



**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 30<sup>th</sup> 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 23<sup>rd</sup> 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 21<sup>st</sup> 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 15<sup>th</sup> 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
<b>Uttar Pradesh</b>	<b>23,732</b>	<b>44,044</b>	<b>54%</b>	<b>3.43</b>
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 10<sup>th</sup> 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.