10, 2020 for the FY 2020-21.



The prudence of the same will be done at the time of Truing-up.

5.3 GROSS FIXED ASSETS BALANCES AND CAPITAL FORMATION

Petitioner's Submission

5.3.1 The Petitioner has submitted the assumptions used for projecting gross fixed asset (GFA) and capital work in progress (CWIP) and are as follows:

5.3.2 The Petitioner has estimated the capital investment for FY 2020-21 based on the expected expenditure to be made towards the ongoing projects or schemes and those completed in FY 2020-21.

5.3.3 The capital investment for FY 2020-21 has been estimated as per the table below:

TABLE 5-3: CAPITAL INVESTMENT FOR FY 2020-21 AS PER PETITIONER'S SUBMISSION (Rs. Crore)

| Financing | Approved in Order dated 10 th November, 2020 | Revised Estimates |
|-------------------------------------------------|------------------------------------------------------------|-------------------|
| Grant towards the Green Energy Corridor (@ 40%) | 0.00 | 0.00 |
| Consumer Contribution/Deposit Works | 369.94 | 400.41 |
| Debt | 3,108.39 | 2,612.27 |
| Equity | 1,332.17 | 1,119.54 |
| Total Investment | 4,810.49 | 4,132.22 |

5.3.4 The details of the capital expenditure are provided below:

Table 5-4: BREAK-UP OF CAPITAL INVESTMENT FOR FY 2020-21 AS PER PETITIONER'S SUBMISSION (Rs. Crore)

| CAPEX | FY 2020-21 | |
|----------------------------------------|-------------------------------------------------|-----------------|
| | As per Business Plan Order Dt. 15.10.2020 | APR Petition |
| New/Ongoing Projects | 3,436.34 | 3,092.71 |
| Green Energy Corridor II (Solar Power) | 334.64 | 0.00 |
| Augmentation | 593.54 | 593.54 |
| System Strengthening (Lines & Bays) | 358.98 | 358.98 |
| Addition of Capacitor/Reactor | 87.00 | 87.00 |
| Total | 4,810.50 | 4,132.22 |



- 5.3.5 The Petitioner submitted that the above capital expenditure as per the business plan has been revised in view of the ongoing COVID-19 and change in the timelines of the projects. Further, the petitioner submitted that in the absence of MNRE's approval of the grant, the GEC-II projects could not be taken in FY 2020-21. Hence, any expenditure towards the same has not been considered in the APR petition for FY 2020-21.
- 5.3.6 The petitioner submitted that investment through "deposit work" has been taken for capital formation. The total consumer contribution considered towards the capital formation in FY 2020-21 is Rs. 400.41 crore. The same has been considered as an average of actual consumer contribution in the past 3 years. Further, no grant has been considered for FY 2020-21. Further, the total capital investment planned for FY 2020-21 is Rs. 4,132.22 crore, which is towards ongoing and new schemes.
- 5.3.7 The Petitioner further submitted that 25% of the opening CWIP and 25% of investment made during the year, expenses capitalised & interest capitalised (25% of total investment) has been assumed to be capitalised during the year for FY 2020-21, in line with the past practice of the Commission.
- 5.3.8 The capital investment plan (net of deposit works) has been projected to be funded in the ratio of 70:30 (debt to equity).
- 5.3.9 Considering the aforementioned submissions, the projected capital formation and capital work in progress for FY 2020-21 is presented below:

TABLE 5-5: PROJECTIONS OF CAPITALISATION & WIP OF INVESTMENT FOR FY 2020-21 AS PER PETITIONER'S SUBMISSION (Rs. Crore)

| Particulars | Derivation | Approved in Order dated 10 th November, 2020 | Revised Estimates |
|--------------------------------------------------------|---------------|---------------------------------------------------------|-------------------|
| Opening WIP as on 1st April | A | 7,441.00 | 7,837.75 |
| Investments | B | 4,810.49 | 4,132.22 |
| Employee Expenses Capitalisation | C | 371.63 | 386.18 |
| A&G Expenses Capitalisation | D | 0.00 | 0.00 |
| Interest Capitalisation on Interest on long term loans | E | 298.36 | 162.49 |
| Total Investments | F= A+B+C+D+E | 12,921.48 | 12,518.64 |
| Transferred to GFA (Total Capitalisation) | G | 3,230.47 | 3,129.66 |
| Closing WIP | H= F-G | 9,691.11 | 9388.98 |



5.3.10 The Petitioner has considered the actual closing CWIP of FY 2019-20 as per the provisional accounts as opening for the FY 2020-21, in light of the discussion and submission in the previous sections regarding allowing the CWIP, GFA balance, capital expenditure and capitalisation on actuals up to FY 2019-20 and the disallowance made in CWIP and GFA by the Commission for FY 2017-18 and FY 2018-19 in the Tariff Order dated 10th November 2020, which has not been considered in the current petition. The GFA balance considered for the FY 2020-21 is provided below:

TABLE 5-6: PROJECTIONS OF GROSS FIXED ASSETS FOR FY 2020-21 AS PER PETITIONER'S SUBMISSION (Rs. Crore)

| Particulars | Derivation | Approved in Order dated 10 th November, 2020 | Revised Estimates |
|-----------------------------|------------|---------------------------------------------------------|-------------------|
| Opening GFA | A | 27,268.44 | 28,543.10 |
| Net Addition to GFA | B | 3,230.37 | 3,129.66 |
| Decapitalisation/ deduction | C | 313.00 | 0.00 |
| Closing GFA | C=A+B-C | 30,185.81 | 31,672.76 |

5.3.11 Further, in line with the Regulation 20.2 and the methodology considered by the Hon'ble Commission the fixed asset base (in which the retirement or replacement or de-capitalisation of the assets is accounted for) computed as on 31.03.2020 (taking into consideration the True-Up to FY 2019-20), the equity capital as on 1.4.2020, has been computed to the extent of 30% of such fixed asset base and the debt capital has been computed to the extent of 70% of such fixed asset base. Accordingly, the Debt and equity as on 1.4.2020, computed for FY 2020-21 is shown below:

Table 5-7: PROJECTIONS OF OPENING EQUITY & LOAN AS PER PETITIONER'S SUBMISSION (Rs. Crore)

| Particulars | Derivation | Approved in Order dated 10 th November, 2020 | Revised Estimates |
|------------------------------------------------------------------------------------------------|------------|---------------------------------------------------------|-------------------|
| Opening GFA | A | 27,268.44 | 28,543.10 |
| Opening Balance of Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets | B | 1,513.05 | 1,613.12 |
| Net Opening GFA | C=A-B | 25,755.39 | 26,929.98 |
| Opening Debt | E=C*70% | 18,028.77 | 18,850.99 |
| Opening Equity | D=C*30% | 7,726.62 | 8,078.99 |



Commission's Analysis

5.3.12 The Commission observes that the Petitioner has considered the normative closing GFA for FY 2019-20 as the opening GFA for FY 2020-21, which is the main reason for the difference in the claimed figure of the Petitioner against the numbers approved in last year's Tariff Order. The prudence check of the same will be done at the time of Truing-up.

5.4 FINANCING OF THE CAPITAL INVESTMENT

Petitioner's Submission

5.4.1 The Petitioner has considered a normative debt: equity ratio for financing of the capital investment for FY 2020-21. Considering this approach, 70% of the capital expenditure undertaken in any year has been considered to be financed through loan and balance 30% has been considered to be financed through equity contributions. The portion of capital expenditure financed through consumer contribution, capital subsidies and grants has been separated as the depreciation and interest thereon would not be charged to the beneficiaries.

5.4.2 The total consumer contribution considered towards the capital formation in FY 2020-21 is the total value of the deposit works to be undertaken in FY 2020-21.

5.4.3 The table below summarizes the amounts considered towards consumer contributions, capital grants and subsidies for FY 2020-21:

TABLE 5-8: CONSUMER CONTRIBUTION, CAPITAL GRANTS & SUBSIDIES FOR FY 2020-21 AS PER PETITIONER'S SUBMISSION (Rs. Crore)

| Particulars | Approved in Order dated 10 th November, 2020 | Revised Estimates |
|------------------------------------------------------------------------------------------------|------------------------------------------------------------|-------------------|
| Opening Balance of Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets | 1513.05 | 1613.12 |
| Additions during the year | 369.94 | 400.41 |
| Less: Deductions | 91.28 | 125.84 |
| Closing Balance | 1791.71 | 1887.69 |

TABLE 5-9: FINANCING OF THE CAPITAL INVESTMENT FOR FY 2020-21 AS PER PETITIONER'S SUBMISSION (Rs. Crore)



| Particulars | Derivation | Approved in Order dated 10 th November, 2020 | Revised Estimates |
|--------------------------------------|------------|---------------------------------------------------------|-------------------|
| Investment | A | 4810.49 | 4,132.22 |
| Less: | | | |
| Consumer Contribution | B | 369.94 | 400.41 |
| Investment funded by debt and equity | C=A-B | 4440.55 | 3,731.81 |
| Debt Funded | 70% | 3108.39 | 2,612.27 |
| Equity Funded | 30% | 1332.17 | 1,119.54 |

5.4.4 The Petitioner has submitted that out of the capital investment of Rs. 4,132.22 crore in FY 2020-21, the capital investment through deposit works has been considered as Rs. 400.41 crore. The balance amount is considered to be funded through debt and equity. The debt equity ratio considered for FY 2020-21 is 70:30. The Petitioner is planning large capital expenditure in the MYT period towards new and ongoing works of sub-stations and transmission lines, augmentation schemes and power evacuation schemes. Further, the Regulation 32.2 of the MYT Regulations 2019 provides as:

Quote

“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

5.4.5 The Petitioner in line with the above Regulations is seeking prior approval of the Commission for the new schemes/projects planned or to be undertaken during the period from FY 2020-21 to FY 2024-25.

Commission’s Analysis:

5.4.6 The Commission had approved the Consumer Contributions, capital subsidies and grants to the tune of Rs. 369.94 Crore for FY 2020-21 in Tariff Order dated November 10, 2020. The balance amount has been considered to be funded through debt and equity



considering a debt equity ratio of 70:30. The prudence of the same will be done at the time of Truing-up.

5.5 DEPRECIATION

Petitioner's Submission

5.5.1 Regulation 21 of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019, provide for the basis of charging depreciation. The relevant excerpt is 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 decapitalised assets.

b) Depreciation shall be computed annually based on the Straight- Line Method at the rates stipulated in the Annexure- A of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019.

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.

d) 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

5.5.2 The Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019 provides for calculating depreciation based on the Straight – Line Method basis, whereas the previous MYT Transmission Regulations, 2014 provides for calculation of depreciation on written down value of the fixed assets of the corresponding year. Further, for the allowable depreciation for the assets capitalized upto till 31st March 2020 and those capitalized 1st April 2020 onwards the Commission has observed the following in the Tariff Order dated 10th November 2020:

Quote

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.

Unquote

5.5.3 The Petitioner submitted that the Commission has allowed the depreciation for the gross block upto 31st March 2020 (Part-A) and that capitalized 1st April 2020 onwards (Part-B) separately. Further, for the purpose of computing the allowable depreciation, the Petitioner has considered normative closing gross fixed asset base for FY 2019-20 and subsequent addition and the yearly capitalizations for the FY 2020-21 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 2020-21. The Petitioner in line with the above regulations and methodology adopted by the Commission in the Tariff Order dated 10th November 2020 has computed the allowable depreciation for the Part-A & Part-B as mentioned below:

TABLE 5-10: DEPRECIATION EXPENSE FOR FY 2020-21 FOR THE GROSS BLOCK UPTO 31ST MARCH 2020 (PART-A) AS PER PETITIONER'S SUBMISSION (Rs. Crore)

| Particulars | Opening GFA | Additions to GFA | Deductions to GFA | Closing GFA | Cumulative Depreciation upto 31 st March 2020 | Written Down Value as on 1.4.2020 | Depreciation Rate (%) | Allowable Depreciation |
|---------------------------|-------------|------------------|-------------------|-------------|----------------------------------------------------------|-----------------------------------|-----------------------|------------------------|
| Land & Land Rights | | | | | | | | |
| i) Unclassified | 141.97 | 1.31 | 43.84 | 99.45 | 0.00 | 99.45 | 0.00% | - |
| ii) Freehold Land | 1.35 | 0.09 | 1.29 | 0.06 | 0.00 | 0.06 | 0.00% | - |
| Buildings | 1085.14 | 145.76 | 0.85 | 1230.05 | 323.93 | 906.13 | 3.34% | 30.26 |
| Other Civil Works | 91.63 | 11.91 | 0.00 | 103.54 | 27.27 | 76.27 | 3.34% | 2.55 |
| Plants & Machinery | 12822.19 | 1435.39 | 288.92 | 13968.66 | 3678.53 | 10290.13 | 5.28% | 543.32 |
| Lines, Cable Network etc. | 11314.74 | 1707.37 | 20.61 | 13001.50 | 3423.84 | 9577.66 | 5.28% | 505.70 |
| Vehicles | 3.37 | 0.00 | 0.00 | 3.37 | 0.89 | 2.48 | 9.50% | 0.24 |
| Furniture & Fixtures | 8.74 | 1.23 | 0.00 | 9.98 | 2.63 | 7.35 | 6.33% | 0.47 |
| Office Equipments | 9.55 | 2.56 | 0.00 | 12.11 | 3.19 | 8.92 | 6.33% | 0.56 |
| Jeep & Motor Car | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.50% | - |
| Intangible Assets | 4.27 | 0.03 | 0.00 | 4.30 | 1.13 | 3.16 | 5.28% | 0.17 |



Approval of ARR and Tariff for UPPTCL for FY 2021-22, APR of FY 2020-21 and True-up of FY 2019-20

| Particulars | Opening GFA | Additions to GFA | Deductions to GFA | Closing GFA | Cumulative Depreciation upto 31 st March 2020 | Written Down Value as on 1.4.2020 | Depreciation Rate (%) | Allowable Depreciation |
|----------------------------------------------------------|-----------------|------------------|-------------------|-----------------|----------------------------------------------------------|-----------------------------------|-----------------------|------------------------|
| Assets taken over from Licensees pending final Valuation | 105.44 | 4.74 | 0.10 | 110.09 | 28.99 | 81.10 | 5.28% | 4.28 |
| Total Depreciable Assets | 25444.07 | 3309.00 | 310.48 | 28443.45 | 7490.43 | 20953.03 | 5.19% | 1087.55 |
| Total Non-Depreciable Assets | 143.23 | 1.41 | 45.13 | 99.50 | 0.00 | 99.50 | | 0.00 |
| GRAND TOTAL | 25588.30 | 3310.41 | 355.61 | 28543.10 | 7490.39 | 21052.71 | - | 1087.55 |

Table 5-11: DEPRECIATION EXPENSE FOR FY 2020-21 FOR THE GROSS BLOCK OR ASSETS CAPITALISED 1ST APRIL 2020 ONWARDS (PART-B) AS PER PETITIONER'S SUBMISSION (Rs. Crore)

| Particulars | Opening GFA | Additions to GFA | Deductions to GFA | Closing GFA | Average GFA | Depreciation Rate (%) | Allowable Depreciation |
|----------------------------------------------------------|-------------|------------------|-------------------|----------------|----------------|-----------------------|------------------------|
| Land & Land Rights | | | | | | | |
| i) Unclassified | 0.00 | 17.36 | 0.00 | 17.36 | 8.68 | 0.00% | - |
| ii) Freehold Land | 0.00 | 0.15 | 0.00 | 0.15 | 0.08 | 0.00% | - |
| Buildings | 0.00 | 132.72 | 0.00 | 132.72 | 66.36 | 3.34% | 2.22 |
| Other Civil Works | 0.00 | 11.21 | 0.00 | 11.21 | 5.60 | 3.34% | 0.19 |
| Plants & Machinery | 0.00 | 1568.26 | 0.00 | 1568.26 | 784.13 | 5.28% | 41.40 |
| Lines, Cable Network etc. | 0.00 | 1383.89 | 0.00 | 1383.89 | 691.94 | 5.28% | 36.53 |
| Vehicles | 0.00 | 0.41 | 0.00 | 0.41 | 0.21 | 9.50% | 0.02 |
| Furniture & Fixtures | 0.00 | 1.07 | 0.00 | 1.07 | 0.53 | 6.33% | 0.03 |
| Office Equipments | 0.00 | 1.17 | 0.00 | 1.17 | 0.58 | 6.33% | 0.04 |
| Jeep & Motor Car | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.50% | - |
| Intangible Assets | 0.00 | 0.52 | 0.00 | 0.52 | 0.26 | 5.28% | 0.01 |
| Assets taken over from Licensees pending final Valuation | 0.00 | 12.90 | 0.00 | 12.90 | 6.45 | 5.28% | 0.34 |
| Total Depreciable Assets | 0.00 | 3122.14 | 0.00 | 3122.14 | 1556.07 | 5.19% | 80.78 |
| Total Non Depreciable Assets | 0.00 | 17.52 | 0.00 | 17.52 | 8.76 | | 0.00 |
| GRAND TOTAL | 0.00 | 3129.66 | 0.00 | 3129.66 | 1564.83 | - | 80.78 |

5.5.4 The Petitioner has projected the depreciation on assets created out of consumer contributions, capital grants and subsidies for FY 2020-21 in the same ratio as per annual



accounts of FY 2019-20. The Petitioner has reduced the equivalent depreciation amounting to Rs. 106.18 crore for FY 2020-21 in respect of depreciation on assets created out of consumer contributions, capital grants and subsidies. Thus, the allowable depreciation for FY 2020-21 has been depicted in the table below:

Table 5-12: GROSS ALLOWABLE DEPRECIATION FOR FY 2020-21 AS PER PETITIONER'S SUBMISSION

| Particulars | Approved in Order dated 10 th November, 2020 | Revised Estimates |
|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|-------------------|
| Allowable Depreciation for assets upto 31.03.2020 | 996.51 | 1087.55 |
| Allowable Depreciation for assets capitalised 01.04.2020 | 83.39 | 80.78 |
| Gross Allowable Depreciation | 1079.90 | 1168.33 |
| Less: Equivalent amount of depreciation on assets acquired out of the consumer contribution and GoUP Subsidy | 91.28 | 106.18 |
| Net Allowable Depreciation | 988.62 | 1062.15 |

5.5.5 The Petitioner further submits 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. However, the Commission in its Tariff Orders dated 8th January 2019 and 27th August 2019 while approving the revised ARR for FY 2018-19 & FY 2019-20 has allowed the net depreciation after deducting the equivalent amount of depreciation on assets acquired out of the consumer contribution. The petitioner has considered the same approach while claiming the net depreciation amount for FY 2020-21. The Income from Consumer Contribution recognized as revenue (or equivalent depreciation amount) in FY 2020-21 has been projected as the percentage of the Non-tariff income (in the same ratio as in the annual accounts of FY 2019-20).

5.5.6 Thus, the Petitioner requests the Commission to consider the net depreciation amount of Rs. 1062.15 crore for FY 2020-21.

Commission's Analysis

5.5.7 The Commission has carried out comparison of each component of APR as claimed by the Petitioner with that approved vide Tariff Order dated November 10, 2020 for FY 2020-21. The Commission will carry out the detailed prudence check of various components of APR for FY 2020-21 while carrying out the truing up for FY 2020-21.



5.6 INTEREST ON LONG TERM LOANS

Petitioner's Submission

5.6.1 The Petitioner submitted that it has considered a normative tariff approach with a gearing of 70:30. In this approach, 70% of the capital expenditure undertaken in any year has been considered to be financed through loan and balance 30% has been considered to be funded through equity contributions. The Commission in the Tariff Order dated 10th November 2020 has 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

5.6.2 Accordingly, the normative opening loan as on 1st April 2020 is worked out as below:

Table 5-13: OPENING NORMATIVE LOAN AS ON 1ST APRIL 2020 AS SUBMITTED BY PETITIONER (Rs. Crore)

| Particulars | Derivation | Approved in Order dated 10 th November, 2020 | Revised Estimates |
|----------------------------------------------|------------|---------------------------------------------------------|-------------------|
| Opening Debt | A | 18,028.77 | 18,850.99 |
| Cumulative Net Depreciation up to 31.03.2020 | B | 7,344.64 | 7,490.39 |
| Opening Normative Loan | C=A-B | 10,684.13 | 11,360.60 |

5.6.3 Further, for the purpose of the computation of the normative interest on loan the Petitioner has considered the loan addition as 70% of the actual capitalisation after adjusting the consumer contribution and grants.

5.6.4 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.

5.6.5 Allowable 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 2019-20



has been considered for FY 2020-21, as it seems to be fair and equitable. The interest capitalisation has been considered at a rate of 12.62% for FY 2020-21 which is the actual capitalization for FY 2019-20 as per the audited annual accounts. The computations for interest on long term loan are depicted below:

TABLE 5-14: INTEREST ON LONG TERM LOANS FOR FY 2020-21 AS SUBMITTED BY PETITIONER (Rs. Crore)

| Particulars | Approved in Order dated 10 th November, 2020 | Revised Estimates |
|--------------------------------------------------------|---------------------------------------------------------|-------------------|
| Opening Loan | 10,684.13 | 11,360.60 |
| Loan Additions (70% of Investments) | 1,783.20 | 1,910.47 |
| Less: Repayments (Depreciation allowable for the year) | 9,88.62 | 1,062.15 |
| Closing Loan Balance | 11,478.71 | 12,208.92 |
| Weighted Average Rate of Interest (%) | 10.72% | 10.93% |
| Interest on long term loan | 1,187.47 | 1,287.61 |
| Interest Capitalisation Rate (%) | 25.13% | 12.62% |
| Less: Interest Capitalized | 298.36 | 162.49 |
| Net Interest Charged | 889.11 | 1,125.12 |

Commission's Analysis

5.6.6 The Commission has considered the normative approach with debt: equity ratio of 70: 30 specified in the Transmission MYT Regulations, 2019. The portion of capital expenditure financed through Consumer Contributions and grants has been separated as the depreciation thereon would not be charged to the consumers. Further, the allowable depreciation for the year has been considered for normative loan repayment. The Commission will carry out the detailed prudence check of Interest on Long term Loan while carrying out the truing up for FY 2020-21.

5.7 FINANCE CHARGES

Petitioner's Submission

5.7.1 The Petitioner has estimated the finance charges towards expenses such as guarantee fees and bank charges to the tune of Rs. 0.09 crore in FY 2020-21.

Commission's Analysis



5.7.2 Finance charges are part of A&G expenses from FY 2020-21 onwards as per MYT Regulations 2019.

5.8 INTEREST ON WORKING CAPITAL

5.8.1 Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019, provides for normative interest on working Capital based on the methodology outlined in the Regulations. The interest on working capital has been computed based on the methodology specified in the Regulation 25 as provided below:

Quote

“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;

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

Petitioner’s Submission

5.8.2 The Petitioner submitted that in accordance with the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019, the interest on the working capital requirement is considered as the current State Bank



Marginal Cost of Funds based Lending Rate (MCLR) i.e. 10.65%. The Petitioner has, in accordance with the above mentioned MYT Regulations 2019, considered the interest on working capital which is as shown in the table below:

TABLE 5-15: INTEREST ON WORKING CAPITAL FOR FY 2020-21 AS SUBMITTED BY PETITIONER (Rs. Crore)

| Particulars | Approved in Order dated 10 th November, 2020 | Revised Estimates |
|---------------------------------------------------------------|---------------------------------------------------------|-------------------|
| One Month of O&M Expenses | 49.20 | 124.45 |
| Maintenance spares @ 40% of R&M expenses for two months | 20.51 | 31.59 |
| Receivable equivalent to 45 days average billing of consumers | 251.57 | 351.88 |
| Less: Security deposits from consumers | - | |
| Total Working Capital Requirement | 321.28 | 507.46 |
| Interest rate (%) | 10.65% | 10.65% |
| Interest on working capital | 34.22 | 54.04 |

Commission's Analysis

5.8.3 The interest on working capital claimed by the Petitioner has increased as compared to the interest on working capital expenses approved in Tariff Order dated November 10, 2020 for the FY 2020-21. The prudence of the same will be done at the time of Truing-up.

5.9 OTHER INCOME

Petitioner's Submission

5.9.1 Other Income includes only non-tariff income, which comprises 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 is also booked under the other incomes in the annual accounts. The non-tariff income for FY 2020-21 is claimed as Rs. 230.39 crore. The same has been projected after deducting the estimated amount of income from Consumer Contribution from the total non-tariff income for the year. The non-tariff income for FY 2020-21 has been projected based on the actual non-tariff income of FY 2019-20 as per the provisional accounts which includes one-time income received towards the repayment of loan principal from GoUP. However, at the time of



truing-up for FY 2020-21 the overall non-tariff income shall be considered on actual basis for the purpose of computation of the allowable ARR.

Commission's Analysis

5.9.2 The Commission has noted the submission of the Petitioner. The Commission will do prudence check at the time of True-Up of FY 2020-21.

5.10 RETURN ON EQUITY

Petitioner's Submission

5.10.1 Under provisions of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019, the Petitioner is eligible to a return of @ 14.5% on equity base; for equity base calculation debt equity ratio shall be 70:30. Where equity involved 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. In this Petition, the return on equity has been computed as per methodology adopted by the Hon'ble Commission in the previous Tariff Orders.

5.10.2 In view of the 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 the financial year 2009-10 onwards. Return on equity has been computed on the normative equity portion (30%) of capitalized assets.

5.10.3 The Petitioner has computed the eligible return on equity by considering the opening normative equity as on 1st April 2020 as discussed above. Subsequently, it has considered the normative equity closing based on the capital additions for the FY 2020-21 depicted in aforementioned sections.

5.10.4 Thus, the claimed return on equity for FY 2020-21 has been computed to be Rs. 169.77 Crores for FY 2020-21 as depicted in the table below:

TABLE 5-16: ALLOWABLE RETURN ON EQUITY FOR FY 2020-21 AS SUBMITTED BY PETITIONER (Rs. Crore)



| Particulars | Derivation | Approved in Order dated 10 th November, 2020 | Revised Estimates |
|-------------------------------------|----------------------|------------------------------------------------------------|-------------------|
| Equity at the beginning of the year | A | 7726.62 | 8,078.99 |
| Assets Capitalised | B | 3230.37 | 3,129.66 |
| Net Additions during the year | C | 764.23 | 818.77 |
| Closing Equity | D = A + C | 8490.84 | 8,897.77 |
| Average Equity | E = Average of A & D | 8108.73 | 8,488.38 |
| Rate of Return (%) | F | 2.00% | 2.00% |
| Return on Equity | G = E x F | 162.17 | 169.77 |

Commission's Analysis

5.10.5 The Commission analysed that the increase in claimed amount of the Return on Equity by the Petitioner is because of the increase in the equity at the beginning of the year. The Commission will do prudence check at the time of True-Up of FY 2020-21.

5.11 SUMMARY OF ARR AS PER THE ANNUAL PERFORMANCE REVIEW FOR FY 2020-21

5.11.1 The revised ARR as per the Annual Performance Review for FY 2020-21 is summarized in the table below:

TABLE 5-17: APR FOR FY 2020-21 AS SUBMITTED BY PETITIONER (Rs. Crore)

| Particulars | ARR (as per Order dated 10 th November 2020) | APR Petition |
|----------------------------------------|---------------------------------------------------------------|-----------------|
| Employee cost | 607.29 | 968.81 |
| A&G expenses | 47.08 | 50.82 |
| R&M expenses | 307.64 | 473.82 |
| Interest on Loan Capital | 1,187.47 | 1,287.61 |
| Interest on Working Capital | 34.22 | 54.04 |
| Finance Charges | - | 0.09 |
| Depreciation | 988.62 | 1,062.15 |
| Gross Expenditure | 3,172.32 | 3,897.34 |
| <i>Less: Employee cost capitalized</i> | 371.63 | 386.18 |



Approval of ARR and Tariff for UPPTCL for FY 2021-22, APR of FY 2020-21 and True-up of FY 2019-20

| Particulars | ARR (as per Order dated 10 th November 2020) | APR Petition |
|-------------------------------------------------------------------------------|---------------------------------------------------------------|-----------------|
| <i>Less: A&G Capitalisation</i> | 0.00 | 0.00 |
| <i>Less: Interest Capitalisation</i> | 298.36 | 162.49 |
| Net Expenditure | 2,502.33 | 3,348.67 |
| <i>Provision for Bad & Doubtful debts</i> | 0.00 | 0.00 |
| Prior Period Items, Debits, write-offs & other expenses/Comprehensive Incomes | 0.00 | 0.00 |
| Net Expenditure with provisions | 2,502.33 | 3,348.67 |
| Add: Return on Equity | 162.17 | 169.77 |
| Less: Non-Tariff Income | 75.36 | 230.39 |
| Annual Revenue Requirement (ARR) | 2,589.14 | 3,288.05 |

- 5.11.2 The revised ARR for FY 2020-21 as estimated by the Petitioner is Rs. 3,288.05 Crore as against Rs. 2,589.14 Crore approved in the Tariff Order dated November 10, 2020. Further, the Petitioner has neither mentioned the estimated revenue for FY 2020-21, nor claimed any Revenue Gap for FY 2020-21.
- 5.11.3 As discussed earlier, the Commission shall determine Revenue Gap/Surplus for FY 2020-21 during the truing up exercise.



6 AGGREGATE REVENUE REQUIREMENT FOR FY 2021-22

6.1 INTRODUCTION

6.1.1 As per the UPERC MYT (Distribution & Transmission) Regulations, 2019, the ARR includes the following components:

- (a) Operation and Maintenance Expenses
 - Employee Expenses
 - Administration & General Expenses
 - Repairs and Maintenance Expenses
- (b) Interest on Loan Capital
- (c) Interest on Working Capital
- (d) Depreciation Expenses
- (e) Return on Equity
- (f) Non-tariff income
- (g) Tax on Income
- (h) Income from Other Business
- (i) Any other relevant expenditure

6.1.2 The Petitioner has submitted the Aggregate Revenue Requirement (ARR) and tariff for the FY 2021-22 as per the provisions of the MYT Regulations 2019 and projections of the expenses and capital expenditure. The Petitioner had filed the ARR and tariff petition for FY 2020-21 on 11th March 2020 in line with the MYT Regulations 2019 and as per capital investment proposed in the Business Plan petition for the MYT Period from FY 2020-21 to FY 2024-25 submitted on 3rd March 2020 and in the subsequent revised submissions. The Commission vide Tariff Order dated 10th November 2020 had approved the ARR for FY 2020-21. The Petitioner through instant Petition filed by the Petitioner on 03.12.2020 is seeking ARR and tariff for FY 2021-22.

6.1.3 Further, the Commission has scrutinised the petition filed by the petitioner and based upon preliminary examination, it was found that there were certain defects/data gaps in the petition. The same were communicated to the petitioner. The Petitioner in regards to deficiency raised by the commission and due to late submission of audited accounts of FY 2019-20 on account of ongoing COVID-19 pandemic submitted the revised ARR for FY 2021-22 in accordance with the directions of the commission.

6.1.4 Further, a Technical Validation Session was held to deliberate on certain issues and the



Petitioner has submitted the revised submission according to the discrepancies raised by the Commission.

6.1.5 It is pertinent to mention that in order to arrive at the openings required for determination of ARR for FY 2021-22, the closing values of trued-up have been considered, which have further been considered for opening values for FY 2020-21. Accordingly, the Closing values for FY 2020-21 have been determined and considered as opening values of FY 2021-22.

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

6.2 TRANSMISSION LOSSES

Petitioner's Submission

6.2.1 In the Tariff Order dated November 10, 2020, the Commission had approved intra-State transmission losses of 3.50% for FY 2020-21.

6.2.2 The Petitioner has claimed the intra-State transmission losses of 3.33% for FY 2021-22.

Commission's Analysis

6.2.3 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 15.10.2020. Therefore, the Commission approves the transmission losses of 3.33% for FY 2021-22 in accordance with the MYT Business Plan Order dated 15.10.2020 for the control period FY 2020-21 to FY 2024-25.

6.3 CAPITAL INVESTMENT AND CAPITALIZATION

Petitioner's Submission

6.3.1 The Petitioner has submitted that some assumptions were used for projecting Gross Fixed Asset (GFA) and Capital Work in Progress (CWIP). The petitioner has estimated the capital investment for FY 2021-22 based on the expected expenditure to be made towards the ongoing projects or schemes and those towards the new projects to be undertaken in FY 2021-22. The Petitioner has further submitted the details of the ongoing and new projects or schemes for the period from FY 2019-20 to FY 2021-22 and has submitted the revised capital investment for FY 2021-22.



6.3.2 The capital investment for FY 2021-22 has been estimated by the Petitioner as per the table below:

Table 6-1: CAPITAL INVESTMENT FOR FY 2021-22 AS SUBMITTED BY THE PETITIONER

| Financing | FY 2021-22 |
|------------------------------|-------------------|
| Investment | 5123.22 |
| Consumer Contribution/ Grant | 829.56 |
| Debt | 3005.56 |
| Equity | 1288.10 |
| Total Investment | 4293.66 |

6.3.3 The Petitioner submitted that the capital expenditure as per the business plan has been revised in view of the ongoing COVID-19 pandemic considering change in the timelines for execution of projects. Further, the Petitioner submitted that the proposed CAPEX and timeline for the FY 2021-22 is also changed considering the Government approval of extension of timelines, 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 declared by GoUP.

6.3.4 Further, the MNRE's approval for the grant is expected by FY 2021-22 for the GEC-II projects. Hence, the expenditure towards the same has been considered from FY 2021-22 onwards. Further, the Petitioner also submitted the progress of the schemes/projects planned for FY 2020-21 to FY 2021-22

6.3.5 The Petitioner has further submitted that Investment through "deposit work" has been taken for capital formation. The total consumer contribution considered towards the capital formation in FY 2021-22 is Rs. 829.56 crore. The same has been considered as the average of actual consumer contribution in the past 3 years. Further, grant @40% has been considered towards the expenditure for the assets under the Green Energy Corridor (GEC-II) during FY 2021-22. Further, the total capital investment planned for FY 2021-22 is Rs. 5,123.22 Crore which is towards ongoing and new schemes.

6.3.6 Further, 25% of the opening CWIP and 25% of investment made during the year, expenses capitalised & interest capitalised (25% of total investment) has been assumed to be capitalised during the year for FY 2021-22, in line with the past practice of the Commission. The capital investment plan (net of deposit works) has been projected to be funded in the ratio of 70:30 (debt to equity).

Commission's Analysis

6.3.7 The MYT Distribution & Transmission Regulations, 2019 provide as under:



Quote

“ 18 Capital Expenditure/ Cost and Capital Structure

Capital cost for a capital investment Project shall include:

the expenditure incurred or projected to be incurred, including interest during construction and financing charges, as admitted by the Commission after prudence check;

capitalised initial spares subject to the ceiling rates stipulated in these Regulations;

expenses incurred by the Licensee on obtaining right of way, as admitted by the Commission after prudence check;

additional capital expenditure determined under Regulation 19;

Incidental expenditure during construction including apportioned expenditure on relevant components of O&M:

Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost;

any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed up to the date of commercial operation, as admitted by the Commission after prudence check:

Provided that any gain or loss on account of foreign exchange risk variation pertaining to the loan amount availed up to the date of commercial operation shall be adjusted only against the debt component of the capital cost:

Provided further that the capital cost of the assets forming part of the Project but not put to use or not in use, shall be excluded from the capital cost:

Provided also that the Licensee shall submit documentary evidence in support of its claim of assets being put to use;

The capital cost admitted by the Commission after prudence check shall form the basis for determination of Tariff.

The capital cost admitted by the Commission after prudence check shall form the basis for determination of Tariff.

The actual capital expenditure on a scheme as on COD for the original scope of work based on audited accounts of the Licensee or Project, as the case may be, shall be considered subject to prudence check by the Commission.



Capital cost to be allowed by the Commission for the purpose of determination of Tariff will be based on the capital investment plan prepared by the Licensee and approved by the Commission, prior to the Petition for determination of ARR / Tariff filing

.....

19 Additional Capitalisation

19.1 *The capital expenditure, **actually incurred or projected to be incurred, on the following counts within the original scope of work, after the date of commercial operation and up to the cut-off date, may be admitted by the Commission subject to prudence check:***

- (i) *Undischarged liabilities recognized to be payable at a future date;*
- (ii) *Works deferred for execution;*
- (iii) *Procurement of initial capital spares within the original scope of work, in accordance with the provisions of Regulation 18;*
- (iv) *Liabilities to meet award of arbitration or for compliance of the Order or decree of a court of law; and*
- (v) *Change in law or compliance of any existing law*

Provided that the details of works included in the original scope of work along with estimates of expenditure, liabilities recognized to be payable at a future date and the works deferred for execution shall be submitted along with the Petition for determination of final Tariff after the date of commercial operation.

19.2 *The capital expenditure, incurred or projected to be incurred on the following counts after the cut-off date, may be admitted by the Commission, subject to prudence check:*

- (i) *Liabilities to meet award of arbitration or for compliance of the Order or decree of a court of law;*
- (ii) *Change in law or compliance of any existing law;*
- (iii) *Any liability for works executed prior to the cut-off date, after prudence check of the details of such undischarged liability, total estimated cost of package, reasons for such withholding of payment and release of such payments, etc.;*



(iv) Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;

(v) Any additional capital expenditure which has become necessary for efficient operation

Provided that the claim shall be substantiated with the technical justification duly supported by documentary evidence like test results carried out by an independent agency in case of deterioration of assets, damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;

(vi) Any additional expenditure on items such as relays, control and instrumentation, computer system, power line carrier communication, batteries, tower strengthening, communication equipment, emergency restoration system, insulators cleaning infrastructure, which has become necessary for successful and efficient operation of Transmission System; and

(vii) Any capital expenditure found justified after prudence check necessitated on account of modifications required:

Provided that any expenditure, which has been claimed under Renovation and Modernisation or repairs and maintenance under O&M expenses, shall not be claimed under Additional Capitalisation.

19.3 Impact of additional capitalisation on Tariff, if any, shall be considered during Tariff determination proceedings.

.....

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.*

32.3 *The Capital Investment Plan shall be accompanied by such information, particulars and documents as may be required including but not limited to the information such as number of bays, name, configuration and location of grid substations, substation capacity (MVA), transmission line length (circuit kilometres) showing the need for the proposed investments, alternatives considered, cost/benefit analysis, total cost of ownership and other aspects that may have a bearing on the transmission charges.*

32.4 *The Capital Investment Plan of the Transmission Licensee shall be consistent with the Transmission System plan for the Intra-State Transmission System developed by the State Transmission Utility:*

Provided that any capital expenditure incurred by the Transmission Licensee based on the specific requirement of a Distribution Licensee shall be substantiated with necessary documentary evidence in the form of request for the same and undertaking given as appropriate.

32.5 *The Commission shall consider the Capital Investment Plan, which will be a part of Business Plan for the entire Control Period submitted by the Transmission Licensee taking into consideration the prudence check of the proposed expenditure and estimated impact on transmission charges.*

32.6 *The Transmission Licensee shall submit, along with the Petition for determination of ARR or along with the Petition for **Annual Performance Review, as the case may be, details showing the progress of capital expenditure projects, together** with such other information, particulars or documents as the Commission may require to assess such progress.*

(emphasis added)

Unquote



- 6.3.8 As per Regulation 32.2 of UPERC MYT Regulations, 2019 the petitioner has to submit the complete capital investment plan and take prior approval of projects above Rs. 20 Crores and 220 kV.
- 6.3.9 The Commission has observed that the Petitioner has informed the Commission regarding the execution and completion of the schemes undertaken by it in the existing Control Period and the Petitioner has been submitting capital investment schemes for prior approval of Commission.
- 6.3.10 Therefore, in line with the above, the Commission has considered the following assumptions for the computation of GFA & CWIP for FY 2021-22:
- (a) to allow 100% of the claimed capital investments for FY 2021-22.
 - (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 claimed by the petitioner and in accordance to the past practice.
- 6.3.11 It is to be noted that if the Licensee fails to take separate approval(s) for projects above Rs. 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 at the time of True-up.
- 6.3.12 Accordingly, the projected Capital formation and Capital Work in Progress and GFA allowed for FY 2021-22 is presented below:

Table 6-2: PROJECTIONS OF CAPITALISATION & WIP OF INVESTMENT DURING FY 2021-22 AS APPROVED BY COMMISSION'S (RS. CRORE)

| Particulars | Derivation | Claimed | Approved |
|--------------------------------------------------------|--------------------|-----------------|-----------------|
| Opening WIP as on 1st April | A | 9388.98 | 8315.33 |
| Investments | B | 5123.22 | 5123.22 |
| Employee Expenses Capitalisation | C | 406.64 | 406.64 |
| A&G Capitalisation | D | 0.00 | 0 |
| Interest Capitalisation on Interest on long term loans | E | 174.40 | 180.94 |
| Total Investments | F=A+B+C+D+E | 15093.24 | 14026.13 |
| Transferred to GFA (Total Capitalisation) | G | 3773.31 | 3506.53 |
| Closing WIP | H=F-G | 11319.93 | 10519.60 |



6.4 FINANCING OF THE CAPITAL INVESTMENT

Petitioner's Submission

- 6.4.1 The Petitioner submitted that they have considered a normative Debt: Equity (70:30) ratio for financing of the capital investment for FY 2021-22. Considering this approach, 70% of the capital expenditure undertaken in any year has been considered to be financed through loan and balance 30% has been considered to be financed through equity contributions. The portion of capital expenditure financed through consumer contribution, capital subsidies and grants has been separated as the depreciation and interest thereon would not be charged to the beneficiaries.
- 6.4.2 Further, the Petitioner submitted that the total consumer contribution considered towards the capital formation in FY 2021-22 is the total value of the deposit works to be undertaken in FY 2021-22.
- 6.4.3 Thus, the Petitioner submits that out of the capital investment of Rs. 5123.22 Crore in FY 2021-22, the capital investment through Consumer Contribution has been considered as Rs. 829.56 Crore. The balance amount is considered to be funded through debt and equity. The debt equity ratio considered for FY 2021-22 is 70:30. The Petitioner is planning large capital expenditure in the MYT period towards new and ongoing works of sub-stations and transmission lines, augmentation schemes and power evacuation schemes.
- 6.4.4 The financing of the capital investment as per Petitioner's submission is depicted in the table below:

Table 6-3: FINANCING OF CAPITAL INVESTMENT FOR FY 2021-22 AS SUBMITTED BY THE PETITIONER (RS. CRORE)

| Particulars | Derivation | Claimed |
|--------------------------------------|------------|---------|
| Investment | A | 5123.22 |
| Less: | | |
| Consumer Contribution | B | 829.56 |
| Investment funded by debt and equity | C=A-B | 4293.66 |
| Debt Funded | 70% | 3005.56 |
| Equity Funded | 30% | 1288.10 |

Commission's Analysis



6.4.5 The Regulation 20 of the UPERC MYT Regulations, 2019 is as follows:

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

6.4.6 For the purpose of arriving at the opening values of FY 2021-22, the Commission has computed the values for FY 2020-21. For APR of FY 2020-21, the Licensee has claimed an investment of Rs. 4132.22 Crores and GFA addition of Rs. 3129.66 Crores. However, 100% of the investment during the year has been considered i.e. Rs. 4132.22 Crores and accordingly the GFA addition of Rs. 2782.10 Crores computed. The projected Capital formation and Capital Work in Progress and GFA computed for FY 2020-21 is as shown in table below:

Table 6-4: CAPITAL INVESTMENT FOR FY 2020-21 COMPUTED PROVISIONALLY (RS. CRORE)

| Particulars | Derivation | Tariff Order dt. 10.11.2020 | Claimed in APR | Computed (provisional) |
|--------------------------------------------------------------------------|--------------------|--------------------------------|-----------------|------------------------|
| Opening WIP as on 1st April | A | 7441.00 | 7837.75 | 6430.67 |
| Investments (during the year) | B | 4810.49 | 4132.22 | 4132.22 |
| Employee expenses capitalisation (during the year) | C | 371.63 | 386.18 | 386.18 |
| A&G expenses capitalisation (during the year) | D | 0.00 | 0.00 | 0 |
| Interest capitalisation in Interest on long term loans (during the year) | E | 298.36 | 162.49 | 138.03 |
| Total Investments | F=A+B+C+D+E | 12921.48 | 12518.64 | 11087.11 |
| Transferred to GFA (total capitalisation) (during the year) | G=F*25% | 3230.47 | 3129.66 | 2771.78 |
| Closing WIP | H=F-G | 9691.11 | 9388.98 | 8315.33 |

6.4.7 The Commission has considered the trued-up closing GFA of FY 2019-20 as the opening GFA of FY 2020-21. The closing GFA has been computed after considering Net addition to the GFA during the year as shown in table below:

Table 6-5: PROJECTIONS OF GROSS FIXED ASSETS FOR FY 2020-21 AS COMPUTED (Rs. Crore)

| Particulars | Derivation | Claimed | Computed (provisional) |
|---------------------------------|------------|---------|------------------------|
| Opening GFA | A | 0.00 | 27148.60 |
| Addition to GFA during the year | B | 3129.66 | 2771.78 |
| Decapitalisation/ deduction | C | 0.00 | 230.02 |



| Particulars | Derivation | Claimed | Computed (provisional) |
|-------------|------------|---------|------------------------|
| Closing GFA | D=A+B-C | 3129.66 | 29690.36 |

6.4.8 The Table below summarises the amounts considered towards Consumer Contributions, capital grants and subsidies for FY 2020-21:

Table 6-6: CONSUMER CONTRIBUTION, CAPITAL GRANTS & SUBSIDIES PROVISIONALLY COMPUTED BY THE COMMISSION FOR FY 2020-21 (RS. CRORE)

| Particulars | Claimed | Computed (provisional) |
|------------------------------------------------------------------------------------------------|----------------|------------------------|
| Opening Balance of Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets | 1613.12 | 1625.73 |
| Additions during the year | 400.41 | 400.41 |
| Less: Deductions | 125.84 | 106.18 |
| Closing Balance | 1887.69 | 1919.96 |

6.4.9 The closing GFA and consumer contribution of FY 2020-21, as computed above, has been considered as the opening GFA and consumer contribution of FY 2021-22 as shown in table below:

Table 6-7: PROJECTIONS OF GROSS FIXED ASSETS AS APPROVED BY THE COMMISSION FOR FY 2021-22 (Rs. Crore)

| Particulars | Claimed | Approved |
|------------------------------------------------------------------------------------------------|---------|----------|
| Opening GFA | 3129.66 | 29690.36 |
| Opening Balance of Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets | 1887.69 | 1919.96 |

6.4.10 As per Regulation 20.2, on the fixed asset base (in which the retirement or replacement or de-capitalisation of the assets is accounted for) computed as on 31.03.2021 (taking into consideration the trued-up values for FY 2019-20), the equity capital as on 1.4.2020 & 1.4.2021, has been computed to the extent of 30% of such fixed asset base and the debt capital has been computed to the extent of 70% of such fixed asset base.

6.4.11 Accordingly, the Debt and equity provisionally computed as on 1.4.2021 for FY 2021-22 is shown below:

Table 6-8: DEBT: EQUITY COMPUTED BY THE COMMISSION AS ON 01.04.2021 FY 2021-22 (RS. CRORE)

| Particulars | Derivation | COMPUTED |
|-------------|------------|----------|
| Opening GFA | A | 29690.36 |



| Particulars | Derivation | COMPUTED |
|------------------------------------------------------------------------------------------------|------------|----------|
| Opening Balance of Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets | B | 1919.96 |
| Net Opening GFA | C=A-B | 27770.40 |
| Opening Equity | D=C*30% | 8331.12 |
| Opening Debt | E=C*70% | 19439.28 |

6.4.12 As per Regulation 20.1 provided above, wrt addition of capital assets after 1.4.2021, debt-equity ratio 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.

6.4.13 The Commission observed that the Petitioner has only shown opening GFA of Part B assets i.e. assets capitalized onwards 1st April 2020 in its petition formats. Accordingly, the closing GFA for FY 2021-22 has been computed after considering Net addition to the GFA during the year as shown in table below:

Table 6-9: PROJECTIONS OF GROSS FIXED ASSETS BY THE COMMISSION FOR FY 2021-22 (RS. CRORE)

| Particulars | Derivation | Claimed | Projected |
|---------------------------------|----------------|----------------|-----------------|
| Opening GFA | A | 3129.66 | 29690.36 |
| Addition to GFA during the year | B | 3773.31 | 3506.53 |
| Decapitalisation/ deduction | C | 0.00 | 224.50 |
| Closing GFA | D=A+B-C | 6902.97 | 32972.39 |

6.4.14 The consumer contribution base for FY 2021-22 is as under:

Table 6-10: CONSUMER CONTRIBUTION, CAPITAL GRANTS & SUBSIDIES APPROVED BY THE COMMISSION FOR FY 2021-22 (RS. CRORE)

| Particulars | Claimed | Approved |
|------------------------------------------------------------------------------------------------|----------------|----------------|
| Opening Balance of Consumer Contributions, Grants and Subsidies towards Cost of Capital Assets | 1887.69 | 1919.96 |
| Additions during the year | 829.56 | 829.56 |
| Less: Deductions | 147.26 | 109.55 |
| Closing Balance | 2569.99 | 2639.97 |

6.5 DEPRECIATION

Petitioner's Submission



- 6.5.1 Regulation 21 of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019, provide for the basis of charging depreciation.
- 6.5.2 The MYT (Distribution & Transmission) Regulations, 2019 provides for calculating depreciation based on the Straight – Line Method basis, whereas the previous MYT Transmission Regulations, 2014 provides for calculation of depreciation on written down value of the fixed assets of the corresponding year. Further, for the allowable depreciation for the assets capitalized up to till 31st March 2020 and those capitalized 1st April 2020 onwards the Commission has observed the following in the Tariff Order dated 10th November 2020:

Quote

“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.”

Unquote

- 6.5.3 For the purpose of computing the allowable depreciation, the Petitioner has considered normative closing gross fixed asset base for FY 2020-21 as per revised estimates and have subsequently added the yearly capitalizations for the FY 2021-22. Further the Petitioner has computed the asset-wise depreciation as per the rates provided in the Annexure A of the MYT (Distribution & Transmission) Regulations, 2019 based on the normative opening and closing gross fixed asset base for FY 2021-22. The allowable depreciation for FY 2021-22 is provided in the table below:

Table 6-11: DEPRECIATION EXPENSE FOR FY 2021-22 FOR THE GROSS BLOCK UPTO 31ST MARCH 2020 AS SUBMITTED BY PETITIONER

| Particulars * | Gross Block up to FY 2019-20 | Depreciation up to FY 2019-20 |
|---------------|------------------------------|-------------------------------|
|---------------|------------------------------|-------------------------------|



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| | Opening GFA | Additions to GFA | Deductions to GFA | Closing GFA | Cumulative Depreciation | Written Down Value as on 1.4.2020 | Depreciation Rate (%) | Allowable Depreciation |
|----------------------------------------------------------|-----------------|------------------|-------------------|-----------------|-------------------------|-----------------------------------|-----------------------|------------------------|
| Land & Land Rights | | | | | | | | |
| i) Unclassified | 141.97 | 1.31 | 43.84 | 99.45 | 0.00 | 99.45 | 0.00% | - |
| ii) Freehold Land | 1.26 | 0.09 | 1.29 | 0.06 | 0.00 | 0.06 | 0.00% | - |
| Buildings | 1085.14 | 145.76 | 0.85 | 1230.05 | 323.92 | 906.13 | 3.34% | 30.26 |
| Other Civil Works | 91.63 | 11.91 | 0.00 | 103.54 | 27.27 | 76.27 | 3.34% | 2.55 |
| Plants & Machinery | 12822.19 | 1435.39 | 288.92 | 13968.66 | 3678.53 | 10290.13 | 5.28% | 543.32 |
| Lines, Cable Network etc. | 11314.74 | 1707.37 | 20.61 | 13001.50 | 3423.84 | 9577.66 | 5.28% | 505.70 |
| Vehicles | 3.37 | 0.00 | 0.00 | 3.37 | 0.89 | 2.48 | 9.50% | 0.24 |
| Furniture & Fixtures | 8.74 | 1.23 | 0.00 | 9.98 | 2.63 | 7.35 | 6.33% | 0.47 |
| Office Equipments | 9.55 | 2.56 | 0.00 | 12.11 | 3.19 | 8.92 | 6.33% | 0.56 |
| Jeep & Motor Car | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.50% | - |
| Intangible Assets | 4.27 | 0.03 | 0.00 | 4.30 | 1.13 | 3.16 | 5.28% | 0.17 |
| Assets taken over from Licensees pending final Valuation | 105.44 | 4.74 | 0.10 | 110.09 | 28.99 | 81.10 | 5.28% | 4.28 |
| TOTAL Depriciable Assets | 25445.07 | 3309.00 | 310.48 | 28443.60 | 7490.39 | 20953.21 | 5.19% | 1087.55 |
| Total Non-Depreciable Assets | 143.23 | 1.41 | 45.13 | 99.50 | 0.00 | 99.50 | | 0.00 |
| Grand Total | 25588.30 | 3310.41 | 355.61 | 28543.10 | 7490.39 | 21052.71 | | 1087.55 |

6.5.4 Further, the Petitioner has submitted the allowable depreciation for the FY 2021-22 considering the assets capitalized 1st April 2020 onwards in the gross block as mentioned below:

Table 6-12: DEPRECIATION EXPENSE FOR FY 2021-22 FOR THE GROSS BLOCK OR ASSETS CAPITALISED FOR 1ST APRIL 2020 ONWARDS AS SUBMITTED BY THE PETITIONER (PART-B)

| Particulars | Gross Block for FY 2021-22 onwards | | | | | Depreciation FY 2021-22 Onwards | | | | |
|--------------------|---------------------------------------------------|-----------|------------|-------------------------------------|-------------|---------------------------------|----------------------------------------------|------------------------------|------------------------------------------------------------------------------------------|----------------------------|
| | As at the beginning of the Financial Year 2021-22 | Additions | Deductions | As at the end of the Financial Year | Average GFA | Depreciation Rate | Allowable Depreciation on FY 2021-22 onwards | Gross Allowable Depreciation | Less: Ddepreciation on assets acquired out of the consumer contribution and GoUP Subsidy | Net Allowable Depreciation |
| Land & Land Rights | | | | | | | | | | |
| i) Unclassified | 17.36 | 20.94 | 0.00 | 38.30 | 27.83 | 0.00% | - | 1290.71 | 109.55 | 1181.16 |



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| | | | | | | | | | | |
|----------------------------------------------------------|----------------|----------------|-------------|----------------|----------------|--------------|---------------|--|--|--|
| ii) Freehold Land | 0.15 | 0.19 | 0.00 | 0.34 | 0.25 | 0.00% | - | | | |
| Buildings | 132.72 | 160.02 | 0.00 | 292.74 | 212.73 | 0.00% | - | | | |
| Other Civil Works | 11.21 | 13.51 | 0.00 | 24.72 | 17.96 | 3.34% | 0.60 | | | |
| Plants & Machinery | 1568.26 | 1890.79 | 0.00 | 3459.05 | 2513.65 | 3.34% | 83.96 | | | |
| Lines, Cable Network etc. | 1383.89 | 1668.50 | 0.00 | 3052.38 | 2218.13 | 5.28% | 117.12 | | | |
| Vehicles | 0.41 | 0.50 | 0.00 | 0.91 | 0.66 | 5.28% | 0.03 | | | |
| Furniture & Fixtures | 1.07 | 1.29 | 0.00 | 2.36 | 1.71 | 9.50% | 0.16 | | | |
| Office Equipments | 1.17 | 1.41 | 0.00 | 2.58 | 1.87 | 6.33% | 0.12 | | | |
| Jeep & Motor Car | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.33% | - | | | |
| Intangible Assets | 0.52 | 0.63 | 0.00 | 1.15 | 0.84 | 9.50% | 0.08 | | | |
| Assets taken over from Licensees pending final Valuation | 12.90 | 15.55 | 0.00 | 28.45 | 20.67 | 5.28% | 1.09 | | | |
| Total Depreciable Assets | 3112.14 | 3752.19 | 0.00 | 6864.33 | 4988.24 | 4.07% | 203.16 | | | |
| Total Non-Depreciable Assets | 17.52 | 21.12 | 0.00 | 38.64 | 28.08 | | 0.00 | | | |
| Grand Total | 3129.66 | 3773.31 | 0.00 | 6902.97 | 5016.31 | | 203.16 | | | |

6.5.5 The Petitioner has projected the depreciation on assets created out of consumer contributions, capital grants and subsidies for FY 2021-22 in the same ratio as per annual accounts of FY 2019-20. The Petitioner has reduced the equivalent depreciation amounting to Rs. 109.55 crore for FY 2021-22 in respect of depreciation on assets created out of consumer contributions, capital grants and subsidies. The Petitioner further submits that in compliance to the provisions of Appendix 'C' to Ind AS-18, 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. However, the Commission vide its Tariff Order dated 8th January 2019, 27th August 2019 and November 10, 2020 while approving the ARR for FY 2018-19, FY 2019-20 and FY 2020-21 has allowed the net depreciation after deducting the equivalent amount of depreciation on assets acquired out of the consumer contribution. The Petitioner has considered the same approach while claiming the net depreciation amount for FY 2021-22. The Income from Consumer Contribution recognized as revenue (or equivalent depreciation amount) in FY 2021-22 has been projected as the percentage of the Non-tariff income (in the same ratio as in the annual accounts of FY 2019-20).

6.5.6 Thus, the Petitioner requests the Commission to allow the net depreciation amount of Rs. 1181.16 Crore for FY 2021-22.



Commission's Analysis

6.5.7 The Regulation 21 of the MYT Distribution & Transmission Regulations, 2019

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 decapitalised assets.

b) Depreciation shall be computed annually based on the Straight- Line Method at the rates stipulated in the Annexure- A of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019.

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.

d) 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

- 6.5.8 In accordance of the above regulation, the Commission in the Tariff Order dated November 10, 2020 has provided a separate treatment. The relevant extract of the same is provided below:

Quote

“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.”

Unquote

- 6.5.9 Further, for the purpose the computation of Closing GFA for FY 2021-22, Petitioner has not claimed any de-capitalisation. However, the Commission has considered, the decapitalisation for FY 2021-22 as average of last three years (FY 2017-18, FY 2018-19 & FY 2019-20) trued-up decapitalisation.



Table 6-13: ASSET RETIRED OR DEDUCTED FOR FY 2021-22 AS COMPUTED BY THE COMMISSION (RS. CRORE)

| Particulars | FY 2017-18 (% of Deductions) | FY 2018-19 (% of Deductions) | FY 2019-20 (% of Deductions) | Average % of Deductions of Last 3 true-Ups |
|--------------------|------------------------------|------------------------------|------------------------------|--------------------------------------------|
| Depreciable assets | 1.18% | 1.31% | 1.20% | 1.23% |

6.5.10 As per above, the Commission has computed the depreciation. The closing of FY 2020-21 is considered as Opening for FY 2021-22. The Depreciation of FY 2021-22 is computed as per SLM. 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:

Table 6-14: GROSS ALLOWABLE DEPRECIATION FOR ASSETS UPTO 31.03.2020 (PART A) AS APPROVED BY THE COMMISSION FOR FY 2021-22 (RS. CRORE)

| For assets from 31.03.2020 onwards (Part A) | | Depreciation | | | | | | | | | |
|---------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------|-----------------|--------------------------------------------|------------------|-----------------|-----------------|-------------------|------------------------------|-----------------------|----------------------------|
| S.No. | Particulars | Opening GFA (Closing GFA as on 31.03.2021) | Addition to GFA | Average % of Deductions of Last 3 true-Ups | Deduction to GFA | Closing GFA | Average GFA | Depreciation Rate | Allowable Gross Depreciation | Consumer Contribution | Net Allowable Depreciation |
| 1 | Land & Land Rights | | | | | | | | | | |
| | (i) Unclassified | 79.22 | | 13.08% | 9.73 | 69.50 | 74.36 | 0.00% | 0.00 | | 0.00 |
| | (ii) Freehold Land | 0.01 | | 67.78% | 0.01 | 0.01 | 0.01 | 0.00% | 0.00 | | 0.00 |
| 2 | Buildings | 913.40 | | 0.03% | 0.23 | 913.17 | 913.29 | 3.34% | 30.50 | 4.23 | 26.27 |
| 3 | Other Civil Works | 74.97 | | 0.00% | 0.00 | 74.97 | 74.97 | 3.34% | 2.50 | 0.35 | 2.16 |
| 4 | Plant & Machinery | 8772.59 | | 2.15% | 186.68 | 8585.91 | 8679.25 | 5.28% | 458.26 | 40.21 | 418.05 |
| 5 | Lines, Cables, Network etc. | 9271.59 | | 0.30% | 27.84 | 9243.75 | 9257.67 | 5.28% | 488.80 | 42.89 | 445.91 |
| 6 | Vehicles | 1.71 | | 0.13% | 0.00 | 1.71 | 1.71 | 9.50% | 0.16 | 0.01 | 0.15 |
| 7 | Furniture & Fixtures | 5.88 | | 0.03% | 0.00 | 5.88 | 5.88 | 6.33% | 0.37 | 0.03 | 0.34 |
| 8 | Office Equipments | 7.24 | | 0.00% | 0.00 | 7.24 | 7.24 | 6.33% | 0.46 | 0.03 | 0.42 |
| 9 | Other assets (Assets taken over from Licensees pending final Valuation) | 59.48 | | 0.03% | 0.02 | 59.46 | 59.47 | 5.28% | 3.14 | 0.28 | 2.86 |
| 10 | Intangible assets | 2.34 | | 0.00% | 0.00 | 2.34 | 2.34 | 5.28% | 0.12 | 0.01 | 0.11 |
| 11 | Total Fixed Assets | 19188.43 | | 1.28% | 224.50 | 18963.93 | 19076.18 | | 984.33 | 88.03 | 896.30 |
| 12 | Non depreciable assets (Land & Land Rights) | 79.24 | | 13.39% | 9.73 | 69.50 | 74.37 | | 0.00 | 0.00 | 0.00 |
| 13 | Depreciable assets | 19109.20 | | 1.23% | 214.77 | 18894.43 | 19001.81 | 5.18% | 984.33 | 88.03 | 896.30 |



Table 6-15: GROSS ALLOWABLE DEPRECIATION FOR ASSETS UNDER PART B AS APPROVED BY THE COMMISSION FOR FY 2021-22 (RS. CRORE)

| For assets from 01.04.2020 onwards (Part B) | | Depreciation | | | | | | | | |
|---------------------------------------------|-------------------------------------------------------------------------|----------------|-----------------|------------------|----------------|----------------|-------------------|------------------------------|-----------------------|----------------------------|
| S. No. | Particulars | Opening GFA | Addition to GFA | Deduction to GFA | Closing GFA | Average GFA | Depreciation Rate | Allowable Gross Depreciation | Consumer Contribution | Net Allowable Depreciation |
| 1 | Land & Land Rights | | | | | | | | | |
| | (i) Unclassified | 9.22 | 14.48 | 0.00 | 23.70 | 16.46 | 0.00% | 0.00 | | 0.00 |
| | (ii) Freehold Land | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00% | 0.00 | | 0.00 |
| 2 | Buildings | 119.80 | 166.92 | 0.00 | 286.72 | 203.26 | 3.34% | 6.79 | 1.53 | 5.26 |
| 3 | Other Civil Works | 10.24 | 13.70 | 0.00 | 23.94 | 17.09 | 3.34% | 0.57 | 0.13 | 0.44 |
| 4 | Plant & Machinery | 1363.56 | 1603.12 | 0.00 | 2966.68 | 2165.12 | 5.28% | 114.32 | 16.29 | 98.03 |
| 5 | Lines, Cables, Network etc. | 1255.07 | 1694.31 | 0.00 | 2949.38 | 2102.23 | 5.28% | 111.00 | 15.81 | 95.18 |
| 6 | Vehicles | 0.34 | 0.31 | 0.00 | 0.66 | 0.50 | 9.50% | 0.05 | 0.00 | 0.04 |
| 7 | Furniture & Fixtures | 0.96 | 1.07 | 0.00 | 2.04 | 1.50 | 6.33% | 0.09 | 0.01 | 0.08 |
| 8 | Office Equipment's | 1.16 | 1.32 | 0.00 | 2.49 | 1.82 | 6.33% | 0.12 | 0.01 | 0.10 |
| 9 | Other assets (Assets taken over from Licensees pending final Valuation) | 10.99 | 10.87 | 0.00 | 21.86 | 16.43 | 5.28% | 0.87 | 0.12 | 0.74 |
| 10 | Intangible assets | 0.42 | 0.43 | 0.00 | 0.84 | 0.63 | 5.28% | 0.03 | 0.00 | 0.03 |
| 11 | Total Fixed Assets | 2771.78 | 3506.53 | 0.00 | 6278.31 | 4525.04 | 5.17% | | | |
| 12 | Non depreciable assets (Land & Land Rights) | 9.22 | 14.48 | 0.00 | 23.70 | 16.46 | 0.00 | | | |
| 13 | Depreciable assets | 2762.55 | 3492.05 | 0.00 | 6254.61 | 4508.58 | 5.19% | 233.83 | 21.51 | 212.32 |

Table 6-16: NET APPROVED DEPRECIATION FOR ASSETS UPTO 31.03.2020 (Part A) AS APPROVED BY THE COMMISSION FOR FY 2021-22 (RS. CRORE)

| Particulars | Claimed | Allowed |
|---------------------------------------------------------------------------------------------|----------------|---------------|
| Gross allowable Depreciation | 1291.38 | 984.33 |
| Less: Equivalent amount of depreciation on assets acquired out of the Consumer Contribution | 109.55 | 88.03 |
| Net allowable Depreciation | 1181.84 | 896.30 |

Table 6-17: NET APPROVED DEPRECIATION FOR ASSETS UNDER PART B AS APPROVED BY THE COMMISSION FOR FY 2021-22 (RS. CRORE)

| Particulars | Claimed | Allowable |
|------------------------------|---------|-----------|
| Gross allowable Depreciation | 1291.38 | 233.83 |



| Particulars | Claimed | Allowable |
|---------------------------------------------------------------------------------------------|----------------|---------------|
| Less: Equivalent amount of depreciation on assets acquired out of the Consumer Contribution | 109.55 | 21.51 |
| Net allowable Depreciation | 1181.84 | 212.32 |

Table 6-18: NET APPROVED DEPRECIATION FOR ASSETS (PART A & PART B) AS APPROVED BY THE COMMISSION FOR FY 2021-22 (RS. CRORE)

| Particulars | Claimed | Allowable |
|---------------------------------------------------------------------------------------------|----------------|----------------|
| Gross allowable Depreciation | 1291.38 | 1218.17 |
| Less: Equivalent amount of depreciation on assets acquired out of the Consumer Contribution | 109.55 | 109.55 |
| Net allowable Depreciation | 1181.84 | 1108.62 |

6.6 INTEREST ON LONG TERM LOANS

Petitioner's Submission

- 6.6.1 The Petitioner submitted that a normative ratio 70:30 has been considered for debt and equity. In this approach, 70% of the capital expenditure undertaken in any year has been considered to be financed through loan and balance 30% has been considered to be funded through equity contributions.
- 6.6.2 The Petitioner submitted that the Commission in the Tariff Order dated 10th November 2020 for FY 2020-21 has 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



6.6.3 Accordingly, the normative opening loan as on 1st April 2020 is worked by the petitioner is shown below:

Table 6-19: OPENING NORMATIVE LOAN AS SUBMITTED BY THE PETITIONER ON 1ST APRIL 2020

| Particulars | Derivation | PROVISIONALLY COMPUTED FOR FY 2020-21 |
|--------------------------------------------|------------|---------------------------------------|
| Opening Debt | A | 18,852.82 |
| Cumulative Net Depreciation upto 31.3.2020 | B | 7,490.43 |
| Opening Normative Loan | C=A-B | 11,362.39 |

6.6.4 Further the petitioner has submitted that the normative opening loan for the FY 2021-22 is considered as per the normative closing for FY 2020-21 worked out in the APR of FY 2020-21. Further, for the purpose of the computation of the normative interest on loan the Petitioner has considered the loan addition as 70% of the 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.

6.6.5 Allowable 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 2019-20 has been considered for FY 2021-22, as it seems to be fair and equitable. The interest capitalisation has been considered at a rate of 12.62% for FY 2021-22 which is the actual capitalization for FY 2019-20 as per the annual accounts.

Commission's Analysis

6.6.6 The Commission for the purpose of determination tariff has considered debt equity ratio of 70:30 for the assets capitalized in line with the MYT Distribution & Transmission 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 taken for FY 2020-21 (provisionally) & FY 2021-22 both. Further, as per the Regulation 23.5, the rate of interest on long term loan is considered as the weighted average rate of interest of the actual long term loan portfolio year. The relevant extract is provided in the following:



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

6.6.7 For the purpose of arriving at the opening values of FY 2021-22, the Commission has provisionally computed the values for FY 2020-21. The Commission has considered 100% investment claimed by Petitioner during the year (FY 2020-21) i.e. Rs. 4132.22 Crores and accordingly the GFA addition of Rs. 2771.78 Crores has been computed. Further, for considering the opening loan for FY 2020-21, the Commission has considered the same approach as it considered in Tariff Order of FY 2020-21, in line with the Regulations. Further, the Commission has provisionally computed loan addition during the year of Rs. 1506.72 Crores, which is 70% of Rs. 2152.45 Crores (i.e. Rs. 2771.78- Rs.400.41-218.91 Crores) i.e. net investment after reducing consumer contribution and assets decapitalised on the basis of last three years average value. The closing loan base as on 31.03.2021 provisionally computed by the Commission for FY 2020-21 is as shown in the Table below:

Table 6-20: INTEREST ON LONG TERM LOANS COMPUTED BY COMMISSION FOR FY 2020-21 (RS. CRORE)

| S.No | Particulars | Tariff Order dt. 10.11.2020 | Claimed | Computed (provisional) |
|------|-------------------------------------|--------------------------------|----------|---------------------------|
| 1 | Opening Normative Loan | 10684.13 | 11360.60 | 10539.34 |
| 2 | Loan Additions (70% of Investments) | 1783.20 | 1910.47 | 1506.72 |



| S.No | Particulars | Tariff Order dt. 10.11.2020 | Claimed | Computed (provisional) |
|------|--------------------------------------------------------|--------------------------------|----------------|---------------------------|
| 3 | Less: Repayments (Depreciation allowable for the year) | 988.62 | 1062.15 | 961.28 |
| 4 | Closing Loan Balance | 11478.71 | 12208.92 | 11084.78 |
| 5 | Weighted Average Rate of Interest (%) | 10.72% | 10.93% | 10.12% |
| 6 | Interest on long term loan | 1187.47 | 1287.61 | 1093.81 |
| 7 | Interest Capitalisation Rate (%) | 25.13% | 12.62% | 12.62% |
| 8 | Less: Interest Capitalized | 298.36 | 162.49 | 138.03 |
| 9 | Net Interest Charged | 889.11 | 1125.12 | 955.78 |

6.6.8 As per the Regulation 23.2, the normative long term loan outstanding as on April 1, 2021, shall be worked out by deducting the cumulative repayment as admitted by the Commission up to March 31, 2021, from the gross normative loan as shown below:

Table 6-21: OPENING NORMATIVE LOAN FOR FY 2021-22 PROVISIONALLY COMPUTED BY THE COMMISSION (RS. CRORE)

| S.No | Particulars | COMPUTED (Provisional) |
|------|--------------------------------------------|---------------------------|
| 1 | Opening debt | 19439.28 |
| 2 | Cumulative Net Depreciation upto 31.3.2021 | 8287.95 |
| 3 | Opening Normative Loan | 11151.33 |

6.6.9 As per Regulation 20.2, the debt capital i.e. opening loan base as on 1.4.2021 shall be reduced to the extent of outstanding debt component of the fixed asset base computed as on 31.03.2021 or the normative closing loan base of FY 2020-21, whichever is lower. The portion of capital expenditure financed through Consumer Contributions and grants has been separated as the depreciation thereon would not be charged to the consumers. Further, the allowable depreciation for the year has been considered for normative loan repayment.

6.6.10 Further, the Commission has considered the capitalization of interest expenses at the rate of 15.7%, i.e. the average of actual interest capitalization rate (%) of last three years true-up value (FY 2017-18 - 25%, FY 2018-19 - 9% and FY 2019-20 -13%), against the Petitioner's claim of 12.62%.

6.6.11 The Commission has approved interest on long-term loans for FY 2021-22 as computed in the Table below:



Table 6-22: INTEREST ON LONG TERM LOANS AS APPROVED BY THE COMMISSION FOR FY 2021-22 (RS. CRORE)

| S.No | Particulars | Claimed | Approved |
|------|--------------------------------------------------------|----------------|----------------|
| 1 | Opening Normative Loan | 12208.92 | 11084.78 |
| 2 | Loan Additions (70% Assets Capitalised) | 2060.63 | 1723.54 |
| 3 | Less: Repayments (Depreciation allowable for the year) | 1181.16 | 1108.62 |
| 4 | Closing Loan Balance | 13088.39 | 11699.70 |
| 5 | Weighted Average Rate of Interest (%) | 10.93% | 10.12% |
| 6 | Interest on long term loan | 1382.00 | 1152.50 |
| 7 | Interest Capitalisation Rate (%) | 12.62% | 15.70% |
| 8 | Less: Interest Capitalized | 174.40 | 180.94 |
| 9 | Net Interest Charged | 1207.59 | 971.56 |

6.7 FINANCE CHARGES

Petitioner's Submission

6.7.1 The Petitioner submitted that it has estimated the finance charges towards expenses such as guarantee fees and bank charges to the tune of Rs. 0.09 crore in FY 2021-22.

Commission's Analysis

6.7.2 As per Regulation 34.3 of UPERC MYT Distribution & Transmission Regulation, 2019, the finance charges shall be part of A&G Expenses. The relevant excerpt is reproduced below:

Quote

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

- 6.7.3 The Commission in its computation has taken into account the Finance Charges as a part of the A&G Expenses as per the above stated Regulation.

6.8 OPERATION & MAINTENANCE EXPENSES

Petitioner's Submission

- 6.8.1 The Petitioner has submitted that the Operation & Maintenance expenses comprise of Employee costs, Administrative & General (A&G) Expenses and Repair & Maintenance (R&M) expenses. The Regulation 34 of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019, stipulates as under:

Quote

“34. Operation & Maintenance Expenses

- f) The Operation and Maintenance expenses for the Transmission Business shall be computed as stipulated in with these Regulations.*
- g) 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.*



- h) 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.
- i) 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.
- j) 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.

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

- 6.8.2 The Petitioner has worked out the base year O&M expenses i.e. for FY 2019-20 as per above Regulations. The Petitioner has considered the True-up O&M expenses for the FY 2015-16 to FY 2016-17 as allowed by the Commission in the true-up Orders. Further, the Petitioner has considered the normative O&M Expenses as per the true-up Petitions for FY 2017-18 to FY 2019-20. The Petitioner has submitted that the Commission in its Tariff Order dated 10th November 2020 while truing-up of the O&M expenses for FY 2017-18 & FY 2018-19 had considered the lower of the normative and actual O&M expenses. The Petitioner has considered the normative O&M Expenses as per the true-up Petitions for FY 2017-18 to FY 2019-20 for arriving at the base year norms. The base year O&M expenses Computed by petitioner for FY 2019-20 are as mentioned below:



TABLE 6-23: O&M EXPENSES COMPUTATION FOR FY 2021-22 AS SUBMITTED BY THE PETITIONER

| S.No | Particulars | True-Up Expenses (Rs. Crore) | | | | | Avg. Expenses for Mid-Year | Normative Expenses (up to base Year) | |
|------|-------------------------------|------------------------------|---------------|----------------|----------------|----------------|----------------------------|--------------------------------------|----------------|
| | | FY 2015-16 | FY 2016-17 | FY 2017-18* | FY 2018-19 | FY 2019-20* | | FY 2017-18 | FY 2018-19 |
| 1 | Employee Expenses | 473.99 | 513.86 | 848.56 | 1054.67 | 1227.95 | 823.80 | 866.63 | 920.06 |
| 2 | A&G Expenses | 28.35 | 62.51 | 38.14 | 37.81 | 54.16 | 44.20 | 46.49 | 49.36 |
| 3 | R&M Expenses | 167.81 | 205.35 | 344.94 | 423.70 | 495.72 | 327.50 | 344.53 | 365.77 |
| 4 | Gross O&M Expenses | 670.15 | 781.72 | 1231.64 | 1516.18 | 1777.83 | 1195.50 | 1257.65 | 1335.19 |
| 5 | Expenses Capitalised | 242.13 | 372.09 | 308.36 | 278.84 | 255.21 | 308.36 | 278.84 | 255.21 |
| a | Employee Expenses Capitalised | 242.13 | 372.09 | 308.36 | 278.84 | 255.21 | 308.36 | 278.84 | 255.21 |
| b | A&G Expenses Capitalised | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6 | Net O&M Expenses | 428.02 | 409.63 | 923.28 | 1237.33 | 1522.62 | 887.14 | 978.80 | 1079.99 |

*As per the true-up petitions

6.8.3 The Petitioner submitted that the normative base year R&M expenses computed for FY 2019-20 as per the methodology in the Regulation 34 comes out to be Rs. 365.77 crore, which is significantly lower than actual R&M expenses of the past year or the allowable normative R&M expenses of the past year. Further, the Petitioner mentioned that, the allowable R&M expenses for any next financial year cannot be less than allowable expenses in the previous year. Therefore, the Petitioner has considered the base year (FY 2019-20) R&M expenses as per the actuals.

6.8.4 Based on the O&M expenses for the FY 2019-20 and allowable O&M expenses for FY 2020-21 as worked out in the APR of FY 2020-21. The Petitioner has computed the allowable O&M expenses for FY 2021-22 as mentioned in the table below:

TABLE 6-24: EMPLOYEE EXPENSES FOR FY 2021-22 AS SUBMITTED BY THE PETITIONER

| Employee Expenses | FY 2019-20 (Base Year) | FY 2020-21 | FY 2021-22 |
|-------------------------|------------------------|------------|------------|
| CPI Inflation Index (%) | | 5.30% | 5.30% |



| Employee Expenses | FY 2019-20 (Base Year) | FY 2020-21 | FY 2021-22 |
|-------------------------------------|---------------------------|------------|------------|
| Gross Employee Costs and Provisions | 920.06 | 968.81 | 1020.13 |
| Less: Employee expenses capitalised | 255.21 | 386.18 | 406.64 |
| Net Employee Expenses | 664.86 | 582.63 | 613.50 |

TABLE 6-25: A&G EXPENSES FOR FY 2021-22 SUBMITTED BY THE PETITIONER

| A&G Expenses | FY 2019-20 (Base Year) | FY 2020-21 | FY 2021-22 |
|--------------------------------|---------------------------|------------|------------|
| WPI Inflation Index (%) | | 2.96% | 2.96% |
| A&G Expenses | 49.36 | 50.82 | 52.33 |
| Less: A&G Expenses Capitalised | 0.00 | 0.00 | 0.00 |
| Net A&G Expenses | 49.36 | 50.82 | 52.33 |

TABLE 6-26: R&M EXPENSES FOR FY 2021-22 AS SUBMITTED BY THE PETITIONER

| R&M Expenses | FY 2019-20 (Base Year) | FY 2020-21 | FY 2021-22 |
|-------------------------|---------------------------|------------|------------|
| WPI Inflation Index (%) | | 2.96% | 2.96% |
| R&M Expenses | 365.77 | 473.82 | 487.87 |

6.8.5 The Petitioner further submitted that the employee expense capitalisation for the FY 2021-22 is considered at the same rate as per the actual capitalisation in the FY 2019-20.

Commission's Analysis

6.8.6 The Commission observed that the Petitioner has considered the actual O&M Expenses from FY 2015-16 to FY 2019-20 for computation of average gross O&M expense for the base year and has further escalated the same. However, as per the Regulations 34 (b) of MYT Regulations 2019, the Petitioner has to consider the trued up values of last available five years. The Relevant extract of the regulation is reproduced below:

Quote

"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.”

Unquote

- 6.8.7 Further, it is pertinent to mention that the Commission in this Tariff Order has already carried out the true-up of FY 2019-20, therefore the average of trued-up values from FY 2015-16 to FY 2019-20 are considered for the computation.
- 6.8.8 Further, first proviso of Regulation 34.3 of Uttar Pradesh Electricity Regulatory Commission (Multi Year Tariff for Distribution & Transmission) Regulations, 2019 stipulates that the Interest and Finance charges such as Credit Rating charges, collection facilitation charges, financing cost of Delayed Payment Surcharge and other finance charges to be considered as a part of A&G expenses. The relevant extract is provided below:

Quote

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

6.8.9 The Commission in Tariff Order to compute normative O&M expense for FY 2021-22 has first arrived at the mid-year i.e. FY 2017-18 value of each component of the O&M Expenses based on the average of last 5 Trued-Up values of FY 2015-16 to FY 2019-20 and the Computation of Norms for O&M Expenses of FY 2020-21 and FY 2021-22 is provided in the table below: (owing to the details provided and size of the Table it is split into two)

Table 6-27: O&M EXPENSES AS COMPUTED BY THE COMMISSION FOR FY 2021-22

| S.No | Particulars | Trued-Up O&M Expenses (Without Efficiency Gains/Loss) | | | | | |
|------|----------------------------------|-------------------------------------------------------|---------------|---------------|-----------------|-----------------|----------------------------------------------------------------------|
| | | FY 2015-16 | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 | Avg. Expenses for past 5 years (a+b+c+d+e)/5 = Mid-Year FY 2017-18 |
| | | (a) | (b) | (c) | (d) | (e) | (f) |
| 1 | Employee Expenses | 473.99 | 513.86 | 507.06 | 553.70 | 640.21 | 537.76 |
| 2 | A&G Expenses | 28.35 | 62.51 | 38.14 | 37.81 | 53.33 | Finance Charges is added in the A&G expenses in MYT Regulation, 2019 |
| 3 | Finance Charges (FC) | 1.26 | 1.16 | 0.85 | 0.44 | 0.09 | |
| 4 | A&G Expenses (with FC) | 29.61 | 63.67 | 39.00 | 38.25 | 53.41 | 44.79 |
| 5 | R & M Expenses | 167.81 | 205.35 | 341.83 | 413.44 | 460.19 | 317.72 |
| 6 | Gross O&M Expenses | 670.15 | 781.72 | 887.03 | 1,004.95 | 1,153.81 | 900.27 |
| 7 | Employee Expenses Capitalisation | 242.13 | 372.09 | 308.36 | 278.84 | 191.41 | |
| 8 | A&G Expenses Capitalisation | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 9 | Total Capitalisation | 242.13 | 372.09 | 308.36 | 278.84 | 191.41 | |
| 10 | Net O&M Expenses | 428.02 | 409.63 | 578.67 | 726.11 | 962.40 | |

6.8.10 Secondly, the Mid Year value (FY 2017-18) of each component of O&M expenses as shown in above table is 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. Accordingly, the Commission, has computed the O&M expenses of the base year which



shall be escalated at Inflation/Escalation rate notified by Labour Bureau, Govt. of India (http://labourbureau.gov.in/LBO_indexes.htm) and Economic Advisor Govt. of India (<https://eaindustry.nic.in/>) respectively for different years. The Commission has computed the WPI, CPI inflation rate as follows:

TABLE 6-28: INFLATION INDEX FOR FY 2021-22 AS APPROVED BY THE COMMISSION

| FY | INDEX | | INFLATION RATE | | 60:40 Index | 60:40 Index Inflation | Average if Last 3 Years | |
|------------|-----------------|-----------------|----------------|-------|-------------|-----------------------|-------------------------|--------------|
| | WPI (Base 2011) | CPI (Base 2001) | WPI | CPI | | | WPI | CPI |
| FY 2013-14 | 112.46 | 236.00 | 5.20% | 9.68% | 186.58 | 8.57% | | |
| FY 2014-15 | 113.88 | 250.83 | 1.26% | 6.29% | 196.05 | 5.07% | | |
| FY 2015-16 | 109.72 | 265.00 | -3.65% | 5.65% | 202.89 | 3.49% | | |
| FY 2016-17 | 111.62 | 275.92 | 1.73% | 4.12% | 210.20 | 3.60% | | |
| FY 2017-18 | 114.88 | 284.42 | 2.92% | 3.08% | 216.60 | 3.05% | | |
| FY 2018-19 | 119.79 | 299.92 | 4.28% | 5.45% | 227.87 | 5.20% | | |
| FY 2019-20 | 121.80 | 322.50 | 1.68% | 7.53% | 242.22 | 6.30% | 2.38% | 6.00% |
| FY 2020-21 | 123.26 | 338.69 | 1.20% | 5.02% | 252.52 | 4.25% | | |

6.8.11 Subsequently, in terms of Regulations, the Employee Expenses for FY 2021-22 are computed by escalating the base year (FY 2019-20) employee expenses by average CPI inflation of immediately preceding 3 financial years. The A&G Expenses (including Finance Charges) and R&M Expenses for FY 2021-22 are computed by escalating the base year (FY 2019-20) R&M and A&G Expenses by average WPI inflation of immediately preceding 3 financial years. Accordingly, the O&M expenses approved for FY 2021-22 are shown as under:

TABLE 6-29: O&M EXPENSES AS APPROVED BY THE COMMISSION FOR FY 2021-22

| S.No. | Particulars | FY 2017-18 | FY 2018-19 | FY 2019-20 | FY 2020-21 | Average of previous 3 years CPI and WPI escalation factor | | FY 2021-22 |
|-------|------------------------|----------------------------------------------------|-----------------------------------------------|-----------------------------------------------|----------------------------------------------------------------------|-----------------------------------------------------------|-------|----------------------------------------------------------------------|
| | | (f) (Average of last 5 year Gross O&M expenses) | g = f*(1+escalation factor for FY 2018-19) | h = g*(1+escalation factor for FY 2019-20) | Normative k = j*(1+average of 3 previous years escalation factor) | WPI | CPI | Normative k = j*(1+average of 3 previous years escalation factor) |
| 1 | Employee Expenses | 537.76 | 565.74 | 601.37 | 633.57 | - | 6.00% | 671.58 |
| 2 | A&G Expenses (with FC) | 44.79 | 47.12 | 50.08 | 51.57 | 2.38% | - | 52.80 |
| 3 | R & M Expenses | 317.72 | 337.74 | 359.01 | 369.63 | 2.38% | - | 378.45 |
| 4 | Gross O&M Expenses | 900.27 | 950.59 | 1,010.47 | 1,054.76 | - | - | 1,102.82 |



| S.No. | Particulars | FY 2017-18 | FY 2018-19 | FY 2019-20 | FY 2020-21 | Average of previous 3 years CPI and WPI escalation factor | | FY 2021-22 |
|-------|----------------------------------|----------------------------------------------------|------------------------------------------------|----------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------|-----|---------------------------------------------------------------------|
| | | (f) (Average of last 5 year Gross O&M expenses) | g = f*(1+escalation factor for FY 2018-19) | h= g*(1+escalation factor for FY 2019-20) | Normative k= j*(1+average of 3 previous years escalation factor) | WPI | CPI | Normative k= j*(1+average of 3 previous years escalation factor) |
| 5 | Employee Expenses Capitalisation | - | - | - | 386.18 | - | - | 406.64 |
| 6 | A&G Expenses Capitalisation | - | - | - | - | - | - | - |
| 7 | Total Capitalisation | - | - | - | 386.18 | - | - | 406.64 |
| 8 | Net O&M Expenses | - | - | - | 668.59 | - | - | 696.19 |

6.9 INTEREST ON WORKING CAPITAL

Petitioner's Submission

6.9.1 The Petitioner has submitted that MYT (Distribution & Transmission) Regulations, 2019, provides for normative interest on working Capital based on the methodology outlined in the Regulations. The interest on working capital has been computed based on the methodology specified in the Regulation 25 as provided below:

Quote

"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;



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

6.9.2 In accordance with the MYT (Distribution & Transmission) Regulations, 2019, the interest on the working capital requirement is considered as the current State Bank Marginal Cost of Funds based Lending Rate (MCLR) i.e. 10.65%.

Commission’s Analysis

6.9.3 In accordance with the MYT (Distribution & Transmission) Regulations, 2019, the interest on the working capital shall be computed on the normative basis and rate of interest shall be equal to the SBI MCLR (1 Year) plus 250 basis points as of the date on which Petition for determination of tariff is accepted by the Commission. Accordingly, the Commission has considered the interest rate on working capital requirement at 10.65 %. (The link for the same is: <https://www.sbi.co.in/web/interest-rates/interest-rates/mclr-historical-data>.)

6.9.4 The Commission observed that the Petitioner has computed Interest on Working Capital considering Gross O&M Expenses instead of Net O&M Expenses. However, the Commission has computed interest on working Capital considering net O&M expenses in accordance with the Transmission MYT (Distribution & Transmission) Regulations, 2019, The Interest on Working Capital computed by the Commission is shown in the Table given below:

Table 6-30: INTEREST ON WORKING CAPITAL AS APPROVED BY THE COMMISSION FOR FY 2021-22 (RS. CRORE)

| Particulars | Claimed | Approved |
|----------------------------------------------------------------------------------------------------|---------|----------|
| One Month of O&M Expenses | 130.03 | 58.02 |
| Maintenance spares @40% of R&M expenses for two months | 32.52 | 25.23 |
| One and half month’s equivalent of expected revenue from transmission charges at prevailing Tariff | 358.39 | 340.06 |
| Less: Security deposits from consumers | | |
| Total Working Capital Requirement | 520.94 | 423.31 |
| Interest rate (%) | 10.65% | 10.65% |



| Particulars | Claimed | Approved |
|-----------------------------|---------|----------|
| Interest on working capital | 55.48 | 45.08 |

6.10 Non-Tariff Income

Petitioner's Submission

6.10.1 Non-tariff income comprises of items such as interest on loan 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 is also booked under the head of 'other incomes' in the annual accounts. The non-tariff income for FY 2021-22 is claimed as Rs. 237.68 crore. The same has been projected after deducting the estimated amount of income from Consumer Contribution from the total non-tariff income for the year.

Commission's Analysis

6.10.2 Non-Tariff Income comprises of items such as interest on loans and advances to employees, income from fixed rate investment deposits and interest on loans and advance to staff. Accordingly, the Commission has approved the Non-Tariff Income of Rs. 237.68 Crore for FY 2021-22 as proposed by the Petitioner.

6.11 RETURN ON EQUITY

Petitioner's Submission

6.11.1 The Petitioner has submitted that under provisions of the MYT (Distribution & Transmission) Regulations, 2019, the Petitioner is eligible to a return of @ 14.5% on equity base; for equity base calculation debt equity ratio shall be 70:30. Where equity involved 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. In this Petition, 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 the huge gap in the recovery of cost of supply at the Discoms' level, 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 the financial year 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 1st April 2020. Subsequently, it has considered the normative equity closing based on the capital additions for the FY 2021-22 depicted in aforementioned sections.

Commission's Analysis

6.11.4 The Commission for the purpose of determination tariff has considered debt equity ratio of 70:30 for the assets capitalized in line with the MYT Distribution & Transmission 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 taken for FY 2020-21 (provisionally) & FY 2021-22 both.

6.11.5 The Regulation 22 of the UPERC MYT Regulations, 2019 is as follows:

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 equity for FY 2021-22, the Commission has computed the values for FY 2020-21. The Commission has considered 100% investment as claimed by Petitioner during the year FY 2020-21 i.e. Rs. 4132.22 Crores and accordingly the GFA addition of Rs. 2771.78 Crores is computed. Further equity addition during the year is 30% of Rs. 2152.45 (i.e. Rs. 2771.78 - Rs. 400.41 – Rs. 218.91 Crores) i.e. net investment after reducing consumer contribution and de-capitalised assets. The closing equity base as on 31.03.2021 provisionally computed by the Commission for FY 2020-21 is as shown in the Table below:



Table 6-31: RETURN ON EQUITY PROVISIONALLY COMPUTED BY COMMISSION FOR FY 2020-21 (Rs. Crore)

| S.No | Particulars | FORMULA | FY 2020-21 | | |
|-----------------------------------------------|---------------------------------------------------------------|----------------|----------------------------|-------------------------|------------------------|
| | | | Tariff Order dt.10.11.2020 | Petitioner's Submission | Computed (provisional) |
| Assets to be deducted regarding Equity | | | | | |
| 1 | Assets Capitalised (during the year) | A | 3,230.37 | 3129.66 | 2771.78 |
| 2 | Assets created out of consumer contribution (during the year) | B | 369.94 | 400.41 | 400.41 |
| 3 | Assets De-Capitalised (during the year) | C | 313.00 | | 218.91 |
| 4 | Net Assets Capitalised (during the year) | D=A-B-C | 2547.43 | 2729.25 | 2152.45 |
| 5 | 30% on Net Assets Capitalised (during the year) | E=D*30% | 764.23 | 818.77 | 645.74 |
| 6 | Equity at the beginning of the year | F | 7726.62 | 8078.99 | 7656.86 |
| 7 | Addition to Equity (during the year) | G=E (Approved) | 764.23 | 818.77 | 645.74 |
| 8 | Closing Equity | H=F+G | 8490.84 | 8897.77 | 8302.60 |
| 9 | Average Equity | I=(F+H)/2 | 8108.73 | 8488.38 | 7979.73 |
| 10 | Rate of Return (%) | J | 2.00% | 2.00% | 2.00% |
| 11 | Return on Equity (during the year) | K=I*J | 162.17 | 169.77 | 159.59 |

6.11.7 As per Regulation 20.2 of MYT Regulations, 2019, the opening equity base, shall be reduced to the extent of 30% of the fixed asset base approved as on 31.03.2021 or the closing equity base of FY 2020-21 on 31.03.2021, whichever is lower.

6.11.8 For the purpose of computation of ROE, the Opening equity base of FY 2021-22 is considered same as the closing of FY 2020-21 as it is lower than the normative closing equity base of FY 2020-21. Further, 30% of Net GFA addition (after considering deduction / de-capitalization and consumer contribution in GFA) has been considered as equity addition during the year. The Return on Equity approved by the Commission for FY 2021-22 is shown in the Table below:



Table 6-32: RETURN ON EQUITY APPROVED BY THE COMMISSION FOR FY 2021-22 (RS. CRORE)

| S.No | Particulars | FORMULA | FY 2021-22 | |
|-----------------------------------------------|---------------------------------------------------------------|-------------------|-------------------------|----------------|
| | | | Petitioner's Submission | Approved |
| Assets to be deducted regarding Equity | | | | |
| 1 | Assets Capitalised (during the year) | A | 3773.31 | 3506.53 |
| 2 | Assets created out of consumer contribution (during the year) | B | 829.56 | 829.56 |
| 3 | Assets De-Capitalised (during the year) | C | | 214.77 |
| 4 | Net Assets Capitalised (during the year) | D=A-B-C | 2943.75 | 2462.20 |
| 5 | 30% on Net Assets Capitalised (during the year) | E=D*30% | 883.13 | 738.66 |
| 6 | Equity at the beginning of the year | F | 8897.77 | 8302.60 |
| 7 | Addition to Equity (during the year) | G=E (Approved) | 883.13 | 738.66 |
| 8 | Closing Equity | H=F+G | 9780.89 | 9041.26 |
| 9 | Average Equity | I=(F+H)/2 | 9339.33 | 8671.93 |
| 10 | Rate of Return (%) | J | 2.00% | 2.00% |
| 11 | Return on Equity (during the year) | K=I*J | 186.79 | 173.44 |

6.12 SLDC ARR

Petitioner's Submission

6.12.1 The Petitioner submitted that annual accounts for UPPTCL & SLDC are not segregated yet. Accordingly, the expenses of SLDC functions and ARR are embedded in the current ARR of UPPTCL. The SLDC ARR Submitted by the Petitioner is given in the below table:

Table 6-33: SLDC ARR AS SUBMITTED BY THE PETITIONER FOR FY 2021-22

| Particulars | FY 2021-22 |
|-----------------------------------|--------------|
| Net O&M Expenses | |
| R&M Expense | 3.91 |
| Net Employee Expenses | 29.60 |
| Net A&G Expense | 4.05 |
| Total Net O&M expenses | 37.56 |
| Depreciation | 1.31 |
| Interest on Loan | - |
| Return on Equity | - |
| Capital Expenditure | 4.56 |



| | |
|--------------------------|--------------|
| Other Expenditure | - |
| Non-tariff Income | 6.72 |
| Total Expenditure | 36.71 |

Commission's Analysis

6.12.2 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. SLDC is operating as a part of the Uttar Pradesh Power Transmission Corporation Ltd., in its capacity as the State Transmission Utility. SLDC is the apex body to ensure integrated operation of the power system in the State.

6.12.3 The Commission also notified UPERC (Fees & Charges of State Load Despatch Centre and other related matters) Regulations, 2020 on 14th May 2020. Further, the Commission has directed UPPTCL from time to time to expedite the process to separate the SLDC from UPPTCL in order to make SLDC as an independent Organization. Also, SLDC shall ensure to file its ARR Petition separately.

6.12.4 Further, the non-separation of SLDC is a non-compliance of the Electricity Act, 2003 & UPERC (Fees & Charges of State Load Despatch Centre and other related matters) Regulations, 2020.

6.12.5 Taking all the above into consideration, the SLDC expenses are not being allowed in the UPPTCL ARR for FY 2021-22. SLDC is directed to approach the Commission separately under the SLDC Regulation, 2020 for the same. Accordingly, the ARR of SLDC of Rs. 36.71 Crore is disallowed from UPPTCL ARR of FY 2021-22.

6.13 SUMMARY OF AGGREGATE REVENUE REQUIREMENT FOR FY 2021-22

Petitioner's Submission

6.13.1 The Petitioner submitted that it has calculated the ARR for FY 2021-22 as Rs. 3547.12 Cr. and has requested the Commission for approval of the same.

Commission's Analysis

6.13.2 The Commission based on above, has approved the ARR for FY 2021-22 are as shown in the Table given below:



Table 6-34: APPROVED AGGREGATE REVENUE REQUIREMENT FOR FY 2021-22 (RS. CRORE)

| S.No | Particulars | Claimed | Approved |
|-----------|-------------------------------------------------------------------------------|----------------|----------------|
| 1 | Employee Cost | 1020.13 | 671.58 |
| 2 | A&G expenses | 52.33 | 52.80 |
| 3 | R&M expenses | 487.87 | 378.45 |
| 4 | Interest on Loan Capital | 1382.00 | 1152.50 |
| 5 | Interest on Working Capital | 55.48 | 45.08 |
| 6 | Finance Charges | 0.09 | - |
| 7 | Depreciation | 1181.16 | 1108.62 |
| 8 | Gross Expenditure | 4179.05 | 3409.03 |
| 9 | Less: Employee cost capitalized | 406.64 | 406.64 |
| 10 | Less: A&G Capitalisation | | 0 |
| 11 | Less: Interest Capitalisation | 174.40 | 180.94 |
| 12 | Net Expenditure | 3598.02 | 2821.45 |
| 13 | Provision for Bad & Doubtful debts | 0.00 | - |
| 14 | Prior Period Items, Debits, write-offs & other expenses/Comprehensive Incomes | 0.00 | - |
| 15 | Net Expenditure with provisions | 3598.02 | 2821.45 |
| 16 | Add: Return on Equity | 186.79 | 173.44 |
| 17 | Less: Non-Tariff Income | 237.68 | 237.68 |
| 18 | Annual Revenue Requirement (ARR) | 3547.12 | 2757.21 |
| 19 | Less: SLDC ARR | | 36.71 |
| 20 | Net Annual Revenue Requirement (ARR) | 3547.12 | 2720.50 |

*A&G including Finance charges

6.14 TRANSMISSION SYSTEM AVAILABILITY

6.14.1 The Regulation 33 of UPERC MYT Distribution and Transmission Regulations, 2019 specifies that transmission availability is to be maintained above 98%. The relevant extract is given below:

Quote

33.1 Target availability

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

(1) AC System : 98%

Unquote

6.14.2 Accordingly, The Commission directs the Petitioner to maintain Transmission availability



above 98% for FY 2021-22 as per the Regulation quoted above. The same will be dealt with at the time of Truing-Up.

6.15 TRANSMISSION TARIFF

6.15.1 The UPERC MYT Distribution and Transmission 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.

6.15.2 Presently, the State owned Discoms have not been allocated 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. Further, the Petitioner has projected 120568.28 MU to be delivered to Distribution Licensees and other Long-Term Open Access Consumers who are also Discom's consumers during FY 2021-22.

6.15.3 The Commission has approved the projected Energy to be handled at Discom periphery is 112360.21 MU for FY 2021-22

6.15.4 The Commission has observed that considering the Energy handled as approved by the Commission and Net ARR as submitted by the Petitioner, the Transmission Tariff is arrived at Rs. 0.3157/kWh. However, considering the Energy handled and Net ARR as approved by the Commission, the Transmission Tariff is arrived at Rs. 0.2421/kWh. Accordingly, the Transmission Tariff as approved by the Commission for FY 2021-22 is shown in the Table below:

Table 6-35: TRANSMISSION TARIFF APPROVED BY THE COMMISSION FOR FY 2021-22

| Particulars | FY 2021-22 | |
|---------------------------------------|---------------|---------------|
| | Claimed | Approved |
| Net ARR (Rs. Crore) | 3547.12 | 2720.50 |
| Energy Handled (MU) | 120568.28 | 112360.21 |
| Transmission Tariff (Rs. /kWh) | 0.2942 | 0.2421 |

6.16 OPEN ACCESS: TRANSMISSION TARIFF

Petitioner's Submission

6.16.1 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 revised open access charges for FY 2021-22 as follows:

Table 6-36: REVISED OPEN ACCESS CHARGES PROPOSED BY THE PETITIONER FOR FY 2021-22

| Particulars | Unit | FY 2021-22 |
|---------------------------------------------|---------|------------|
| Short Term Open Access Transmission Charges | Rs./kWh | 0.2942 |
| Long Term Open Access Transmission Charges | Rs./kWh | 0.2942 |

6.16.2 Further the Petitioner submitted that the energy handled as projected in the above para is for the purpose of uniform open access charges irrespective of voltage levels for the FY 2021-22. 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 10th November 2020.

6.16.3 In addition to the above charges, the open access customer would also be liable to bear the projected transmission losses to the tune of 3.33 % for FY 2021-22 irrespective of the voltage levels at which the consumers are connected with the grid.

Commission's Analysis

6.16.4 The Commission has computed the Transmission Tariff for FY 2021-22 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 6-37: APPROVED INTRA STATE OPEN ACCESS TRANSMISSION CHARGES FOR FY 2021-22 PERIOD

| Particulars | Unit | FY 2021-22 | |
|----------------------------------------------|----------|------------|------------|
| | | Long-Term | Short-Term |
| Intra State Open Access Transmission Charges | Rs. /kWh | 0.2421 | 0.2421 |

6.16.5 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 ruled that the transmission losses for FY 2021-22 would be 3.33% irrespective of the voltage levels at which the consumers are connected with the grid.



7 DIRECTIVES

7.1 COMPLIANCE WITH DIRECTIVES ISSUED IN THE TARIFF ORDER DATED NOVEMBER 10, 2020

7.1.1 The Commission had issued certain directives to the Petitioner in the Tariff Order dated November 10, 2020. 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

| S. No. | Directives | Status of Compliance/ Petitioner's Reply | | | | | | | | | |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------------------|---------------------|---------|------|-------|---------|------|-------|
| 1. | The Commission directs the Petitioner to submit the detailed justification for wide variations between Actual and Normative Components of O&M Expenses in its next ARR/ Tariff filings. | <p>The Petitioner submitted that normative O&M expenses are computed and claimed on the basis of the applicable regulations and methodology approved by the Commission in the past Tariff Orders.</p> <p>In FY 2019-20, the normative O&M expenses are allowed on the basis of the network base & GFA of UPPTCL, whereas, the actual O&M expenses are as per the provisional annual accounts.</p> <p>The normative employee expenses are higher than actual employee expenses. Whereas, the normative A&G and R&M expense are lower than the actual A&G and R&M expense.</p> <p>It is further submitted that the total sanctioned manpower vis-à-vis the actual manpower strength is mentioned below:</p> <table border="1"><thead><tr><th>FY</th><th>Current Strength</th><th>Sanctioned Manpower</th></tr></thead><tbody><tr><td>2019-20</td><td>6372</td><td>13473</td></tr><tr><td>2020-21</td><td>6318</td><td>14148</td></tr></tbody></table> <p>Currently, some works are also carried out by the outsourced manpower due to which the</p> | FY | Current Strength | Sanctioned Manpower | 2019-20 | 6372 | 13473 | 2020-21 | 6318 | 14148 |
| FY | Current Strength | Sanctioned Manpower | | | | | | | | | |
| 2019-20 | 6372 | 13473 | | | | | | | | | |
| 2020-21 | 6318 | 14148 | | | | | | | | | |



| S. No. | Directives | Status of Compliance/ Petitioner's Reply |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Employee Expenses are on the lower side as compared to the normative employee expenses. |
| 2. | UPPTCL should note that any transaction which deals with transfer / sell / renting of its Assets (land, lines, transformers etc), without prior approval of the Commission is void as per Section 17(4) of the Electricity Act, 2003 | 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. |
| 3. | The Commission directs that UPPTCL and SLDC shall take all necessary actions to ensure that in the next ARR/ Tariff filing the discrepancies regarding the mismatch in Transmission Loss should not be repeated. | The Petitioner submitted that it has taken cognizance of the same and in the current filing the computation of the intra-state losses for FY 2019-20 duly certified by the UPSLDC is being submitted. |
| 4. | 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, if any. | The Petitioner submitted that from April 2020 onwards it has submitted DPRs to Commission for approval for the projects approved by the TWC. Further, UPPTCL in the 1 st & 2 nd Quarter of FY 2020-21 in accordance in the provisions of the MYT Regulations 2019. The Petitioner further submitted that it shall seek prior approval of the newly approved assets on quarterly basis in future. |
| 5. | The Commission directs the Petitioner to maintain a separate individual asset wise FAR for assets capitalized after 1.4.2020. Accordingly, from FY 2020-21 onwards UPPTCL to maintain two separate Gross Blocks (one for assets upto 31.3.2020 and second for assets after 1.4.2020) and two separate FAR's depicting addition of Assets details from | The Petitioner submitted that in line with the directions of the Commission, the directives have been issued to the Accounts wing of UPPTCL for preparation of the FAR and the same shall be submitted at the time of truing-up of FY 2020-21. |



| S. No. | Directives | Status of Compliance/ Petitioner's Reply |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | 01.04.2020 onwards for the purpose of depreciation computation. | |
| 6. | The Commission directs the Petitioner to expedite the process to separate the SLDC from UPPTCL in order to make SLDC as an independent Organization. Also, SLDC shall ensure to file its ARR Petition in accordance with UPERC SLDC Regulations, 2020. | The Petitioner submitted that in view of the SLDC Regulations 2020 and directions of the Commission, UPPTCL in a board meeting held in November 2020 has passed resolution to segregate UPSLDC from UPPTCL and further approval from the GoUP is under process. |
| 7. | The Commission directs the Petitioner to ensure to file its ARR/ Tariff Petition on time strictly in accordance with the applicable UPERC MYT Regulations. | The Petitioner submitted that it has filled the current petition as per the timelines stipulated in the MYT Regulations 2019. Further, 30 th November 2020 being a holiday, the petition was filed (and uploaded) on 1 st December 2020. |
| 8. | The Commission directs the Petitioner that while filing ARR/ Tariff Petition, it shall upload on its website the Petitions 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. | The Petitioner has uploaded the petitions as per the directions of the Commission at the time of the admittance. |
| 9. | The Commission directs that in case UPPTCL has planned a Green Field project it must undertake techno- commercial feasibility exercise with respect to an existing Brown field project(s) and accordingly take further necessary actions in order to build, maintain and operate an efficient and economical intra-state transmission system. | The Petitioner submitted that it has submitted the detailed justification of the green field or brown field projects approved in the 1 st & 2 nd Quarter of FY 2020-21 in the DPR. The Petitioner shall submit the same for the newly approved assets on quarterly basis in future. |



7.2 DIRECTIVES ISSUED IN THIS ORDER

- 7.2.1 The Commission directs the Petitioner to submit the details of the final outcome of the issues raised by CAG regarding CWIP and its impact (with regards, to FY 2017-18 & FY 2018-19). Further, the Commission directs the Petitioner to submit CAG reports for FY 2019-20.
- 7.2.2 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.
- 7.2.3 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.
- 7.2.4 The Commission directs the Petitioner to maintain a separate individual asset wise FAR for assets capitalized after 1.4.2020. Accordingly, from FY 2020-21 onwards UPPTCL to maintain two separate Gross Blocks (one for assets upto 31.3.2020 and second for assets after 1.4.2020) and two separate FAR`s depicting addition of Assets details from 01.04.2020 onwards for the purpose of depreciation computation.
- 7.2.5 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.
- 7.2.6 The Commission directs the Petitioner to ensure to file its ARR/ Tariff Petition on time strictly in accordance with the applicable UPERC MYT Regulations.
- 7.2.7 The Commission directs that in case UPPTCL has planned a Green Field project it must undertake techno- commercial feasibility exercise with respect to an existing Brown field project(s) and accordingly take further necessary actions in order to build, maintain and operate an efficient and economical intra-state transmission system
- 7.2.8 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.



- 7.2.9 The Licensee is directed to replace existing conventional/ TOD metering installed at 33kV and above feeders (T-D interface) with ABT interface metering for smooth implementation of Deviation Settlement Mechanism in the State. Also, the Licensee shall make an arrangement for meter reading, MRI and uploading/ submitting interface meter data to SLDC for the said interface meters.
- 7.2.10 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.



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 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.

(Vinod Kumar Srivastava)
Member (Law)

(Kaushal Kishore Sharma)
Member

(Raj Pratap Singh)
Chairman

Place: Lucknow

Date: June 29, 2021



9 ANNEXURE 1: ADMITTANCE ORDER



UttarPradesh Electricity Regulatory Commission

Vidyut Niyamak Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow-226010 Phone 2720426 Fax 2720423 E-mail secretary@uperc.org

Dr. Sanjay K. Singh
Secretary

Ref: UPERC/Secy/D(T)/2021-004
Dated: 08 April, 2021

To,

1. The Chairman, U. P. Power Corporation Ltd., 7th Floor, Shakti Bhawan, 14, Ashok Marg, Lucknow – 226001.
2. Managing Director, U. P. Power Transmission Corporation Ltd., 7th Floor, Shakti Bhawan, 14, Ashok Marg, Lucknow – 226001.
3. Director, SLDC, UPPTCL, Phase II, Vibhuti Khand, Gomti Nagar, Lucknow - 226010.
4. Director, (Planning & Commercial), UPPTCL, 5th Floor, Shakti Bhawan, 14 Ashok Marg, Lucknow-226001.
5. CE, RAU, Regulatory Affairs Unit, U. P. Power Corporation Ltd., 15th Floor, Shakti Bhawan Extension, 14, Ashok Marg, Lucknow – 226001.

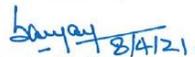
Petition No. 1656 /2020 (UPPTCL).

Sir,

Kindly find enclosed herewith a copy of the Commission's Order dated 08th April 8, 2021, regarding above cited matter.

Encl: As above.

Yours sincerely


(Sanjay K. Singh)
Secretary





BEFORE

THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION,
LUCKNOW

Petition No. 1656 /2020

IN THE MATTER OF:

Petition for determination of Annual Revenue Requirement (ARR) for the FY 2021-22, Annual Performance Review (APR) for FY 2020-21 and True-up for the FY 2019-20 – (Petition No. - 1656 of 2020) of Uttar Pradesh Power Transmission Corporation Ltd., Lucknow (UPPTCL)

ORDER

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 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 1, 2015 to March 31, 2020, unless otherwise extended by the Commission. Embarking upon the MYT framework, the Commission has divided the period of five years (i.e. April 1, 2015 to March 31, 2020) into two periods namely –

- a. Transition period (April 1, 2015 to March 31, 2017)
- b. Control period (April 1, 2017 to March 31, 2020)

As per the provisions stipulated in Regulation 12 of Uttar Pradesh Electricity Regulatory Commission (Multi Year Transmission Tariff) 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).

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 1, 2020 onwards up to FY 2024-25 [i.e., till March 31, 2025] unless extended by the Commission. Further, as per the provisions stipulated in Regulation 4, the Petition for determination of Aggregate Revenue Requirement (ARR) and Tariff, Annual Performance Review (APR) and True-Up complete in all respect has to be

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Approval of ARR and Tariff for UPPTCL for FY 2021-22, APR of FY 2020-21 and True-up of FY 2019-20



filed by the Transmission Licensee 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 and Tariff for FY 2021-22, Annual Performance Review for FY 2020-21 and True-Up for the FY 2019-20 on December 03, 2020.

A preliminary analysis of the Petition was conducted, wherein the Commission asked the Petitioner to submit its actual audited accounts for FY 2019-20 and revise its ARR based on the same, along with various other deficiencies observed, which were communicated vide letter dated January 29, 2021. A reminder letter requesting the Petitioner to furnish the responses immediately to the deficiencies observed by the Commission, was also sent on March 12, 2021. Further, the Petitioner submitted its response to the deficiencies in respect to True-Up of FY 2019-20, APR of FY 2020-21 and ARR of FY 2021-22 on March 30, 2021.

The Technical Validation Session covering all the Petitions was conducted on April 01, 2021, which was attended by the senior officials of the Commission & the Petitioner and during the Technical Validation Session, they explained various issues raised in the deficiencies. Subsequently, minutes of meeting (M.O.M) along with pending data / information were issued and the Petitioner was directed to submit the pending information within 10 days. The Petitioner is required to submit the Audited Balance Sheet, CAG and Statutory Auditor report for FY 2019-20, Network details of Transmission Lines, Substations, bays and lines, Transmission losses including capex, Details of ongoing TBCB projects and other matters captured in the M.O.M.

Further, since the determination of ARR / Tariff has already been significantly delayed, the Commission admits the Petitions for further processing. Keeping all the above into consideration, 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, True Up and other such matters, if any, as directed by the Commission, and invite suggestions and objections within 15 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 for further submissions made in respect to these proceedings. The Petitioner shall also submit a set of notices along with the copies of original newspapers.

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The Petitioner shall also 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. The Petitioner shall also ensure that for downloading the same, there is 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.

It is pertinent to mention that the Commission, in wake of prevailing COVID-19 pandemic outbreak which has led to restricted movement across the country and due to the subsequent requirement of social distancing for prevention of spread of the disease, proposes to hold the Public Hearing in the end of April / start of May, through video conferencing.

The details of the same will be provided subsequently on the Commission's website www.uperc.org. The Petitioner shall take all necessary steps to ensure the necessary arrangements for smooth functioning 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

(Kaushal Kishore Sharma)

Member

(Raj Pratap Singh)

Chairman

Place: Lucknow

Date: 08/04/ ,2021



10 ANNEXURE 2: LIST OF PERSONS WHO ATTENDED PUBLIC HEARING

10.1.1 The list of persons who attended public hearing In the matter of Tariff Petition No. 1646/2020 of UPPTCL for Determination of APR for FY 2020-21, ARR for FY 2021-22 & True Up of ARR for FY 2019-20 are listed below:

LIST OF PERSONS WHO HAVE ATTENDED THE VIRTUAL PUBLIC HEARING OF UPPTCL ON MAY 21, 2021

| S. No. | Name | Organization |
|--------|--------------------------|--------------------------------------|
| 1. | Shri Senthil Pandian | MD, UPPTCL |
| 2. | Shri Anil Jain | Director (Comm.),UPPTCL |
| 3. | Shri Bibhu Mohapatra | Director Finance, UPPTCL |
| 4. | Shri Rameshwar Singh | UPPTCL |
| 5. | Shri Amarendra Khushwa | Director, SLDC |
| 6. | Shri Niraj Agrawal | RAU, UPPCL |
| 7. | Shri Sameer Shyam | UPPCL Consultant |
| 8. | Shri Amit Bhargava | Director (Tariff), UPERC |
| 9. | Shri Abhishek Moza | Joint Director (Transmission), UPERC |
| 10. | Shri Sajal Kumar Singh | Deputy Director (IT), UPERC |
| 11. | Shri Amiy Chaturvedi | Mercados |
| 12. | Shri R.K Singh | Director Operation, UPPTCL |
| 13. | Shri A.K Arora | NPCL |
| 14. | Shri Alok Sharma | NPCL |
| 15. | Shri Sanjeev Kumar Goel | NPCL |
| 16. | Shri Sanket Srivastava | NPCL |
| 17. | Shri Awadesh Kumar Verma | UPVUP |
| 18. | Shri Krishna Parolia | Consumer |
| 19. | Shri Pradeep Singhal | Consumer |
| 20. | Shri Laksh Godani | Consumer |
| 21. | Shri Janak Bhatia | Laghu Udyog Bharti H.O. Lucknow |
| 22. | Shri Deepak Agarwal | Laghu Udyog Bharti H.O. Lucknow |



Approval of ARR and Tariff for UPPTCL for FY 2021-22, APR of FY 2020-21 and True-up of FY 2019-20

| S. No. | Name | Organization |
|---------------|----------------------|---------------------|
| 23. | Shri Chanmeet Singh | Consultant (ABPS) |
| 24. | Shri Prabhat Gupta | Consultant (ABPS) |
| 25. | Shri Arjun Manohar | Consultant (ABPS) |
| 26. | Shri Somsuklo Biswas | Consultant (ABPS) |