

# **TARIFF ORDER**

**On**

**Approval of Business Plan and Multi  
Year Tariff for Fourth Control Period  
(FY 2022-23 to FY 2024-25)**

**Annual Performance Review for**

**FY 2021-22**

**&**

**True Up for FY 2020-21**

**For**

**UJVN Ltd.**

**March 31, 2022**

**UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**

**Vidyut Niyamak Bhawan,**

**Near I.S.B.T., P.O. Majra, Dehradun-248171**



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**Before**  
**UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**

**Petition No.: 53 of 2021**

**&**

**Petition No. 54 to 63 of 2021**

**In the Matter of:**

Petition filed by UJVN Ltd. for Approval of Business Plan for Fourth Control Period from FY 2022-23 to FY 2024-25.

**AND**

**In the Matter of:**

Petition filed by UJVN Ltd. for True Up for FY 2020-21, Annual Performance Review for FY 2021-22 and determination of Multi Year Tariff for Fourth Control Period from FY 2022-23 to FY 2024-25 for 10 LHPs.

**AND**

**In the Matter of:**

UJVN Ltd.

UJJWAL, Maharani Bagh, GMS Road, Dehra Dun-248006

...Petitioner

**Coram**

**Shri D. P. Gairola**

**Member (Law)/Chairman (I/c)**

**Shri M. K. Jain**

**Member (Technical)**

**Date of Order: March 31, 2022**

Section 64(1) read with Section 61 and 62 of the Electricity Act, 2003 (hereinafter referred to as "the Act") requires the Generating Companies and the Licensees to file an application for determination of tariff before the Appropriate Commission in such manner and along with such fee as may be specified by the Appropriate Commission through Regulations.

In accordance with the relevant provisions of the Act, the Commission had notified Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff)

Regulations, 2011 (hereinafter referred to as “UERC Tariff Regulations, 2011”) for the First Control Period from FY 2013-14 to FY 2015-16 specifying therein terms, conditions and norms of operation for licensees, generating companies and SLDC. The Commission had issued the MYT Order dated May 6, 2013 for the First Control Period from FY 2013-14 to FY 2015-16. In accordance with the provisions of the UERC Tariff Regulations, 2011, the Commission had carried out the Annual Performance Review for FY 2013-14, FY 2014-15 and FY 2015-16 vide its Orders dated April 10, 2014, April 11, 2015 and April 5, 2016 respectively.

Further, in accordance with the relevant provisions of the Act, the Commission had notified Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2015 (hereinafter referred to as “UERC Tariff Regulations, 2015”) for the Second Control Period from FY 2016-17 to FY 2018-19 specifying therein terms, conditions and norms of operation for licensees, generating companies and SLDC. The Commission had issued the MYT Order on approval of Business Plan and Multi Year Tariff Order dated April 5, 2016 for the Second Control Period from FY 2016-17 to FY 2018-19. In accordance with the provisions of the UERC Tariff Regulations, 2015, the Commission had carried out the Annual Performance Review for FY 2016-17, FY 2017-18 and FY 2018-19 vide its Order dated March 29, 2017, March 21, 2018 and February 27, 2019 respectively.

Subsequently, in accordance with the relevant provisions of the Act, the Commission had notified Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2018 (hereinafter referred to as “UERC Tariff Regulations, 2018”) for the Third Control Period from FY 2019-20 to FY 2021-22 specifying therein terms, conditions and norms of operation for licensees, generating companies and SLDC. The Commission had issued Order on approval of Business Plan and Multi Year Tariff Petition on February, 27, 2019 for the Third Control Period from FY 2019-20 to FY 2021-22. Further, the Commission had carried out the Annual Performance Review for FY 2019-20 and FY 2020-21 vide its Order dated April 18, 2020 and April 26, 2021 respectively.

Further, in accordance with the relevant provisions of the Act, the Commission had notified Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2021 (hereinafter referred to as “UERC Tariff Regulations, 2021”) for the Fourth Control Period from FY 2022-23 to FY 2024-25 specifying therein terms, conditions and norms

of operation for licensees, generating companies and SLDC. In compliance with the provisions of the Act and Regulation 8(1) and Regulation 10(1) of UERC Tariff Regulations, 2021, UJVN Ltd. (hereinafter referred to as “UJVN Ltd.” or “Petitioner”) filed separate Petition for approval of its Business Plan for the Fourth Control Period from FY 2022-23 to FY 2024-25 (Petition No. 53 of 2021 hereinafter referred to as the “Business Plan Petition”) and Multi Year Tariff Petition (Petition Nos. 54 to 63 of 2021 hereinafter referred to as the “MYT Petition”) on November 30, 2021. UJVN Ltd., in its Business Plan Petition, has submitted the Capital Investment Plan, Financing Plan, Human Resources Plan and trajectory of performance parameters for the Fourth Control Period. Further, through the MYT Petitions, UJVN Ltd. has submitted station wise detailed calculations of its projected Aggregate Revenue Requirement for the Fourth Control Period from FY 2022-23 to FY 2024-25 as per the UERC Tariff Regulations, 2021. Through the MYT Petition, the Petitioner has also requested for True Up of FY 2020-21 based on the audited accounts in accordance with UERC Tariff Regulations, 2018 and Annual Performance Review of FY 2021-22.

The Business Plan Petition filed by UJVN Ltd. had not been found to have any substantial material deficiencies. Based on the submissions made by UJVN Ltd., the Commission vide its Order dated December 21, 2021 provisionally admitted the Petition for further processing with the condition that UJVN Ltd. shall furnish any further information/ clarifications as deemed necessary by the Commission during the processing of the Petition and provide such information and clarifications to the satisfaction of the Commission within the time frame, as may be 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.

Further, the Multi Year Tariff (MYT) Petitions filed by UJVN Ltd. also had not been found to have any substantial material deficiencies. Based on the submissions made by UJVN Ltd., the Commission vide its Order dated December 21, 2021 provisionally admitted the Petitions for further processing with the condition that UJVN Ltd. shall furnish any further information/ clarifications as deemed necessary by the Commission during the processing of the Petition and provide such information and clarifications to the satisfaction of the Commission within the time frame, as may be 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.

Tariff determination being one of the most vital functions of the Commission, it has been the

practice of the Commission to elaborate in detail the procedure and to explain the underlying principles in determination of Tariff. Accordingly, in the present Order also, in line with past practices, the Commission has tried to elaborate the procedure and principles followed by it in determining the ARR of the licensee. The Annual Fixed Charges of UJVN Ltd. are recoverable from the beneficiaries. It has been the endeavour of the Commission in past also, to issue Tariff Orders for UJVN Ltd. concurrently with the issue of Order on Retail Tariffs for UPCL, so that UPCL is able to honour the payment liability towards generation charges of UJVN Ltd. For the sake of convenience and clarity, this Order has further been divided into following Chapters:

- Chapter 1 - Background and Procedural History.
- Chapter 2 - Stakeholders' Objections/Suggestions, Petitioner's Responses & Commission's Views.
- Chapter 3 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Business Plan for Fourth Control Period from FY 2022-23 to FY 2024-25.
- Chapter 4 - Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing Up of 9 LHPs and MB-II for FY 2020-21.
- Chapter 5 - Petitioner's Submissions, Commission's Analysis, Scrutiny & Conclusion on APR for FY 2021-22 and MYT for the Fourth Control Period from FY 2022-23 to FY 2024-25.
- Chapter 6 - Commission's Directives.

# **1 Background and Procedural History**

UJVN Ltd. is a company wholly owned by the State Government and is engaged in the business of generation of power in the State including ten large hydro generating stations to which this Order relates. These generating stations are Dhakrani, Dhalipur, Chibro, Khodri, Kulhal, Ramganga, Chilla, Maneri Bhali-I, Maneri Bhali-II and Khatima. Electricity generated by these generating stations is supplied to Uttarakhand Power Corporation Ltd (UPCL), the sole distribution licensee in the State and Himachal Pradesh State Electricity Board (HPSEB), which, as per an old arrangement/scheme, has share in five of these generating stations viz. Dhakrani (25%), Dhalipur (25%), Chibro (25%), Khodri (25%) and Kulhal (20%).

The Commission vide its Order dated May 6, 2013 had approved the Business Plan and Multi Year Tariff for UJVN Ltd. for the First Control Period from FY 2013-14 to FY 2015-16. Further, the Commission had carried out the Annual Performance Review for FY 2013-14, FY 2014-15 and FY 2015-16, vide its Orders dated April 10, 2014, April 11, 2015 and, April 5, 2016 respectively.

The Commission vide its Order dated April 5, 2016 approved the Business Plan and Multi Year Tariff for UJVN Ltd. for the Second Control Period from FY 2016-17 to FY 2018-19. Further the Commission had carried out the Annual Performance Review for FY 2016-17, FY 2017-18 and FY 2018-19 vide its Orders dated March 29, 2017, March 21, 2018 and February 27, 2019 respectively.

The Commission vide its Order dated February 27, 2019 approved the Business Plan and Multi Year Tariff for UJVN Ltd. for the Third Control Period from FY 2019-20 to FY 2021-22. Further, the Commission had carried out the Annual Performance Review for FY 2019-20 and FY 2020-21 vide its Order dated April 18, 2020 and April 26, 2021 respectively.

As also mentioned earlier, in accordance with the provisions of the Electricity Act, 2003 and Regulation 8(1) and Regulation 10(1) of the UERC Tariff Regulations, 2021, Generating companies are required to submit Business Plan Petition and MYT Petition for determination of Aggregate Revenue Requirement respectively latest by November 30, 2021. UJVN Ltd. in compliance to the Regulations submitted the Business Plan Petition and Station-wise MYT Petition for determination of Annual Fixed Charges for the fourth Control Period from FY 2022-23 to FY 2024-25, the True Up of expenses for FY 2020-21 and Annual Performance Review for FY 2021-22 on November 30, 2021.



The Business Plan Petition and MYT Petition were provisionally admitted by the Commission vide two separate Orders dated December 21, 2021. The Commission, through its above Admittance Orders dated December 21, 2021, to provide transparency to the process of tariff determination and give all Stakeholders an opportunity to submit their objections/suggestions/comments on the proposals of UJVN Ltd., also directed UJVN Ltd. to publish the salient points of its Petitions in the leading newspapers. The salient points of the Petitions were published by the Petitioner in the following newspapers:

**Table 1.1: Publication of Notice**

<b>Sl. No.</b>	<b>Newspaper Name</b>	<b>Date of Publication</b>
1	Amar Ujala (Hindi)	24.12.2021
2	Dainik Jagran (Hindi)	24.12.2021
3	Times of India (English)	24.12.2021 & 25.12.2021
4	Hindustan Times (English)	24.12.2021 & 25.12.2021

Through the above notices, the Stakeholders were requested to submit their objections/suggestions/comments latest by 31.01.2022 (copy of the notice is enclosed as **Annexure-1 & Annexure-2**). Besides suggestions/comments of the State Advisory Committee, the Commission received 06 objections/suggestions/comments in writing on the Petition filed by UJVN Ltd. The list of Stakeholders who have submitted their objections/suggestions/comments in writing is enclosed as **Annexure-3**.

Further, for direct interaction with all the Stakeholders and public at large, the Commission also held public hearings on the proposals filed by the Petitioner at the following places in the State of Uttarakhand.

**Table 1.2: Schedule of Hearing**

<b>Sl. No.</b>	<b>Place</b>	<b>Date</b>
1	Ranikhet	26.02.2022
2	Rudrapur	27.02.2022
3	Dehradun	02.03.2022
4	Kotdwar	08.03.2022

The list of participants who attended the Public Hearing is enclosed at **Annexure-4**.

The Commission also sent the copies of the salient features of the tariff proposals to Members of the State Advisory Committee and the State Government. The salient features of the tariff proposals submitted by UJVN Ltd. were also made available on the website of the Commission, i.e. [www.uerc.gov.in](http://www.uerc.gov.in). The Commission also held a meeting with the Members of the State Advisory Committee on March 09, 2022, wherein, detailed deliberations were held with the Members of the Advisory Committee on the various issues linked with the Petitions filed by UJVN Ltd.

The objections/suggestions/comments, as received from the Stakeholders through mail/post as well as during the course of the public hearings were sent to the Petitioner for its response. All the issues raised by the Stakeholders, Petitioner's response and Commission's views thereon are detailed in Chapter 2 of this Order. In this context, it is also to underline that while finalizing this Order, the Commission has, as far as possible, tried to address all the issues raised by the Stakeholders related to approval of Business Plan and Multi Year Tariff.

Meanwhile, based on the scrutiny of the Petitions submitted by UJVN Ltd., the Commission communicated certain additional clarifications/justification pertaining to the Business Plan Petition for FY 2022-23 to FY 2024-25 vide its letter no. UERC/5/Tech/741/Pet. No. 53 of 2021/965 dated December 23, 2021. The Petitioner submitted the replies to data gaps/ information sought by the Commission vide its letter no. M-51/ UJVNL/02/D(O)/B-8 dated January 12, 2022 and M-67/UJVNL/02/D(O)/B-8 dated January 18, 2022.

Further, the Commission has also communicated certain additional clarifications/justification pertaining to the MYT Petition vide its letter no. UERC/5/Tech/742/Pet. No. 54 of 2021 to 63 of 2021/966 dated December 23, 2021. The Petitioner submitted the replies to data gaps/ information sought by the Commission vide its letter no. M-52/ UJVNL/02/D(O)/B-8 dated January 12, 2022 and M-85/UJVNL/02/D(O)/B-8 dated January 22, 2022.

So as to have better clarity on the data filed by the Petitioner and to remove inconsistency in the data, a Technical Validation Session (TVS) was also held with the Petitioner's Officers on January 20, 2022, for further deliberations on certain issues related to the Petitions filed by UJVN Ltd. Minutes of above Technical Validation Session were sent to the Petitioner vide Commission's letter no. UERC/5/Tech/742/Pet. No. 54 of 2021 to 63 of 2021/1123 dated January 21, 2022, for its response.

The Petitioner submitted the replies to Minutes of TVS sought by the Commission vide its letter no. M-93/UJVNL/02/D(O)/B-8 dated January 31, 2022 and M-167/UJVNL/02/D(O)/B-8 dated February 26, 2022.

Further, Plant-wise/cost centre-wise discussion were held from 05.02.2022 to 11.02.2022 followed by discussions with Material Management Contracts wing & RMU wing on 16.02.2022 & 17.02.2022 respectively. During discussions certain additional clarifications/justification pertaining to the additional capital expenditure and R&M expenses claimed in the MYT Petition were sought from the Petitioner. The Petitioner submitted the replies to the data gaps/information sought by the Commission vide its letter no. M-144/UJVNL/02/D(O)/B-8 dated February 17, 2022 and M-162/UJVNL/02/D(O)/B-8 dated February 25, 2022.

Further, the Commission vide its e-mail dated 25.02.2022 raised some queries regarding Add-capitalization claimed for Unit#1 of MB-I under RMU for FY 2020-21 and R&M expenditure claimed by Civil Mayapur for Khatima Power Plant. The Petitioner submitted the replies on the queries vide its letter No. M-212/UJVNL/02/D(O)/B-8 dated 11.03.2022.

Further, the Commission vide its email dated March 04, 2022 raised some queries regarding De-capitalization of MB-II, Man power details from FY 2020-21 to FY 2024-25, Computation of Gn, Details in respect of interest earned on FDs out of investment from ROE etc. The Petitioner submitted the replies to the data gaps/information sought by the Commission vide its letter no. M-200/UJVNL/02/D(O)/B-8 dated March 09, 2022.

In addition to above queries, the Commission vide its e-mail dated 21.03.2022 has sought the details of revised Actual/Expected CoD of LHPs/SHPs w.r.t. Business Plan for Fourth Control Period. The Petitioner vide its e-mail dated 23.03.2022 submitted their replies on the sought information by the Commission.

The submissions made by UJVNL Ltd. in the Petitions as well as additional submissions have been discussed by the Commission at appropriate places in the Order along with the Commission's views on the same.

## **2 Stakeholders' Objections/suggestions, Petitioner's Responses & Commission's Views**

The Commission has received Six suggestions/objections on UJVN Ltd.'s Petition for Approval of Business Plan for Fourth Control Period from FY 2022-23 to FY 2024-25 and on UJVN Ltd. Petitions for True Up for FY 2020-21, Annual Performance Review for FY 2021-22 and determination of Multi Year Tariff for Fourth Control Period from FY 2022-23 to FY 2024-25 for 10 Large Generating Stations. List of Stakeholders/Respondents who submitted their objections/suggestions/comments in writing is given at **Annexure-3** and the list of Respondents who participated in the Public Hearings is enclosed at **Annexure-4**. The Commission has further obtained replies from UJVN Ltd. on the objections/suggestions/comments received from the Stakeholders. For the sake of clarity, the objections raised by the Stakeholders and responses of the Petitioner have been consolidated and summarized issue-wise. In the subsequent Chapters of this Order, the Commission has kept in view the objections/suggestions/comments of the Stakeholders while deciding the Annual Fixed Charges and tariffs for different generating stations of UJVN Ltd.

### **2.1 Capital Cost and RoE of MB-II**

#### **2.1.1 Stakeholder's Comments**

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that UJVN Ltd. has claimed Capital cost of MB-II as Rs. 1923 Crores and calculated ROE on equity amount of Rs. 654.92 crores including investment of Rs. 341.39 crores made out of PDF. UJVN Ltd. have filed a an Appeal before the Hon'ble Appellate Tribunal for electricity regarding the same. He requested the Commission to follow the approach adopted in its earlier Orders for Capital cost, return on equity and depreciation.

#### **2.1.2 Petitioner's Reply**

The Petitioner submitted that tariff Petition of MB-II HEP has been prepared based on capital expenditure actually incurred.

#### **2.1.3 Commission's Views**

The Commission has considered the Capital Cost as approved in its earlier Orders and has

also not allowed Return on Equity on funds deployed by the GoU out of PDF fund for reasons recorded in the previous Tariff Orders. Unlike other funds available with the Government collected through taxes and duties, PDF is a dedicated fund created in accordance with the provisions of the PDF Act passed by the GoU and the amount is collected directly from the consumers through the electricity bills as the same forms part of the power purchase cost of UPCL, which in turn is loaded on to the consumers. PDF Act and Rules made thereunder, further, clearly indicate that money available in this fund has to be utilized for the purposes of development of generation and transmission assets. Though UJVN Ltd. has preferred an Appeal on these issues before Hon'ble APTEL, however, no stay has been granted by Hon'ble APTEL. Therefore, the Commission has adopted the same approach as adopted in previous Tariff Orders while allowing the Capital cost and Return on Equity for MB-II project.

## **2.2 Depreciation for MB-II**

### **2.2.1 Stakeholder's Comments**

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that UJVN Ltd. has not understood the previous order of Commission for calculating depreciation of MB-II and has erroneously claimed Rs. 67.56 Crores in this Petition. Similarly for future years also, UJVN Ltd. has projected depreciation of MB-II as per earlier methodology, which has infirmities resulting in higher claim.

### **2.2.2 Petitioner's Reply**

The Petitioner submitted that UJVN Ltd. has prepared its Tariff Petition in accordance with regulations notified by the Commission. While calculating the depreciation, UJVN Ltd. has considered the Gross Fixed Asset as on COD and corresponding Additional Capitalization. Further the rate of depreciation has been computed as per the rates specified by the Commission.

### **2.2.3 Commission's Views**

The Commission, in this regard, would like to clarify that the depreciation has been allowed by the Commission considering the approved Capital Cost and Additional Capitalisation of the Petitioner in accordance with UERC Tariff Regulations, 2018 & UERC Tariff Regulations, 2021 as applicable after carrying out due prudence check. The approach adopted in this regard is elaborated in Chapter 4 and 5 of this Order.

## **2.3 Rate of Interest**

### **2.3.1 Stakeholder's Comments**

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that the Commission must relook into the rate of interest allowed as rate of interest is showing downward trend.

### **2.3.2 Petitioner's Reply**

The Petitioner submitted that UJVN Ltd. has computed the rate of interest as per the norms specified by the Commission. Any gains on account of reduction of interest rates has been passed on to the consumers as can be cited from previous tariff orders by the Commission. Further, UJVN Ltd continues its endeavour to get the most competitive interest rates for which it has adopted an approach of getting loan on an open tender basis to get the competitive interest rates for financing of its ongoing/upcoming projects.

### **2.3.3 Commission's Views**

The Commission, in this regard, would like to clarify that the rate of interest allowed by the Commission is calculated considering the actual loan portfolio of the Petitioner in accordance with UERC Tariff Regulations, 2018 & UERC Tariff Regulations, 2021 as applicable after due prudence check. The approach adopted in this regard is elaborated in Chapter 4 and 5 of this Order.

## **2.4 Other Cost**

### **2.4.1 Stakeholder's Comments**

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that UJVN Ltd. has proposed very high increase in all heads of the expenses for all the generating stations, which is not commensurate with the past and requested the Commission to look closely at all the costs.

### **2.4.2 Petitioner's Reply**

The Petitioner submitted that UJVN Ltd. has prepared its Tariff Petition on actual/normative basis in accordance with the Regulations notified by the Commission.

### **2.4.3 Commission's Views**

The Commission, in this regard, would like to clarify that the actual expenses, both of revenue

and capital nature submitted by the Petitioner are examined separately in detail, while carrying out the truing up of expenses & revenues and, only legitimate expenses are allowed in accordance with UERC Tariff Regulations 2018 and UERC Tariff Regulations 2021 as applicable.

## **2.5 Additional Capitalization**

### **2.5.1 Stakeholder's Comments**

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that the thrust of UJVN Ltd. is to spend more so that they can earn better RoE at 15.75%, more depreciation and interest on normative loan allowed on capitalization. He requested the Commission to examine whether such expenditure will result in benefit to consumers. He further submitted that if the additional capitalization is without any appreciable benefit to consumers, then same should not be approved. He further submitted that in its previous tariff orders for UJVN Ltd., the Commission had given very prudent orders regarding additional capitalisation and is sure that the methodology will be followed this year also.

### **2.5.2 Petitioner's Reply**

The Petitioner submitted that UJVN Ltd. is a responsible Generating Company, which has always strived for the better utilization of its resources and attaining utmost efficiency from the resources is its continuous endeavour. UJVN Ltd. has never intended to increase its spending just to earn better RoE. UJVN Ltd. is currently operating the Hydro Plants, which mostly have completed their useful life and Renovation of the power Plants and dams/barrages has become the necessity in the current times. Therefore, additional capitalization proposed in FY 2022-23 to FY 2024-25 includes the proposal against RMU of Dhalipur, Dhakrani, Chilla and MB-I LHPs and Renovation of Dams/Barrages through DRIP schemes.

### **2.5.3 Commission's Views**

The Commission, in this regard, would like to clarify that the additional capitalization, both incurred and proposed by the Petitioner are examined separately in detail while carrying out the truing up of expenses and projecting tariff and only legitimate expenses are allowed in accordance with UERC Tariff Regulations as applicable from time to time.

## **2.6 Design Energy/Actual Energy Generated**

### **2.6.1 Stakeholder's Comments**

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that the Commission in its earlier Orders had taken the average of annual generation of last 15 years as projected generation for FY 2004-05 and lower of this projected generation compared with the Plant-wise design energy mutually agreed between UPJVNL and UPPCL was taken for the purpose of working out the primary energy rate and therefore, Commission had fixed 3169.13 MU as approved primary energy generation for the year 2004-05. In this regard, he submitted that this analogy should not hold good for future years and was only acceptable as far as sufficient data was not available. He submitted that considering the Petitioner's claim that there has been substantial improvement in availability. He requested the Commission to revisit the Design Energy and allow the benefit of better generation to the consumers. He further submitted that the Tariff Policy notified by GoI stipulates for specifying operating norms based on actuals and not lower of normative and actuals so that it encourages better performance from utilities.

### **2.6.2 Petitioner's Reply**

The Petitioner submitted that UJVN Ltd. has sought revision in Design Energy for its 10 large hydropower Plants due to reduced discharge available for generation of power in view of the NGT order and GoU Order no. 708/I/2018-05/24(Writ)/2016 dated 05.06.2018, in compliance of which minimum 15% average lean season flow of rivers has to be maintained in the state, for which the Gazette notification has also been issued by Govt. of India on 09.10.2018 in this regard. UJVN Ltd is also complying the directives of National Mission for Clean Ganga (NMCG) issued vide order 10.10.2018 and 14.09.2019 for releasing the lean period discharge of 20%, 25% and 30% which is applicable on MB-I, MB-II and Chilla HEPs of UJVN Ltd. Regular monitoring of the discharge released from the said dams/barrages is being done by the concerned agency.

In view of aforesaid orders of NGT and GoU/GoI, UJVN Ltd. has maintained the minimum discharges and therefore the available water discharge has reduced in the tunnels/power channels of the Power Plants of UJVN Ltd. Consequent upon the reduction in the discharge available for power generation, the quantum of power generation as well as the declared capacity of the Power Plants has reduced accordingly. Therefore, UJVN Ltd. has requested the Commission for revision of Design



Energy of the affected hydro Power Plants.

### **2.6.3 Commission's Views**

Due to non-availability of reliable information on the design water discharges and DPRs for nine old generating stations, the Commission in its previous Orders had considered the lower of 15 years' average annual generation or the Plant-wise Design Energy (as mutually agreed between UPJVNL and UPPCL) as the Projected Primary Energy generation of these generating stations for tariff purposes. For Maneri Bhali-II, the Commission, as discussed in MYT Order dated February 27, 2019 had appointed an Expert Consultant for detailed study/analysis to find out the actual reasons that are hindering the Plant performance despite the fact that various works have been carried out by the Petitioner post CoD of the project and, accordingly, the NAPAF and Design Energy are revised for the Third Control Period. However, for Khatima HEP for which RMU works have been completed, the Commission has considered Design Energy for Third Control Period in accordance with the DPR for RMU works and in-line with the approach adopted by the Commission in its earlier Orders.

Further, the Commission has detailed its approach while approving the Design Energy for various LHPs in Chapter 3 & 4 of this Order.

## **2.7 Generation Assets**

### **2.7.1 Stakeholder's Comments**

Shri S.D Siddiqui of Galwalia Ispat Udhyog submitted that fixed cost of stranded generation assets is being paid for by the consumers without getting any benefit. In addition, the additional stranded capacity cost estimated on account of renewable energy integration is in the range of Rs.1.02/kWh. He further suggested that the government should extend help to DISCOMs to meet the fixed cost of the power purchase agreements (PPAs) associated with the stranded assets.

### **2.7.2 Petitioner's Reply**

The Petitioner submitted that UJVN Ltd. is a responsible generating company which has always strived for the better utilization of its resources and attaining utmost efficiency from them. As per the scheduling process, the Plants get dispatched as per the schedules given by the distribution companies, which may vary based on the demand. However, since UJVN Ltd. stations have

competitive tariffs, they generally get dispatched completely.

### **2.7.3 Commission's Views**

With regard to stranded generation assets, the Commission ensures that no unnecessary cost attributable to the inefficiencies of the Petitioner is passed on to the consumers of the State.

## **2.8 Cess, Royalty and Water Tax by State Government**

### **2.8.1 Stakeholder's Comments**

Shri S.D Siddiqui of Galwalia Ispat Udhyog submitted that the matter of waiver of water usage charges for hydro projects should be taken up by the Ministry of Power. He further submitted that in the State three charges are levied on the electricity which directly and indirectly affects tariff of the State namely, green cess, electricity duty and royalty on water. Electricity duty @0.50 per kWh and green cess @0.10 per kWh is charged from the consumers directly and Rs. 0.30/kWh as cess and Rs. 0.10/kWh as royalty per Unit on the saleable energy generated by those hydro projects. This further make electricity costlier by Rs. 1/Unit (0.50 +0.10 +0.30 +0.10).

### **2.8.2 Petitioner's Reply**

The Petitioner submitted that Government of Uttarakhand has imposed Cess and Royalty on the saleable energy generated from the existing hydro power projects of the State Government under UJVN Ltd., which are under Commercial Operation for more than 10 years and whose cost of electricity generation is not more than Rs. 2 per Unit. The rate of Cess and Royalty is Rs. 0.30 per Unit and Rs. 0.10 per Unit, respectively. Further, water tax has also been levied on water used for generation of electricity from the Hydro Power Plants in Uttarakhand. Any decision regarding Water Tax, Cess and Royalty can be taken only at the level of Uttarakhand Government. The right to take any decision in this regard lies with the Government of Uttarakhand.

### **2.8.3 Commission's Views**

The Commission, in this regard, would like to clarify that the issues of Electricity Duty, Green Cess, Royalty and Water Tax do not fall under the purview of the Commission and are under the control of GoU. Further, with regard to nature of electricity, the Commission would like to clarify that electricity sector in India is under the concurrent list of the Constitution and is administered by both Central and State Governments.

## **2.9 Rebate**

### **2.9.1 Stakeholder's Comments**

Shri B.P Maithani of RTI Club submitted that UPCL has become a regular defaulter in timely payment of power bills and therefore forgoing the rebate of 2 percent on the bills. UJVN Ltd., a sister organization and one of the suppliers of power to UPCL has declared that the rebate is not applicable to UPCL thereby saving for itself the out go of rebate amount and robbing the consumers of UPCL the benefit of rebate. He further submitted that this is the reason that UPCL suffers loss of crores of rupees every year. He further submitted that it is deliberate delinquency due to suspected complicity of the top management of both the UPCL and the UJVN Ltd. who must be sharing the benefit accruing to UJVN Ltd. from no rebate to UPCL.

He further submitted that instead of giving reasonable rebate to employees of all the three corporations in the consumption of electricity, UPCL has given blanket liberty to them to consume as much as they want and pay only fixed electricity charges. Interestingly, UPCL is bestowing same benefits of concessional power to the employees of UJVN Ltd. also from whom it buys power foregoing even the normal admissible rebate available in power purchase agreements.

### **2.9.2 Petitioner's Reply**

The Petitioner submitted that both UJVN Ltd. and UPCL are regulated entities whose tariffs and billing mechanisms are governed by the Regulations notified by the Commission. As per the Regulations, UPCL can only be allowed a rebate if payment is made within in a month. UJVN Ltd. further submitted that it does not incur any gain on account of not passing the rebate since it has to incur the working capital cost till the time the bills are not paid.

The Petitioner submitted that UJVN Ltd. is a responsible generating company having high ethical standards wherein any policy is implemented through proper Board approvals. Further, all tariffs get approved only after prudence checks by the Commission.

### **2.9.3 Commission's Views**

The Commission, in this regard, would like to clarify that the eligibility for Rebate is linked to timely payments made by beneficiaries and in case of payment beyond stipulated time, UJVN Ltd. is entitled to disallow the rebate as the benefit of early payment do not accrue to UJVN Ltd.

The Commission with regard to the power being provided to the departmental employees it is clarified that the cost of such supply is not being passed through in the tariff.

## **2.10 Others**

### **2.10.1 Stakeholder's Comments**

Shri Vijay Singh Verma submitted that High price tenders of UJVN Ltd. should be assigned to the Government agency for good quality and low price for reducing electricity rates. He further requested the Commission to limit UJVN Ltd. on purchasing equipment at a rate above the market rates.

Shri S.K Agarwal and Shri Sunil Gupta submits that Uttarakhand being a power surplus state is increasing its electricity rates which is not justified. Therefore, electricity upto 300 Units should be made free for the consumers.

Shri Sunil Gupta alleged of corruption existing in UJVN Ltd. and requested Commission to take strict action against them.

### **2.10.2 Petitioner's Reply**

With regard to the comment of Sh. Verma, the Petitioner submitted that UJVN Ltd. is a responsible generating company having high ethical standards wherein any procurement is done through transparent competitive bidding mechanism. Further, all capital expenditure is subject to a prudence check by the Commission.

With regard to the comment of Sh. Aggarwal, the Petitioner submitted that UJVN Ltd. is a responsible generating company which has always strived for the better utilization of its resources and attaining utmost efficiency from them. UJVN Ltd. is currently operating the Hydro Plants, which mostly have completed their useful life. UJVN Ltd. submitted that it is a profit-making Organization.

With regard to the comment of Sh. Gupta, UJVN Ltd. submitted that it is a responsible generating company having the highest level of corporate governance standards. The entire operations of UJVN Ltd. are monitored by the board of directors which also comprise of independent directors. UJVN Ltd., thus refuted the allegations levied against it.

### **2.10.3 Commission's Views**

The Commission would like to clarify that it has been the practice of the Commission to explain in detail its approach in every Tariff Order. Normal approach of the Commission is to follow the Regulations and detail the reasons for any deviation in exceptional conditions. The Commission before allowing any tariff increase or increase in expenses, carries out due diligence and prudence check of all the expenses incurred by the Petitioner before considering it as part of ARR. The Commission ascertains that no unnecessary cost attributable to the inefficiencies of the Petitioner is passed on to the consumers.

The Commission is of the view that allegations do not pertain to the current tariff proceedings, therefore, the same has not been dealt with in this Order.

## **2.11 Issues raised during the Meeting of State Advisory Committee**

### **2.11.1 Views of State Advisory Committee**

During the State Advisory Committee meeting held on March 09, 2021, the Members made the following observations/suggestions/comments:

- (1) UJVN Ltd. has again claimed Return on Equity on PDF amount, though this is settled issue as per Commission's Orders and is sub-judice before Hon'ble APTEL. As no stay has been granted by Hon'ble APTEL on Commission's Orders, RoE on PDF amount should not be allowed.
- (2) UJVN Ltd. has been incurring additional capital expenditure for its stations from a long time and has also proposed higher additional capital expenditure in the current tariff filings. Further, requested the Commission to ensure that the same results in benefit to the consumers of the state.
- (3) Suggested to explore the opportunities of power generation through newer technologies especially Solar Power Plants in hilly region.
- (4) Suggested to include UREDA as a member of Stakeholder Advisory Committee.
- (5) The Stakeholders submitted that the Commission must relook into the rate of interest allowed as rate of interest is showing downward trend. He further suggested that UJVN Ltd. should find ways to get less interest rate in the market.

### **2.11.2 Petitioner's Reply**

On the above observations/suggestions/comments of the State Advisory Committee, UJVN Ltd. has submitted its replies as follows:

- (1) UJVN Ltd. submitted that majority of the Plants being operated by UJVN Ltd. have outlived their useful life and the additional capitalization/RMU has been proposed for improving efficiency and generation of electricity. UJVN Ltd submitted that additional capitalization DPR is first put through the Audit Committee, then Board and then finally after the prudence check is approved by the Commission. The expenditure incurred/proposed is necessary so as to ensure that life of these old Plants can be extended and cheap power can be provided to the consumers. UJVN Ltd. further submitted that a similar utility, i.e. THDC operating in the State and generating power of approx. 5000 MU has been allowed much higher revenue when compared to the revenue allowed for UJVN Ltd. by the Commission.
- (2) UJVN Ltd. submitted that DRIP is a scheme of GoI in which dam safety aspects is taken into consideration. UJVN Ltd. is running the Hydro Power Plants which mostly have completed their life span and regular upkeep of dams/barrages has become the necessity in the current times. GoU provide loans for the same at very less rates.
- (3) UJVN Ltd. further submitted that in consultative with IIT-Roorkee it is exploring alternative ways to generate electricity using hydro kinetic turbines.
- (4) UJVN Ltd. with regards to interest rates submitted that it has been offered interest rate of 8% for Dhakrani HEP.

### **2.11.3 Commission's Views**

The issues raised by the Members of the Advisory Committee have been taken into consideration while deciding on the Petitioner's claims in the Petitions filed for approval of Business Plan for the Fourth Control Period from FY 2022-23 to FY 2024-25 and True Up of FY 2020-21, APR for FY 2021-22 and Tariff for Fourth Control Period from FY 2022-23 to FY 2024-25 as detailed in subsequent Chapters of this Order.

### **3 Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Business Plan for Fourth Control Period from FY 2022-23 to FY 2024-25**

#### **3.1 Statutory Requirement**

The Commission had notified the UERC Tariff Regulations, 2011 (hereinafter referred as UERC Tariff Regulations, 2011) on 19.12.2011. The above Regulations were applicable for approval of Business Plan and determination of Tariff for the First Control Period from FY 2013-14 to FY 2015-16. The Commission further notified the UERC Tariff Regulations, 2015 on 10.09.2015 which were applicable for approval of Business Plan and determination of Tariff for the Second Control Period from FY 2016-17 to FY 2018-19. The Commission further notified the UERC Tariff Regulations, 2018 on 14.09.2018 which are applicable for approval of Business Plan and determination of Tariff for the Third Control Period from FY 2019-20 to FY 2021-22. Thereafter, the Commission notified the UERC Tariff Regulations, 2021 on 14.09.2021 which are applicable for approval of Business Plan and determination of Tariff for the Fourth Control Period from FY 2022-23 to FY 2024-25.

#### **3.2 Multi Year Tariff Framework**

As regards the Multi Year Tariff Framework, UERC Tariff Regulations, 2021 specifies as follows:

##### **"4. Multi-year Framework**

*The Multiyear tariff framework shall be based on the following: -*

- a) Business plan submitted by the applicant for the entire Control Period for the approval of the Commission prior to the beginning of the Control Period;*
- b) Applicant's forecast of expected ARR for each year of the Control Period, based on reasonable assumptions and financial & operational principles/parameters laid down under these Regulations submitted alongwith the MYT petition for determination of Aggregate Revenue Requirement and Tariffs for first year of the Control Period;*
- c) Review of Control Period ending on 31.03.2022 shall also be taken up alongwith the ARR/Tariff petition for the first year of ensuing Control Period.*

- d) *Trajectory for specific parameters as may be stipulated by the Commission based on submissions made by the Licensee, actual performance data of the Applicants and performance achieved by similarly placed utilities;*
- e) *Annual review of performance shall be conducted vis-à-vis the approved forecast and categorization of variations in performance into controllable factors and uncontrollable factors;*
- f) *Sharing of excess profit or loss due to controllable and uncontrollable factors as per provisions of these Regulations.*

...

### **7. Determination of Baseline**

*The baseline values (operating and cost parameters) for the base year of the Control Period shall be determined by the Commission and shall be based on the approved values by the Commission, the latest audited accounts, estimates for the relevant year, prudence check and other factors considered by the Commission.*

*The Commission may re-determine the baseline values for the base year based on the actual audited accounts of the base year."*

### **3.3 Business Plan for Fourth Control Period**

Regulation 8 of the UERC Tariff Regulations, 2021, with regard to the Business Plan specifies as follows:

#### **"8. Business Plan**

- (1) *An Applicant shall submit, under affidavit and as per the UERC Conduct of Business Regulations as amended from time to time, a Business Plan by November 30th, 2021, for the Control Period of three (3) financial years from April 1, 2022 to March 31, 2025,*
  - a) *The Business Plan for the Generating Company shall be for the entire Control Period and shall, interalia, contain:*
    - (i) *Capital investment plan, which shall include details of the investments planned by the Generating Company for existing stations alongwith its cost-benefit analysis, yearly phasing of capital expenditure alongwith the source*



*of funding, financing plan and corresponding capitalisation schedule. This plan shall be commensurate with R&M schemes and proposed efficiency improvements for various plants of the company;*

- (ii) The capital investment plan shall show separately, on-going projects that will spill over into the years under review, and new projects (along with justification) that will commence in the years under review but may be completed within or beyond the tariff period;*
- (iii) The Generating Company shall submit plant-wise details of the capital structure and cost of financing (interest on debt and return on equity), after considering the existing market conditions, terms of the existing loan agreements, risks associated in generation business and creditworthiness;*
- (iv) Details related to major shut down of machines, if any;*
- (v) Trajectory of performance parameters;*

...

- (2) The Applicant shall also submit the details in respect of its manpower planning for the Control Period as part of Business Plan.*
- (3) The Commission shall scrutinize and approve the business plan after following the due consultation process."*

In accordance with Regulation 8 of the UERC Tariff Regulations, 2021, UJVN Ltd. submitted the Business Plan for the Fourth Control Period from FY 2022-23 to FY 2024-25. UJVN Ltd. in its Business Plan Petition and subsequent submissions has submitted the Capital Investment Plan, Financing Plan, Human Resource Plan and trajectory of Performance parameters for the Fourth Control Period from FY 2022-23 to FY 2024-25. The Petitioner's submissions and the Commission's analysis on approval of Business Plan for UJVN Ltd. for the Fourth Control Period from FY 2022-23 to FY 2024-25 are detailed below.

### **3.4 Capital Investment Plan**

#### **3.4.1 Existing and Upcoming Generation Capacities**

UJVN Ltd. has submitted the existing installed capacity of its large hydro generating stations as mentioned in Table below:

**Table 3.1: Existing Installed capacity as submitted by UJVN Ltd.**

Sl. No.	Power Plants	Installed Capacity (MW)	Year of Commissioning	Type of Scheme	River	Design Head (m)	Design Discharge (m <sup>3</sup> /s)
1	Dhakrani	33.75	1965	ROR	Yamuna	19.80	199.20
2	Dhalipur	51.00	1965	ROR	Yamuna	30.48	199.20
3	Chibro	240.00	1975	ROR with Pondage	Tons	110.00	200.00
4	Khodri	120.00	1984	ROR with Pondage	Tons	57.90	200.00
5	Kulhal	30.00	1975	ROR	Yamuna	18.00	198.00
6	Ramganga	198.00	1975	Reservoir	Ramganga	84.40	235.60
7	Chilla	144.00	1980	ROR	Ganga	32.50	565.00
8	MB-I	90.00	1984	ROR with Pondage	Bhagirathi	147.50	71.40
9	Khatima	41.40	1956	ROR	Sharda	17.98	269.00
10	MB-II	304.00	2008	ROR with Pondage	Bhagirathi	247.60	142.00
11	M. Pur	9.30	1952	ROR	Ganga	5.70	255.00
12	Galogi SHP	3.50	1907	ROR	Bhatta	285.00	1.36
13	Dunao SHP	1.50	2017	ROR	Purvi Nayar	47.00	4.60
14	Pilangad SHP	2.25	2004	ROR	Pilang Gad	102.00	2.75
15	Urgam SHP	3.00	1997	ROR	Kalp Ganga	196.50	1.86
16	Pathri	20.40	1955	ROR	Ganga	9.75	253.00
17	Kaliganga-I	4.00	2020	ROR	Kaliganga	164.46	3.45
	<b>Total</b>	<b>1,296.10</b>					

UJVN Ltd. has also submitted the list of upcoming projects. The details are shown in the Table below:

**Table 3.2: Upcoming Generating Stations as submitted by UJVN Ltd.**

Sl. No.	Name of Project	Estimated Potential (MW)	District	River / Tributary	Actual/ Expected COD
	<b>LHP (Short Term)</b>				
1	Vyasi	120.00	Dehradun	Yamuna	31-January-2022
	<b>LHP (Medium Term)</b>				
2	Tuni Palasu	72.00	Dehradun	Tons	31- December-2026
3	Lakhwar	300.00	Dehradun	Yamuna	31- December-2027

**Table 3.2: Upcoming Generating Stations as submitted by UJVN Ltd.**

Sl. No.	Name of Project	Estimated Potential (MW)	District	River / Tributary	Actual/ Expected COD
4	Bowla Nandprayag	300.00	Chamoli	Alaknanda	30- September-2027
5	Arakot Tuni	81.00	Uttarkashi	Pabar	31- March-2028
6	Sirkari Bhyol Rupsiabagar	120.00	Pithoragarh	Goriganga	31- March-2028
7	Nand Pyayag Langasu	100.00	Chamoli	Alaknanda	31- March-2028
<b>LHP (Long Term)</b>					
8	Sela Urthing	202.00	Pithoragarh	Dhauliganga	30- April-2028
9	Kishau	660.00	Dehradun & Sirmour of HP	Yamuna & Tons	Nov-2032
<b>SHP (Short Term)</b>					
10	Kaliganga-II	4.50	Rudrprayag	Mandakini/ Kaliganga	31-December-2021
11	Suringad-II SHP	5.00	Pithoragarh	Suringad a tributary of Goriganga	31-December-2021
12	Madhmaheshwar	15.00	Rudrprayag	Mandakini/ Madhmaheshwar	31-March-2022
13	Swarigad	2.00	Uttarkashi	Bhagirathi	31-December-2024
14	Painagad SHP	15.00	Pithoragarh	Painagad a tributary of Goriganga	31-December-2026
<b>SHP (Medium Term)</b>					
15	Guptkashi	1.50	Rudrprayag	Mandakini/ Rawangad	31-December-2025
16	Purkul	0.80	Dehradun	Kyarkulli	31-December-2026
17	Tankul SHP	12.00	Pithoragarh	Shymkholagad a tributary of Kali river	31-December-2025
18	Jimbagad SHP	12.00	Pithoragarh	Jimbagad a tributary of Goriganga	31-December-2026
19	Bhilangana II - A	24.00	Tehri	Bhilangana	31-March-2026
<b>SHP (Long Term)</b>					
20	Bhilangana II - B	24.00	Tehri	Bhilangana	DPR Under Progress
21	Tapovan	5.00	Chamoli	Dhauliganga/ Soblagad	
22	Kulagad SHP	1.20	Pithoragarh	Kulagad a tributary of Kali river	

**Table 3.2: Upcoming Generating Stations as submitted by UJVN Ltd.**

Sl. No.	Name of Project	Estimated Potential (MW)	District	River / Tributary	Actual/ Expected COD
23	Kanchauti SHP	4.00	Pithoragarh	Kanchauti a tributary of Dhauliganga	
	<b>Total</b>	<b>2081.00</b>			

Further, UJVN Ltd. vide its e-mail dated 23.03.2022 has submitted the revised CoD of the upcoming Hydro Plants as given below:

- (1) Kaliganga-II Small HEP - April 2022.
- (2) Suringad Small HEP - April 2022 subject to revocation of stay.
- (3) Vyasi Large HEP - April 2022 subject to settlement of R&R issue.

It is observed that SHPs namely Suringad-II, Swarigad, Kaliganga-II and one LHP namely Vyasi is expected to be commissioned during the Fourth MYT Control Period, i.e. from FY 2022-23 to FY 2024-25.

For all the upcoming LHP projects as mentioned aforesaid, the Commission sought the details of beneficiaries with percentage allocation. In compliance to the same, the Petitioner vide reply dated 12.01.2022 submitted that UPCL is the sole beneficiary for the 100% power allocated from these projects, except Kishau Project. The Petitioner vide its reply dated 31.01.2022 submitted that UJVN Ltd is liable to sell all the power generated from its Power Plants (barring the share of Himachal Pradesh) to UPCL and also submitted the copy of GoU letter dated 24.11.2003 stating the same. Further, the Petitioner in its submission dated 31.01.2022 submitted that for Kishau Project the Govt. of Uttarakhand is having 50% share. Further, the Petitioner in its Business Plan Petition has submitted that its Project Tamak Lata HEP (190 MW) is held up due to pending decision of the Hon'ble Supreme Court on the PIL filed before it.

With respect to the Bagasse based Plant, the Petitioner submitted that in the Business Plan for Third Control Period they had proposed to implement 22 MW & 16 MW Bagasse based Co-Generation Power Projects along with concurrent Modernization of Sugar Mills at Bazpur and Nadehi respectively on BOO basis. The Petitioner had proposed a capital expenditure of Rs. 115.05 Crore for the Co-generation power project at Nadehi and Rs. 154.52 Crore power project at Bazpur. The

Petitioner further submitted that a review meeting under the Chairmanship of Hon'ble Chief Minister of Uttarakhand for Bazpur (22 MW) & Nadehi (16 MW) cogeneration power projects and modernization of sugar mills" was held on 28.05.2021. Resolution of the meeting is as under:

*"Under the guidance of Hon'ble Chief Minister, it is decided that UJVNL should not implement both Co-generation projects and it would be appropriate to revive Bazpur and Nadehi sugar mills through Sitarganj or other better PPP model. The Secretary (Sugarcane Development and Sugar Industry), GoU will ensure to present the proposal immediately in this context in next cabinet meeting for discussion".*

In compliance to the above resolution, the Petitioner submitted that they do not have any plan to execute bagasse projects in forthcoming years.

The Petitioner further submitted that they have also entered in the business of solar energy development and currently operates solar Plants with in capacity ranging from 0.1 MW to 7.5 MW, totalling up to 26.464 MW. The Petitioner submitted that it has developed following capacities while enhancing its solar portfolio. The details of existing solar projects of UJVN Ltd. are as follows:

**a) Roof Top Solar Power Plants (600 kWp).**

100 kWp off grid Roof Top Solar Power Plant was commissioned in December, 2012 at Corporate Office "Ujjwal" and 500 kWp Grid Connected Solar Power Plant was installed in March, 2015 at Pathri Power Plant.

**b) Ground Mounted Solar Power Plants (5.864 MW)**

4.398 MW Grid Connected Solar Power Plant was commissioned in March, 2016 at Khodri Power Plant on Built Own and Operate (BOO) basis and 1.466 MW Grid Connected Solar Power Plant was commissioned in March, 2016 at Dhakrani Power Plant on Built Own and Operate (BOO) basis.

**c) Canal Bank Solar Power Plants (19 MW)**

7.5 MW Grid Connected Canal Bank Solar Power Plant was commissioned in March, 2017 near Dhalipur Power Plant, 7.0 MW Grid Connected Canal Bank Solar Power Plant was commissioned in March, 2017 near Dhakrani Power Plant and 4.5 MW Grid Connected Canal Bank Solar Power Plant was commissioned in March, 2017 between Dakpathar Barrage to Dhakrani Power Plant on Built Own Operate & Transfer (BOOT) basis.

**d) Canal Top Solar Power Plant (1 MW)**

1 MW Grid Connected Canal Top Solar Power Plant was commissioned in March, 2017 near Dhalipur Power Plant, on Built Own Operate & Transfer (BOOT) basis.

With regard to CUF of existing Solar Projects, the Commission enquired about the same in the TVS. In response, the Petitioner vide its reply dated 31.01.2022 submitted the CUF details for FY 2020-21 and FY 2021-22 for existing Solar Plants as shown in the Table below:

**Table 3.3: CUF Details as submitted by the UJVN Ltd.**

Plants	CUF (FY 2020-21)	CUF (FY 2021-22) (upto Dec-21)	Project Mode
4.398 MW SPV at Khodri	18.40%	15.39%	BOO
1.466 MW SPV at Dhakrani	19.32%	19.69%	BOO
19 MW Canal Bank SPV on Yamuna Power Channel	17.05%	16.18%	BOOT
1 MW Canal Top near Dhalipur	14.36%	13.71%	BOOT
0.5 MW Roof Top at Pathri HEP	6.64%	9.18%	-

With regard to the ownership of BOO/BOOT Projects, the Petitioner in its submission dated 31.01.2022 submitted that the ownership of each project is with the Petitioner but total investment had been done by Solar Power Developer (SPD). The Petitioner further submitted that it has done PPA with SPD for 25 years through competitive bidding basis. In BOO basis, after successful operation of Solar Power Plant for 25 years, SPD shall remove all installation erected by him related to Solar Power Plant at his own cost. However, in BOOT basis, SPD shall hand over the Solar Power Plant back to the Petitioner after successful completion of 25 years.

On a specific query of the Commission during TVS, pertaining to land cost for Solar Power Projects, the Petitioner submitted that it has made land available to SPD free of cost for development of Solar Power Project on BOO/BOOT basis for 25 years on right to use basis and MOU for the same has been done with successful SPD. Further, the Petitioner also submitted the Solar Stations wise revenue earned for FY 2020-21 and FY 2021-22.

Furthermore, the Petitioner submitted the list of upcoming solar projects along with the estimated investment and current implementation schedule. The Petitioner vide its reply dated 12.01.2022 to the data gaps submitted the details viz. name of procurer proposed, tariff for sale of solar power and ownership of each proposed Solar Power Project as shown in the Table below:

**Table 3.4: Details of Upcoming Solar Projects as submitted by UJVN Ltd.**

Sl. No.	Name	Year	Type	Power Plant Involved	Ownership	Capacity	Estimated Investment	Name of Procurer
						(MW)	(Rs. Cr.)	
Short Term								
1	32 kW Rooftop SPV at Ganga Bhawan, Dehradun	2021-22	Roof Top	-	UJVN Ltd.	0.032	0.185	To meet in house power demand
Total						0.032	0.185	

Sl. No.	Name	Year	Type	Power Plant Involved	Ownership	Capacity	Estimated Investment	Tariff (Estimated)	Name of Procurer
						(MW)	(Rs. Cr.)	(Rs./kWh)	
Medium Term									
1	50 kWp SPV Yamuna Bhawan, Dehradun	2022-23	Roof Top	-	UJVN Ltd.	0.05	0.25	0.25	To meet in house power demand
2	50 kWp SPV Vidyut Bhawan/Other Nigam Office, Dakpathar, Dehradun	2022-23	Roof Top	-	UJVN Ltd.	0.05	0.25	0.25	
3	50 kWp SPV SHP Office Rishikesh	2022-23	Roof Top	-	UJVN Ltd.	0.05	0.25	0.25	
4	25 kWp SPV GM Office, Mayapur, Haridwar.	2022-23	Roof Top	-	UJVN Ltd.	0.025	0.13	0.13	
5	790 kWp SPV Near Chilla Power House, Near Haridwar.	2022-23	Ground Mounted	-	UJVN Ltd.	0.79	3.95	3.95	UPCL
6	205 kWp SPV Near Ram Ganga Power House, Pauri Garhwal	2022-23	Ground Mounted	-	UJVN Ltd.	0.205	1.02	1.02	
7	600 kWp SPV Near Chibro Power House, Dehradun	2022-23	Ground Mounted	-	UJVN Ltd.	0.6	0.25	2.5	UPCL

Sl. No.	Name	Year	Type	Power Plant Involved	Ownership	Capacity	Estimated Investment	Tariff (Estimated)	Name of Procurer
						(MW)	(Rs. Cr.)	(Rs./kWh)	
Medium Term									
8	300 kWp SPV Near Kulhal Power House, Dehradun	2022-23	Ground Mounted	-	UJVN Ltd.	0.3	0.25	1.5	
9	500 kWp SPV Near Dhalipur Power House, Dehradun	2022-23	Ground Mounted	-	UJVN Ltd.	0.5	0.25	2.5	
Total						2.57	12.35		

Sl. No.	Name	Year	Type	Power Plant Involved	Ownership	Capacity	Estimated Investment	Tariff (Estimated)	Name of Procurer
						(MW)	(Rs. Cr.)	(Rs./kWh)	
Long Term									
1	9MW Grid Connected SPV near Kulhal Power House. Dehradun	2022-23	Canal Bank/ Ground Mounted	Kulhal Power House	UJVN Ltd.	9	36	4.00	UPCL
2	1MW Grid conected near Dhalipur Power House	2022-23	Canal Bank/ Ground Mounted	Dhalipur	UJVN Ltd.	1	4	4.00	UPCL
3	5260 kWp SPV Near Khatima Power House, Udham Singh Nagar.	2023-24	Ground Mounted	Khatima	UJVN Ltd.	5.26	21.04	4.25	UPCL
4	1370 kWp SPV Near Tiloth Power House, Uttarkashi	2023-24	Ground Mounted	Tiloth	UJVN Ltd.	1.37	6.92	4.25	UPCL
5	1670 kWp SPV Near Dharasu Power	2023-24	Ground Mounted	Dharasu	UJVN Ltd.	1.67	6.68	4.00	UPCL



Sl. No.	Name	Year	Type	Power Plant Involved	Ownership	Capacity	Estimated Investment	Tariff (Estimated)	Name of Procurer
						(MW)	(Rs. Cr.)	(Rs./kWh)	
Long Term									
	House, Uttarkashi								
6	18 MW Canal Top SPV	2024-25	Canal Top	At Power Channel between Dakpathar Barrage to Kulhal HEP	UJVN Ltd. (On Boot Basis)	18	144	6.49	UPCL
7	72.85 MW Canal Top Grid Connected Solar PV Plant on Chilla Power Channel	2025-26	Canal Top	At Chilla Power Channel between Veerbhadra Pashulok Barrage to Chilla HEP	UJVN Ltd. (On Boot Basis)	72.85	582.8	6.49	UPCL
Total						109.15	801.44		
Grand Total						111.75	813.98		

The Petitioner in the above Table has mentioned that the Procurer of upcoming Solar Power Plants would be UPCL, however, no document in support of the same confirming the consent from the procurer regarding the purchase of Solar Energy has been furnished before the Commission. Further, it is observed that Petitioner is planning to add 111.75 MW of Solar Power Plants in ensuing years, the implementation schedule as submitted by the Petitioner mostly is in Fourth Control Period. In this regard, UJVN Ltd., is cautioned to take extreme care with regard to BOO/BOOT Schemes and it should safeguard its commercial interests. **Further, UJVN Ltd. is directed to ensure that expenses incurred on account of power evacuation should be borne by the developer, and any financial implication on account of Solar Power Plants should not be included in its ARR of respective HEPs.**

### 3.4.2 Capital Expenditure and Capitalization Plan for upcoming projects

The Capital Expenditure Plan and capitalisation schedule for the upcoming large hydro projects for the Fourth Control Period as submitted by the Petitioner are as given below:

**Table 3.5: Capital Expenditure and Capitalization as submitted by UJVN Ltd. for upcoming LHP (Rs. Crore)**

Name of the Project	Estimated Potential (MW)	Particulars	Up to FY 2020-21	FY 2021-22 (Apr to Sept)	FY 2021-22 (Oct to Mar)	FY 2022-23	FY 2023-24	FY 2024-25
Vyasi HEP	120	Capital Expenditure	1506.48	187.07	115.76	-	-	-
		Capitalization	-	-	1809.31	-	-	-
Tiuni-Plasu HEP	72	Capital Expenditure*	10.15	1.36	2.50	50.00	262.40	212.19
		Capitalization	-	-	-	-	-	-
Lakhwar Multipurpose Project	300	Capital Expenditure	0.00	10.00		52.00	47.00	151.00
		Capitalization	-	-	-	-	-	-
Kishau HEP	660	Capital Expenditure	-	-	2.34	10.18	10.18	50.18
		Capitalization	-	-	-	-	-	-
Sirkari Bhyol Rupsiabagar HEP	120	Capital Expenditure	10.69	0.28	2.56	2.00	0.50	100.00
		Capitalization	-	-	-	-	-	-
Bowala Nand Prayag HEP	300	Capital Expenditure*	5.97		0.25	5.00	10.00	15.00
		Capitalization	-	-	-	-	-	-
Nand Prayag Langasu HEP	100	Capital Expenditure*	4.95	0.25	0.25	0.00	0.00	0.00
		Capitalization	-	-	-	-	-	-
Tamak Lata HEP	190	Capital Expenditure	4.53	-	-	-	-	-
		Capitalization	-	-	-	-	-	-
Sela Urthing Project	202	Capital Expenditure	1.44	0.00	0.40	0.61	1.81	2.00
		Capitalization	-	-	-	-	-	-
Aarakot Tuni HEP	81	Capital Expenditure*	0.00	0.00	1.00	10.00	100.00	150.00
		Capitalization	-	-	-	-	-	-
<b>Total</b>	<b>2145</b>		<b>1544.21</b>	<b>198.96</b>	<b>1934.37</b>	<b>129.79</b>	<b>431.89</b>	<b>680.37</b>

\*Revised Claimed vide TVS reply dated 31.01.2022

UJVN Ltd. submitted that the financing of all the above projects have been projected considering debt equity ratio of 70:30.

Whereas, the Capital Expenditure Plan for the upcoming small hydro projects for the Fourth Control Period as submitted by the Petitioner are as given below:

**Table 3.6: Capital Expenditure as submitted by UJVN Ltd.  
for upcoming SHP (Rs. Crore)**

Name of the Project	Estimated Potential (MW)	Up to FY 2020-21	FY 2021-22 (Apr to Sept)	FY 2021-22 (Oct to Mar)	FY 2022-23	FY 2023-24	FY 2024-25
<b>Short Term</b>							
Kaliganga - II	4.50	92.46	7.50	8.62	0.94	0.00	0.00
Suringad - II SHP	5.00	38.42	3.26	1.75	3.62	0.00	0.00
Madhmaheshwar	15.00	215.94	15.41	48.35	9.53	0.00	0.00
Swarigad	2.00	0.64	0.64	3.66	2.07	2.00	5.00
Painagad SHP	15.00	0.21	0.21	0.21	3.00	3.00	14.00
<b>Medium Term</b>							
Guptkashi	1.50	0.00	0.2	0.2	10.00	15.00	4.00
Purkul	0.80	0.00	0.1	0.10	5.00	5.00	2.00
Tankul SHP	12.00	0.14	0	0.31	6.20	30.00	50.00
Jimbagad SHP	12.00	0.18	0.21	0.21	3.00	3.00	14.00
Bhilangana II - A	24.00	10.00	0.00	1.99	61.84	93.36	100.1
<b>Long Term</b>							
Bhilangana II - B	24.00	0.00	0.00	0.00	3.94	4.16	94.9
Tapovan	5.00	0.05	0.00	0.00	7	10	6
Kulagad SHP	1.20	0.00	0.00	0.1	0.2	0.10	0.5
Kanchauti SHP	4.00	0.00	0.00	0.25	0.35	0.25	0.5
<b>Total</b>	<b>126.00</b>	<b>357.94</b>	<b>27.53</b>	<b>65.75</b>	<b>116.69</b>	<b>165.87</b>	<b>291.00</b>

### 3.4.3 Capital Expenditure and Capitalization Plan for existing projects

The Petitioner in its Business Plan Petition has proposed the capital expenditure to be carried out during the Fourth Control Period under three major heads as follows:

- Renovation, Modernisation and Up-rating (RMU) works
- Dam Rehabilitation and Improvement Project (DRIP)
- General Works

The Commission observed certain discrepancies in the Petitioner's capital expenditure claims of Fourth Control Period and directed the Petitioner to rectify the same. In response, the Petitioner submitted the revised additional capitalisation for all HEPs along with the break-up of additional capitalisation as claimed under DRIP and RMU works.

Regulation 21 & 22 of the UERC Tariff Regulations, 2021 specifies as under:

#### **"21. Capital Cost and capital structure**

- (1) *The Capital cost as determined by the Commission after prudence check in accordance with this regulation shall form the basis of determination of tariff for existing and new projects of the Generating Company, Transmission Licensee, Distribution Licensee and SLDC.*
- (2) *The Capital Cost of an existing project shall include the following:*
  - a) *The capital cost admitted by the Commission prior to 01.04.2022 duly trued up as on 01.04.2022;*

...

## **22. Additional capitalisation and De-capitalisation**

- (1) *The following capital expenditure within the original scope of work actually incurred or projected to be incurred after the date of commercial operation and up to the cut-off date may be admitted by the Commission, subject to prudence check:*
  - a) *Undischarged liabilities;*
  - b) *Works deferred for execution;*
  - c) *Procurement of initial capital spares within the original scope of work, subject to the provisions of Regulation 21(11);*
  - d) *Liabilities to meet award of arbitration or for compliance of the order or decree of a court; and*
  - e) *On account of change in law.*

*Provided that the details included in the original scope of work along with estimates of expenditure, deferred liabilities and the works deferred for execution shall be submitted along with the application for determination of tariff.*

- (2) *The capital expenditure of the following nature actually incurred after the cut-off date may be admitted by the Commission, subject to prudence check:*
  - a) *Liabilities to meet award of arbitration or for compliance of the order or decree of a court;*
  - b) *Change in law;*

- c) *Works deferred for execution within the original scope of work;*
- d) *Any liability for works admitted by the Commission after the cut-off date to the extent of discharge of such liabilities by actual payments;*
- e) *Any additional capital expenditure which has become necessary for efficient operation of generating station or transmission system as the case may be. The claim shall be substantiated with the technical justification duly supported by the documentary evidence like test results carried out by an independent agency in case of deterioration of assets, report of an independent agency in case of damage caused by natural calamities, obsolescence of technology, up-gradation of capacity for the technical reason such as increase in fault level;*
- f) *In case of hydro generating stations, any additional expenditure which has become necessary on account of damage caused by natural calamities (but not due to flooding of power house attributable to the negligence of the generating company), including due to geological surprises, after adjusting for proceeds from any insurance scheme, and expenditure incurred due to any additional work which has become necessary for successful and efficient plant operation;*

*Provided that additional capitalisation on this account would only be allowed if appropriate and adequate insurance cover was available at the time of occurrence of natural calamities referred to above;*

...

- h) *In case of replacement of any asset/equipment (e.g. transformer, circuit breaker, C.T., P.T. etc.) on account of non-performance/failure of the same, the following approach shall be adopted:*
  - (i) *In case of non-performance/failure of assets/equipment, it shall be sent to Store for assessment to check whether it is repairable or not at zero cost;*
  - (ii) *In case the asset is repairable, then such asset/equipment shall not be retired from Books of Assets.*

*Provided, proper tracking should be available for the material like location, asset number etc.*

(iii) *In case the asset is not repairable, then following process shall be carried out:*

- *The asset is retired from the Books of Assets, at depreciated value.*
- *Transfer the failed assets/equipment's from failed to scrap material.*
- *Dismantle it into of scrap inventory like iron, brass etc.*
- *Build up scrap inventory.*

*Provided, exercise of dismantling of scrap inventory and build-up of scrap inventory shall be done simultaneously. Dismantled scrap value would be decided on the basis of last scrap sale value. Control Account (Dismantling) will be expense account. Difference of Control account, i.e. either profit or loss shall be booked accordingly.*

(iv) *In case a new asset/equipment is issued, then it will be issued at weighted average cost and capitalized respectively, and accordingly, new asset would be created and corresponding entries shall be done in the Books of Accounts.*

(3) *In case of de-capitalisation of assets of a generating company or the distribution licensee or the transmission licensee or SLDC, as the case may be, the original cost of such asset as on the date of de-capitalisation shall be deducted from the value of gross fixed asset and corresponding loan as well as equity shall be deducted from outstanding loan and the equity respectively in the year such de-capitalisation takes place, duly taking into consideration the year in which it was capitalised.*

(4) *Any addition/modification to the existing assets exceeding Rs. 2.50 Crore in case of distribution licensee and Rs. 5 Crore in case of generating companies/transmission licensee shall be taken up only after prior approval of the Commission. The investment approval application covered under this sub-regulation are excluded from the application of proviso to Sub-Regulation (2) of the Regulation 10 of UERC (Conduct of Business) Regulations, 2014 in so far as the requirement of submission of documentary evidence with respect to the approval of BoD is concerned."*

The Petitioner has claimed the additional capitalisation for the Fourth Control Period under 3 heads namely expenses on account of RMU, DRIP, General Works.

The total additional capitalisation claimed for the Fourth Control Period by the Petitioner is as shown in the table below:

**Table 3.7: Additional Capitalization claimed for Fourth Control Period by UJVN Ltd.**

Name of the Generating Station	FY 2022-23 (Rs. Crore)				FY 2023-24 (Rs. Crore)				FY 2024-25 (Rs. Crore)			
	General	DRIP	RMU	Total	General	DRIP	RMU	Total	General	DRIP	RMU	Total
Dhakrani	12.90	3.92	0.00	<b>16.82</b>	3.56	8.12	0.00	<b>11.68</b>	0.75	6.51	30.24*	<b>37.5</b>
Dhalipur	12.51	5.93	36.50*	<b>54.94</b>	1.50	4.96	42.80*	<b>49.26</b>	1.13	9.83	0.00	<b>10.96</b>
Chibro	30.46	4.35	0.00	<b>34.81</b>	12.56	11.71	0.00	<b>24.27</b>	4.10	4.73	0.00	<b>8.83</b>
Khodri	20.83	2.18	0.00	<b>23.01</b>	3.23	5.86	0.00	<b>9.09</b>	3.93	2.37	0.00	<b>6.3</b>
Kulhal	10.22	5.60	0.00	<b>15.82</b>	6.66	10.70	0.00	<b>17.36</b>	5.00	2.62	0.00	<b>7.62</b>
Ramganga	8.09	0.00	0.00	<b>8.09</b>	20.87	0.00	0.00	<b>20.87</b>	18.37	0.00	0.00	<b>18.37</b>
Chilla	35.45	32.63	0.00	<b>68.08</b>	16.33	30.24	86*	<b>132.57</b>	8.45	0.00	75*	<b>83.45</b>
MB-I	18.73	4.74	69.72*	<b>93.19</b>	21.55	9.32	0.00	<b>30.87</b>	11.75	77.59	0.00	<b>89.34</b>
Khatima	35.34	0.00	0.00	<b>35.34</b>	64.84	0.00	0.00	<b>64.84</b>	16.00	0.00	0.00	<b>16</b>
MB-II	32.60	19.55	0.00	<b>52.15</b>	26.92	21.06	0.00	<b>47.98</b>	29.04	50.84	0.00	<b>79.88</b>
<b>Sub-Total</b>	<b>217.13</b>	<b>78.90</b>	<b>106.22</b>	<b>402.25</b>	<b>178.02</b>	<b>101.97</b>	<b>128.8</b>	<b>408.79</b>	<b>98.52</b>	<b>154.49</b>	<b>105.24</b>	<b>358.25</b>

\*As per revised capitalization claim against RMU works vide Petitioner's submission dated 25.02.2022

With regard to additional capitalisation towards general works proposed by the Petitioner, it is observed that the Petitioner has been continuously projecting additional capitalisation under this head in the past as well and has projected around Rs. 497.71 Crore in the Fourth Control Period. The Commission observes that Regulation 22 specifies specific conditions to be met for its consideration after cut-off date. The Commission further observes that the Petitioner is already undertaking RMU of its generating stations covering both E&M and Civil works and DRIP works are being undertaken for improvement of dam safety and mostly covers Civil works. In view of these ongoing RMU and DRIP works, the Petitioner should have a compelling case for approval of any other works not covered under DRIP and RMU for which prior approvals have been taken from the Commission.

With regard to office building at Dehradun, the Commission sought the status of capitalization of expenses against the construction of office building at Dehradun. In response, the Petitioner in its reply dated 25.02.2022 has proposed to capitalize Rs. 47.42 Crore against construction of Corporate office building at Dehradun in FY 2022-23. In this regard, the Commission has not considered capitalization against the same as of now. The same may be considered during the

APR/True-up exercise subject to the specific approvals given by the Commission against construction of office building and prudence check.

In view of the above, the Commission for approving additional capitalisation for the Fourth Control Period has provisionally considered the additional capitalisation projected against RMU and DRIP schemes only. For works to be carried out under general works that do not fall either under RMU or DRIP, the Petitioner is directed to seek specific approval under Regulation 22(4) of UERC Tariff Regulations, 2021.

The total additional capitalisation allowable by the Commission for the Fourth Control Period is as shown in the Table below. The Commission shall consider the same on actual basis subject to prudence check at the time of truing up in accordance with the UERC Tariff Regulations, 2021. Further, the Commission against the allowed additional capitalization has considered the funding of DRIP works through Debt: Equity ratio of 80:20 and RMU works through Debt: Equity ratio of 70:30.

**Table 3.8: Additional Capitalization Approved by the Commission for Fourth Control Period (Rs. Crore)**

Name of the Generating Station	FY 2022-23		FY 2023-24		FY 2024-25	
	DRIP	RMU	DRIP	RMU	DRIP	RMU
<i>Dhakrani</i>	3.92	0.00	8.12	0.00	6.51	30.24*
<i>Dhalipur</i>	5.93	36.50*	4.96	42.80*	9.83	0.00
<i>Chibro</i>	4.35	0.00	11.71	0.00	4.73	0.00
<i>Khodri</i>	2.18	0.00	5.86	0.00	2.37	0.00
<i>Kulhal</i>	5.60	0.00	10.70	0.00	2.62	0.00
<i>Ramganga</i>	0.00	0.00	0.00	0.00	0.00	0.00
<i>Chilla</i>	32.63	0.00	30.24	86.00*	0.00	75.00*
<i>MB-I</i>	4.74	69.72	9.32	0.00	77.59	0.00
<i>Khatima</i>	0.00	0.00	0.00	0.00	0.00	0.00
<i>MB-II</i>	19.55	0.00	21.06	0.00	50.84	0.00
<i>Sub-Total</i>	<b>78.90</b>	<b>106.22</b>	<b>101.97</b>	<b>128.80</b>	<b>154.49</b>	<b>105.24</b>
<b>Total</b>	<b>185.12</b>		<b>230.77</b>		<b>259.73</b>	

\* As per revised capitalization claim against RMU works vide Petitioner's submission dated 25.02.2022

### 3.5 Financing Plan

#### 3.5.1 Petitioner's Submissions

The Petitioner has submitted that the RMU and General works shall be financed in the Debt Equity ratio of 70:30 and the DRIP works shall be funded through 80% Debt and 20% Equity.



### 3.5.2 Commission's Analysis

Regulation 24 of the UERC Tariff Regulations, 2021 specifies as follows:

#### **"24. Debt-equity ratio**

- (1) For a project declared under commercial operation on or after 1.4.2022, debt-equity ratio shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as normative loan. Where actual equity employed is less than 30%, the actual equity would be used for determination of Return on Equity in tariff computations.

..."

The Commission has gone through the submissions of the Petitioner and has considered funding of RMU works in the Debt Equity Ratio of 70:30 and DRIP works in the ratio of 80:20.

### 3.6 Human Resources Plan

#### 3.6.1 Petitioner's Submissions

The Petitioner in its Business Plan has submitted that against a sanctioned strength of 4093, the current working strength is 1916 with 2177 vacancies, and the Petitioner intends to partially fill the existing vacancies as well vacancies that may arise in the forthcoming period on account of retirements, resignations etc. The HR plan for the Fourth Control Period from FY 2022-23 to FY 2024-25 as submitted by the Petitioner in the Business Plan is as per the Table below:

**Table 3.9: HR Plan as submitted by UJVN Ltd.**

Particulars	FY 2021-22		FY 2022-23	FY 2023-24	FY 2024-25
	Actual (Apr-Sept)	Projected (Oct-Mar)	Projected	Projected	Projected
Opening No. of Employees	1924	1916	1975	1980	2070
Recruitment during the year	24	101	60	146	150
Retirement during the year	32	42	55	56	69
Closing No. of Employees	1916	1975	1980	2070	2151

### 3.6.2 Commission's Analysis

The Commission directed the Petitioner to submit the proper justification and preparedness for manpower addition during the Fourth Control Period and also sought the details of its recruitment plan indicating the posts on which such recruitment would take place.

In compliance to the same, the Petitioner vide letter dated 12.01.2022 submitted only the details of its recruitment plan indicating the posts on which such recruitment would take place. The details submitted is as shown in the table below:

**Table 3.10: Projected Recruitment Plan October 2021 to March 2022**

Sl. No.	Name of Post	No. of Post	Recruitment Plan
1	A.E. (E&M)	10	Written exam through GBPUAT and interview process has been arranged. Based on the final results, selected candidates will be appointed by March, 2022
2	A.E. (Civil)	10	
3	Geologist	01	
4	R&R Officer	01	Manual for the said post has been submitted to the State Govt. for their acceptance. Recruitment process will be completed after approval of the same.
5	Manager Environment	01	
6	T.G.II (Electrical & Mech.)	39	Recruitment process is going on. At present, through UKSSSC for 5 post vacancies has been filled.
7	Steno Grade III	26	Written exam through UKSSSC has been completed. Result awaited. Request to unfreeze the said posts has been sent to the State Govt.
8	Asst. Librarian	01	
9	Asst. Store Keeper	11	For record verification, 9 candidates were present, appointment letter has been released on 29.12.2021. Candidates to submit the report on it by 01.02.2022
10	P.O.	01	Appointment letter has been released on 17.12.2021. Candidate to submit the report on it by 20.01.2022
<b>Total</b>		<b>101</b>	

**Table 3.11: Projected Recruitment Plan FY 2022-23**

Sl. No.	Name of Post	No. of Post	Recruitment Plan
1	J.E. (E&M)	25	Advertisement against the post has been published on 10.12.2021. The last date for submission of application against it is 28.01.2022
2	J.E. (Civil)	25	
3	O.A. III	10	The proposal for the posts has been sent to UKSSSC vide letter dated 05.07.2021. The advertisement against it will be published.
<b>Total</b>		<b>60</b>	

**Table 3.12: Projected Recruitment Plan FY 2023-24**

Sl. No.	Name of Post	No. of Post	Recruitment Plan
1	A.E. (E&M)	10	After approval from the State Govt. w.r.t. unfreezing of the posts, the recruitment process shall be initiated through UKSSSC/GBPUAT.
2	A.E. (Civil)	06	
3	J.E. (E&M)	20	

4	J.E. (Civil)	25	
5	Accounts Officer	09	
6	O.A. III	40	
7	T.G.II (Electrical)	15	
8	T.G.II (Mech.)	21	
	<b>Total</b>	<b>146</b>	

**Table 3.13: Projected Recruitment Plan FY 2024-25**

Sl. No.	Name of Post	No. of Post	Recruitment Plan
1	A.E. (E&M)	15	After approval from the State Govt. w.r.t. unfreezing of the posts, the recruitment process shall be initiated through UKSSSC/GBPUAT.
2	A.E. (Civil)	06	
3	J.E. (E&M)	20	
4	J.E. (Civil)	20	
5	P.O.	01	
6	O.A. III	28	
7	Steno Grade III	15	
8	T.G.II (E&M)	40	
9	Assistant Accountant	05	
	<b>Total</b>	<b>150</b>	

During TVS, the Commission directed the Petitioner to re-submit the actual status of the manpower addition for FY 2021-22 and re-submit employee projections in view of the Retirement/Resignation/De-ceased figures projected for FY 2022-23, FY 2023-24, FY 2024-25. In compliance to the same, the Petitioner submitted the same vide reply dated 31.01.2022. However, it was observed that the Petitioner submitted the projection details of manpower as on 15.01.2022 to FY 2024-25. The revised actual figures prior to 15.01.2022 were not submitted and, therefore, the Commission again directed the Petitioner to submit the actual details of total manpower addition from April, 2021 to 15.01.2022 and thereafter projections till FY 2024-25. The Petitioner submitted the same vide its reply dated 09.03.2022, i.e. total employees of UJVN Ltd. from different departments (HQ, 10 LHPs, SHPs, Project, Solar etc.) as mentioned below:

**Table 3.14: Total Manpower details submitted by UJVN Ltd. from different Departments (HQ, 10 LHPs, SHPs, Project, Solar etc.)**

Particulars	FY 2021-22 (Actuals) - Apr, 2021 to 15-Jan- 2022	FY 2021-22 (Projected) 15-Jan- 2022 to 31- March- 2022	FY 2021-22 (Total)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2024-25 (Projected)
Opening No. of Employees	1924	1901	1924	1975	1985	2077
Recruitment during the year	20	101	121	60	146	150

**Table 3.14: Total Manpower details submitted by UJVN Ltd. from different Departments (HQ, 10 LHPs, SHPs, Project, Solar etc.)**

Particulars	FY 2021-22 (Actuals) - Apr, 2021 to 15-Jan- 2022	FY 2021-22 (Projected) 15-Jan- 2022 to 31- March- 2022	FY 2021-22 (Total)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2024-25 (Projected)
Recruitment against deceased	15	0	15	0	0	0
Retirement/Resigned/Expired	58	27	85	50	54	71
Closing No. of Employees	1901	1975	1975	1985	2077	2156

The Petitioner also submitted the actual details of total manpower addition from April, 2021 to 15.01.2022 and thereafter projections till FY 2024-25 pertaining to HQ and 10 LHPs only, which has been considered by the Commission for the purpose of this Order for the Fourth Control Period of FY 2022-23 to FY 2024-25. The details pertaining to it is as shown below:

**Table 3.15: Total Manpower details approved for HQ & 10 LHPs by the Commission**

Particulars	FY 2021-22 (Actuals) - Apr, 2021 to 15-Jan- 2022	FY 2021-22 (Projected) 15-Jan- 2022 to 31-March- 2022	FY 2021-22 (Total)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2024-25 (Projected)
Opening No. of Employees	1662	1545	1662	1611	1613	1700
Recruitment during the year	13	89	102	45	136	135
Recruitment against deceased	13	0	13	0	0	0
Retirement/Resigned/Expired	37	23	60	43	49	62
Transferred from LHPs and HQs to SHP/Projects/Solar since 2019	106	-	106	-	-	-
Closing No. of Employees	1545	1611	1611	1613	1700	1773

The Commission cautions the Petitioner to put in all efforts for meeting the proposed recruitment of employees during each year of the Fourth Control Period from FY 2022-23 to FY 2024-25. The Commission shall consider the actual recruitment and retirement status during the truing up for the respective years.

### 3.7 Trajectory of the Performance Parameters

#### 3.7.1 Design Energy

Regulation 3(24) of UERC Regulations 2021 defines Design Energy as follows:

*“Design Energy” means the quantum of energy which can be generated in a 90% dependable year with 95% installed capacity of the hydro generating station;“*

UJVN Ltd. submitted that the design energy of the Plants has been proposed taking into consideration the Design Energy approved for FY 2020-21 and FY 2021-22 after impact of NGT Order by the Commission.

UJVN Ltd. submitted that the impact of RMU in Tiloth/MB-I and Dhalipur has also been considered for these Plants. Accordingly, the Petitioner proposed the design energy for the control period as follows:

**Table 3.16: Design Energy proposed by UJVN Ltd. for the Fourth Control Period**

Generating Station	As proposed by UJVN Ltd.		
	FY 2022-23 (MU)	FY 2023-24 (MU)	FY 2024-25 (MU)
Dhakrani	150.90	150.90	150.90
Dhalipur	182.80	182.80	214.5
Chibro	728.10	728.10	728.10
Khodri	335.40	335.40	335.40
Kulhal	148.90	148.90	148.90
Ramganga	311.00	311.00	311.00
Chilla	557.60	557.60	557.60
MB-I	461.00	461.00	461.00
Khatima	235.6	235.6	235.6
MB-II	1291	1291	1291
<b>Total</b>	<b>4402.30</b>	<b>4402.30</b>	<b>4434.00</b>

The Commission vide Order dated 18.04.2020 with regard to the implementation of NGT Order stated as follows:

*“With regard to the consideration of impact due to implementation of NGT/NMCG Order on Design Energy, the Commission observes that the impact of implementation of NGT/NMCG Order on Design Energy for FY 2020-21 could not be precisely ascertained at this stage. However, in order to ensure that the Petitioner is not financially prejudiced on account of under recovery of energy charges, the Commission provisionally approves downward revision of Design Energy of 9 LHPs by 194.02 MU for the sole purpose of recovery of energy charges. The Commission directs the Petitioner to maintain separate discharge data of rivers as well as the data of mandatory discharges being released in compliance to NGT/NMCG Order and any other data to substantiate the impact. Further, the Petitioner shall submit the data at the time of truing-up of FY 2020-21 and, thereafter, appropriate view will be taken by the Commission in this regard after carrying out due prudence check.”*

Further, the Commission vide Order dated 26.04.2021 with regard to the impact of implementation of NGT Order stated as follows:

*"In view of the above, the Commission observes that the impact of implementation of NGT/NMCG Order on Design Energy for FY 2021-22 cannot be precisely ascertained at this stage. However, in order to ensure that the Petitioner is not financially prejudiced on account of under recovery of energy charges, the Commission provisionally approves downward revision of Design Energy of 9 LHPs by 194.02 MU as considered by the Commission in its earlier Tariff Order dated April 18, 2020 for the sole purpose of recovery of energy charges. The Commission further directs the Petitioner to maintain separate discharge data of rivers as well as the data of mandatory discharges being released in compliance to NGT/NMCG Order and any other data to substantiate the impact. Further, the Petitioner shall submit the data at the time of truing-up of FY 2021-22 and, thereafter, appropriate view will be taken by the Commission in this regard after carrying out due prudence check".*

The actual generation submitted by the Petitioner vis-à-vis MYT approved design energy and the revised design energy as per Tariff Order dated 26.04.2021 is as shown in the following Table.

**Table 3.17: Actual Gross Generation vis-a-vis Design Energy Approved in MYT Order & Revised Design Energy on account of NGT Order**

Power Plant	FY 2020-21		
	Actual Gross Generation Submitted by the Petitioner (MU)	Design Energy Approved in MYT Order (MU)	Revised Design Energy after impact of NGT Order approved vide Order dated 18.04.2020 (MU)
	(A)	(B)	(C)
Dhakrani	153.51	156.88	150.85
Dhalipur	175.78 (RMU – 1 Unit)	192.00	182.76
Chibro	830.69	750.00	728.11
Khodri	380.11	345.00	335.37
Kulhal	134.60	153.91	148.91
Ramganga	265.72	311.00	311.00
Chilla	743.58	671.29	557.62
MB-I	334.26 (RMU and MIV Repair)	395.00	366.45
Khatima	221.45	235.59	235.59
MB-II	1301.82	1291.00	1291.00
<b>Total</b>	<b>4541.51</b>	<b>4501.67</b>	<b>4307.66</b>

From the above, it is observed that consolidated actual gross generation is higher than even the design energy approved in the MYT Order. It is further observed that as Dhalipur and MB-I were

under RMU, the generation are lower than the design energy. It is observed that the actual data do not substantiate further relaxation in the design energy for recovery of energy charges as proposed by the Petitioner for the Fourth Control Period.

Further, in view that the generating stations shall be undergoing RMU, post which a fresh view on the same shall be taken based on the DPR submitted/post RMU actual generation. Therefore, the Commission as of now does not find it appropriate in re-working the impact of NGT/NMCG orders for FY 2022-23 to FY 2024-25. However, the relaxation as approved for FY 2021-22 in the Tariff Order dated 26.04.2021 for NGT Order shall continue and shall be subject to true up.

Whereas for MB-I, as RMU works are expected to complete in 1<sup>st</sup> quarter of FY 2022-23, the provisional Design Energy considered by the Commission for the purpose of this Order is 478 MU (Design Energy considered with reduced closure period) for FY 2022-23 to FY 2024-25 as per the Petitioner's submission dated 31.01.2022. Whereas for Dhalipur, as RMU works are expected to complete in FY 2023-24, therefore, as of now revision in design energy for Dhalipur HEP has not being envisaged.

Based on the above, the Commission has, accordingly, approved the Design Energy for the Fourth Control Period as shown in the Table below:

**Table 3.18: Design Energy Approved by the Commission for Fourth Control Period**

Name of the Generating Station	Original Design Energy	Design Energy approved vide Tariff Order dated 26.04.2021	Design Energy Proposed by UJVN Ltd. With the NGT/ NMCG impact	Design Energy Approved for the Fourth Control Period
	MU	MU	MU	MU
Dhakrani	169.00	150.85	150.90	150.85
Dhalipur	192.00	182.76	182.80 MU for FY 2022-23 & FY 2023-24 214.50 MU for FY 2024-25	182.76
Chibro	750.00	728.11	728.10	728.11
Khodri	345.00	335.37	335.40	335.37
Kulhal	164.00	148.91	148.90	148.91
Ramganga	385.00	311.00	311.00	311.00
Chilla	725.00	557.62	557.60	557.62
MB-I	546.00	366.45	461.00	478.00*
Khatima	208.00	235.59	235.59	235.59
MB-II	1566.10	1291.00	1291.00	1291.00
<b>Total</b>	<b>5050.10</b>	<b>4307.66</b>	<b>4402.25/4433.95</b>	<b>4419.21</b>

\*Provisional Design Energy

**The Commission directs the Petitioner to maintain separate discharge data of rivers as well as the data of mandatory discharges being released in compliance to NGT/NMCG Order and any other data to substantiate the impact. The Petitioner shall submit the data at the time of truing-up of respective financial years, i.e. FY 2022-23 to FY 2024-25 and, thereafter, appropriate view will be taken by the Commission in this regard after carrying out due prudence check on case to case basis in case of any severe impact in the actual generation.**

Further, since RMU works are under progress in various LHPs of UJVN Ltd., and there are no compelling reasons to revisit the design energy during this transition period, therefore, the Commission shall take a fresh view on Design Energy once the said RMU works will be completed. Further, any energy generated in excess of design energy approved in this Tariff Order up to the Original Design Energy shall not be considered as secondary energy meaning thereby that till the Original Design Energy, the Petitioner will recover the energy charge upto 50% of the AFC approved for the year.

### **3.7.2 Auxiliary Energy Consumption**

UJVN Ltd. in its Petition has projected the auxiliary energy consumption in line with the norms stipulated in the UERC Tariff Regulations, 2021.

Further, UJVN Ltd. has requested the Commission to revise Normative Auxiliary Consumption for Chibro and MB-II as CERC has allowed higher Auxiliary Consumption for Plants with more than 200 MW total installed capacity and (or) with Underground Plants with Static Excitation, Eg. Chibro and Surface Plants with Static Excitations, Eg. MB-II.

UJVN Ltd. further submitted that Ramganga and MB-I are expected to complete the works for replacing the excitation systems to Static excitation by the end of FY 2021-22. Hence, same has been considered in projections for Auxiliary Energy Consumption. Moreover, Dhalipur's excitation system conversion to Static excitation system is expected after RMU completion by the end of FY 2023-24.

The Commission is of the view that the norms for Auxiliary Energy Consumption (including transformation losses) have been fixed as part of UERC Tariff Regulations, 2021. Therefore, the pleading of UJVN Ltd. to consider Auxiliary Energy Consumption for Chibro and MB-II as per CERC Regulations is not legally tenable. Moreover, the actual Auxiliary Energy Consumption for Chibro



and MB-II HEP for FY 2020-21 do not provide any compelling grounds for consideration of higher Normative Auxiliary Energy Consumption for the said HEP in the Fourth Control Period.

The Commission has, therefore, for the purpose of approval of Business Plan has approved Auxiliary Energy Consumption (including Transformation Losses) as per the norms stipulated in the UERC Tariff Regulations, 2021.

However, for Ramganga and MB-I as it is expected to complete the works for replacing the rotating excitation systems to Static excitation system by the end of FY 2021-22, accordingly, the Commission has considered its Auxiliary Energy Consumption in line with the Regulation 47 (4) (ii) (a) (ii) of the UERC Tariff Regulations, 2021.

The Auxiliary Energy Consumption as submitted by the Petitioner and as approved for the Fourth Control Period is as shown in the Table below:

**Table 3.19: Auxiliary Energy Consumption including Transformation Loss for Fourth Control Period**

Generating Station	As proposed by UJVN Ltd.	Approved for the Fourth Control Period (%)
Dhakrani	0.70%	0.70%
Dhalipur	0.70% (for FY 2022-23 & FY 2023-24) 1.00% for FY 2024-25	0.70%
Chibro	1.20%	1.20%
Khodri	1.00%	1.00%
Kulhal	0.70%	0.70%
Ramganga	1.00%	1.00%
Chilla	1.00%	1.00%
MB-I	1.00%	1.00%
Khatima	1.00%	1.00%
MB-II	1.00%	1.00%

Regulation 3(8) of the UERC Tariff Regulations, 2021 is read as below:

- (8) “Auxiliary Energy Consumption” in relation to a period, in case of generating station means the quantum of energy consumed by auxiliary equipment of the generating station, such as the equipment used being used for the purpose of operating plant and machinery including switchyard of the generating station and transformation losses within the generating stations and shall be expressed as a percentage of the sum of gross energy generated at the generator terminals of all the Units of the generating station;

*Provided that the colony consumption and other facilities of a Generating Station and the power consumed for construction works at the Generating Station shall not be included as part of the Auxiliary Energy Consumption for the purpose of these Regulations.*

*Provided further that auxiliary energy consumption for compliance of revised emission standards, sewage treatment plant and external coal handling plant (jetty and associated infrastructure) shall be considered separately."*

Accordingly, the Commission in the TVS directed UJVN Ltd. to comply with the aforesaid Regulation and record Auxiliary Energy Consumption separately for sewage treatment Plant for its 10 LHPs/Dams/Barrages. UJVN Ltd. vide reply dated 31.01.2022 submitted that the necessary arrangement for recording it separately will be done. **The Commission has considered the submissions of UJVN Ltd. and directs UJVN Ltd. to submit the actual figures of Auxiliary Energy consumption in line with the aforesaid Regulations during truing up of respective financial years, i.e. for FY 2022-23 to FY 2024-25.**

Besides above, during scrutiny of submissions against instant Petitions, it has been observed that either Auxiliary Energy Consumption of Dams/Barrages are not being included in Auxiliary Energy Consumption of the respective HEPs or the same are not being apportioned amongst the HEPs as per apportionment philosophy/methodology. **Therefore, UJVN Ltd. is directed to ensure correct energy accounting of the Auxiliary Energy Consumption at its Dams/Barrages and their apportionment amongst respective HEPs as per apportionment philosophy/methodology.**

### **3.7.3 Saleable Primary Energy and Secondary Energy**

In line with the past practice, in this MYT Order also, the Saleable Primary Energy for Fourth Control Period has been derived by deducting the Normative Auxiliary Energy Consumption from the above considered Design Energy in accordance with UERC Tariff Regulations, 2021 respectively for the purpose of calculation of Energy Charge Rate. With respect to the benefit of excess generation over and above the Original Design Energy, i.e. the secondary energy, the rate of secondary energy shall be based on the Original Design Energy and not on the basis of Design Energy considered by the Commission for recovery of Energy Charge Rates. Further, in case such energy charge rate is higher than 90 paise/kWh, the rate of secondary energy shall be considered as 90 paise/kWh in accordance with Regulation 50(7) of the UERC Tariff Regulations, 2021. The relevant extract of the Regulation is being reproduced below:

"50...

- (7) *In case the Energy Charge Rate (ECR) for a hydro generating station, as computed above, exceeds ninety paise per kWh, and the actual saleable energy in a year exceeds {  $DE \times (100 - AUX)$  } x*

*(100-FEHS)/ 10000 } MWh, the Energy Charge for the energy in excess of the above shall be billed at ninety paise per kWh only:"*

From above, it is amply clear that the Petitioner can get the benefits of Secondary Energy only in case it is able to generate energy more than the Original Design Energy. To provide necessary clarity on the issue the Commission would like to reproduce the relevant extracts from its Tariff Order dated 21.10.2009:

*"Further, since the Petitioner is allowed to recover its entire AFC at a projected generation, which is lower than the Original Design Energy in some of these plants, the Petitioner recovers additional Primary Energy Charges in excess of the approved AFC when the actual generation exceeds this projected level. This situation continues till the generation reaches the Original Design Energy level. As per Regulations, the Primary Energy is reckoned upto the level of Original Design and, accordingly, the charges recovered would be considered as Primary Energy Charges upto the Original Design Energy. However, since the Primary Energy Charges actually recovered at the approved Primary Energy Rates may be higher than approved AFC in the aforesaid circumstances, the excess AFC recovered through Primary Energy Charges needs to be adjusted/refunded to the concerned beneficiary."*

Accordingly, the Design Energy and Saleable Primary Energy for the Fourth Control Period from FY 2022-23 to FY 2024-25 as approved by the Commission is given in the Table below:

**Table 3.20: Original Design Energy, Design Energy and Saleable Primary Energy for Fourth Control Period from FY 2022-23 to FY 2024-25 as approved by the Commission**

Name of the Generating Station	Original Design Energy	Design Energy	Auxiliary Consumption including Transformation Loss		Saleable Primary Energy
	MU	MU	%	MU	MU
Dhokrani	169.00	150.85	0.70%	1.06	149.79
Dhalipur	192.00	182.76	0.70%	1.28	181.48
Chibro	750.00	728.11	1.20%	8.74	719.37
Khodri	345.00	335.37	1.00%	3.35	332.02
Kulhal	164.00	148.91	0.70%	1.04	147.87
Ramganga	385.00	311.00	1.00%	3.11	307.89
Chilla	725.00	557.62	1.00%	5.58	552.04
MB-I	546.00	478.00*	1.00%	4.78	473.22
Khatima	208.00	235.59	1.00%	2.36	233.23
MB-II	1566.10	1291	1.00%	12.91	1278.09
<b>Total</b>	<b>5050.10</b>	<b>4419.21</b>		<b>44.21</b>	<b>4375.00</b>

*\*Revised to 478 MU (Provisionally)*

### 3.7.4 Outage Plan during the Fourth Control Period

UJVN Ltd. in its Petition has submitted the station-wise outage plan on account of Annual Maintenance (AM), Capital Maintenance (CM), Renovation Modernization & Up-gradation (RMU), Dam Rehabilitation and Improvement Project (DRIP) and Reverse Engineering & Capital Maintenance (RE & CM) for the Fourth Control Period. UJVN Ltd. vide its reply dated 31.01.2022 revised the same, the details pertaining to it is as shown in the Table below:

**Table 3.21: Outage Plan for FY 2022-23 submitted by UJVN Ltd.**

Sl. No.	Name of Power Plant	Unit	Date of Start	Date of Completion	No. of Days	Remarks
1.	Dhakrani (3 x 11.25)	Unit 1	01-04-2022	15-04-2022	15	AM
		Unit 1	16-01-2023	15-02-2023	31	AM
		Unit 2	15-11-2022	15-12-2022	31	AM
		Unit 3	16-12-2022	15-01-2023	31	AM
2.	Dhalipur (3x17)	Unit 1	01-04-2022	30-06-2022	91	RMU
		Unit 2	15-12-2022	18-01-2023	35	AM
		Unit 3	08-10-2022	31-03-2023	175	RMU
3.	Chibro (4X60)	Unit 1	20-04-2023	15-05-2023	26	AM
		Unit 2	01-03-2023	26-03-2023	26	AM
		Unit 3	27-03-2023	31-03-2023	5	AM
		Unit 4	01-11-2022	01-03-2023	121	CM
4.	Khodri (4X30)	Unit 1	15-01-2023	14-02-2023	31	AM
		Unit 2	15-11-2022	15-12-2022	31	AM
		Unit 3	01-04-2022	11-04-2022	11	AM
		Unit 3	14-02-2023	16-03-2023	31	AM
		Unit 4	15-12-2022	14-01-2023	31	AM
5.	Kulhal (3x10)	Unit 1	15-11-2022	15-12-2022	31	AM
		Unit 2	18-12-2022	17-01-2023	31	AM
		Unit 3	21-01-2023	20-02-2023	31	AM
6.	Ramganga (3x66)	Unit 1	01-07-2022	14-08-2022	45	AM
		Unit 2	16-08-2022	29-09-2022	45	AM
		Unit 3	01-09-2022	15-10-2022	45	AM
7.	Chilla (4x36)	Unit 1	01-04-2022	24-04-2022	24	AM
		Unit 1	01-08-2022	30-09-2023	426	RMU
		Unit 2	25-12-2022	03-02-2023	41	AM
		Unit 3	06-02-2023	18-03-2023	41	AM
		Unit 4	20-03-2023	30-04-2023	42	AM
8.	MB-I (3x30)	Unit 1	-	-		
		Unit 2	01-04-2022	30-04-2022	30	Under RMU
		Unit 3	03-01-2023	30-01-2023	28	AM
9.	Khatima (3x 13.8)	Unit 1	28-11-2022	28-12-2022	31	AM
		Unit 2	10-02-2023	12-03-2023	31	AM

**Table 3.21: Outage Plan for FY 2022-23 submitted by UJVN Ltd.**

Sl. No.	Name of Power Plant	Unit	Date of Start	Date of Completion	No. of Days	Remarks
		Unit 3	05-01-2023	04-02-2023	31	AM
10.	MB-II (4x76)	Unit 1	15-10-2022	13-12-2022	60	AM
		Unit 2	10-11-2022	08-01-2023	60	AM
		Unit 3	25-12-2022	22-02-2023	60	AM
		Unit 4	21-01-2023	21-03-2023	60	AM

**Table 3.22: Outage Plan for FY 2023-24 submitted by UJVN Ltd.**

Sl. No.	Name of Power Plant	Unit	Date of Start	Date of Completion	No. of Days	Remarks
1.	Dhakrani (3 x 11.25)	Unit 1	01-10-2023	30-04-2024	213	RMU
		Unit 2	16-12-2023	15-01-2024	31	AM
		Unit 3	16-01-2024	15-02-2024	31	AM
2.	Dhalipur (3x17)	Unit 1	-	-		
		Unit 2	15-12-2023	18-01-2024	35	AM
		Unit 3	01-04-2023	07-05-2023	37	RMU
3.	Chibro (4X60)	Unit 1	27-03-2024	31-03-2024	5	AM
		Unit 2	01-03-2024	26-03-2024	26	AM
		Unit 3	01-04-2023	21-04-2023	21	AM
		Unit 3	01-11-2023	29-02-2024	121	CM
		Unit 4	22-04-2024	17-05-2024	26	AM
4.	Khodri (4X30)	Unit 1	15-01-2024	14-02-2024	31	AM
		Unit 2	15-11-2023	15-12-2023	31	AM
		Unit 3	15-02-2024	16-03-2024	31	AM
		Unit 4	15-12-2023	14-01-2024	31	AM
5.	Kulhal (3x10)	Unit 1	15-11-2023	15-12-2023	31	AM
		Unit 2	18-12-2023	17-01-2024	31	AM
		Unit 3	21-01-2024	20-02-2024	31	AM
6.	Ramganga (3x66)	Unit 1	01-07-2023	25-02-2024	240	CM
		Unit 2	01-07-2023	14-08-2023	45	AM
		Unit 3	16-08-2023	29-09-2023	45	AM
7.	Chilla (4x36)	Unit 1	-	-		
		Unit 2	01-10-2023	31-07-2024	305	RMU
		Unit 3	20-11-2024	30-12-2024	41	AM
		Unit 4	01-01-2024	10-02-2024	41	AM
8.	MB-I (3x30)	Unit 1	01-02-2024	28-02-2024	28	AM
		Unit 2	04-01-2024	31-01-2024	28	AM
		Unit 3	-	-		
9.	Khatima (3x 13.8)	Unit 1	26-11-2023	26-12-2023	31	AM
		Unit 2	10-02-2024	11-03-2024	31	AM
		Unit 3	05-01-2024	04-02-2024	31	AM

**Table 3.22: Outage Plan for FY 2023-24 submitted by UJVN Ltd.**

Sl. No.	Name of Power Plant	Unit	Date of Start	Date of Completion	No. of Days	Remarks
10.	MB-II (4x76)	Unit 1	15-10-2023	13-12-2023	60	AM
		Unit 2	10-11-2023	08-01-2024	60	AM
		Unit 3	25-12-2023	22-02-2024	60	AM
		Unit 4	21-01-2024	20-03-2024	60	AM

**Table 3.23: Outage Plan for FY 2024-25 submitted by UJVN Ltd.**

Sl. No.	Name of Power Plant	Unit	Date of Start	Date of Completion	No. of Days	Remarks
1.	Dhakrani (3 x 11.25)	Unit 1	-	-		
		Unit 2	01-10-2024	30-04-2025	212	RMU
		Unit 3	16-12-2024	15-01-2025	31	AM
2.	Dhalipur (3x17)	Unit 1	20-01-2025	24-02-2025	36	AM
		Unit 2	15-12-2024	18-01-2025	35	AM
		Unit 3	-	-		
3.	Chibro (4X60)	Unit 1	01-04-2024	21-04-2024	21	AM
		Unit 1	02-03-2025	27-03-2025	26	AM
		Unit 2	01-11-2024	01-03-2025	121	CM
		Unit 3	20-04-2025	15-05-2025	26	AM
		Unit 4	26-03-2025	20-04-2025	26	AM
4.	Khodri (4X30)	Unit 1	16-01-2025	15-02-2025	31	AM
		Unit 2	15-11-2024	15-12-2024	31	AM
		Unit 3	16-02-2025	18-03-2025	31	AM
		Unit 4	16-12-2024	15-01-2025	31	AM
5.	Kulhal (3x10)	Unit 1	15-11-2024	15-12-2024	31	AM
		Unit 2	18-12-2024	17-01-2025	31	AM
		Unit 3	21-01-2025	20-02-2025	31	AM
6.	Ramganga (3x66)	Unit 1	-	-		
		Unit 2	01-07-2024	25-02-2025	240	CM
		Unit 3	01-07-2024	14-08-2024	45	AM
7.	Chilla (4x36)	Unit 1	01-01-2025	10-02-2025	41	AM
		Unit 2	-	-		
		Unit 3	01-08-2024	31-05-2025	304	RMU
		Unit 4	01-10-2024	31-07-2025	304	RMU
8.	MB-I (3x30)	Unit 1	15-12-2024	29-01-2025	46	AM
		Unit 2	-	-		
		Unit 3	01-02-2025	28-02-2025	28	AM
9.	Khatima (3x 13.8)	Unit 1	26-11-2024	26-12-2024	31	AM
		Unit 2	10-02-2025	12-03-2025	31	AM
		Unit 3	05-01-2025	04-02-2025	31	AM

**Table 3.23: Outage Plan for FY 2024-25 submitted by UJVN Ltd.**

Sl. No.	Name of Power Plant	Unit	Date of Start	Date of Completion	No. of Days	Remarks
10.	MB-II (4x76)	Unit 1	15-10-2024	13-12-2024	60	AM
		Unit 2	10-11-2024	08-01-2025	60	AM
		Unit 3	25-12-2024	22-02-2025	60	AM
		Unit 4	21-01-2025	21-03-2025	60	AM

The Commission for the purpose of approval of the Business Plan has noted the submissions of UJVN Ltd. Further, the Commission expects that UJVN Ltd. shall adhere to the Outage Plan as submitted with minimum outages to achieve maximum generation during the Fourth Control Period.

### 3.7.5 Normative Annual Plant Availability Factor (NAPAF)

#### Petitioner's Submissions

UJVN Ltd. in its Business Plan has projected NAPAF for the Fourth Control Period as below:

**Table 3.24: NAPAF (%) Projected by UJVN Ltd. (%)**

Station	FY 2022-23	FY 2023-24	FY 2024-25
Dhakrani	67.31	62.24	63.92
Dhalipur	58.52	60.12	60.21
Chibro	65.89	66.08	65.88
Khodri	58.49	58.62	58.49
Kulhal	71.56	71.54	70.54
Ramganga	13.19	12.76	13.02
Chilla	59.67	57.07	50.89
MB-I	79.17	79.17	79.17
Khatima	67.85	68.55	67.75
MB-II	69.46	69.46	69.46

The Petitioner requested the Commission to allow relaxation of NAPAF on account of the following reasons:

- (a) **NGT order:** Hon'ble N.G.T. released an Order dated 09.08.2017 regarding release of minimum discharge into the rivers. In compliance to the Order of Hon'ble NGT, the Government of Uttarakhand has issued Order No. 708 dated 05.06.2018 to UJVN Ltd. for maintaining the minimum 15% of the average lean season flow in the rivers from the Dams/Barrages situated in the State of Uttarakhand. Additionally, the Gazette notification has also been issued by Govt. of India on 09.10.2018 which was amended

on 16.09.2019 stating changes on minimum environmental flows to be maintained in River Ganga (up to Unnao). These above mentioned orders shall impact the Plant availability factor and, accordingly, the Petitioner requested the Commission to take it into account while approving NAPAF.

- (b) **Dhalipur HEP:** UJVN Ltd. submitted that the Dhalipur Power Plant is very old HEP and requires more maintenance. Thus, there is a requirement for it to be shut down for longer periods to carry out maintenance. Further, RMU works have also been planned during the Control Period. The RMU works are expected to get completed by the end of FY 2023-24. The Petitioner requested the Commission to consider the impact of RMU works into account while approving NAPAF.
- (c) **Ramganga HEP:** UJVN Ltd. submitted that the control of water release lies with Uttar Pradesh Irrigation Department (UPID). The release of water is pending with UPID to increase peaking power from Ramganga, which may also require desilting in downstream barrages and canals. As the control of water release lies with UPID the Plant is unable to manage the peaking from the Power Plant and, therefore, the NAPAF of 19% fixed by the Commission for last control period could not be achieved. Further, the Plant has also completed its useful life due to which technological up-gradation is also required. The Petitioner requested the Commission that the NAPAF for 4<sup>th</sup> control period may kindly be allowed as per actuals.
- (d) **Chilla HEP:** UJVN Ltd. submitted that the Availability of Chilla will be affected by ageing as well as RMU activities are planned for the Fourth Control Period. Accordingly, the same may be relaxed for the upcoming control period.
- (e) **MB-I HEP:** The RMU activities have also impacted the availability of the HEP in the Third Control Period and RMU works shall be complete by 1<sup>st</sup> quarter of FY 2022-23. The Petitioner submitted that the Power Plant suffers from excessive silt. The Petitioner further submitted that high erosion and detrimental effects of high quantum of silt with quartzite contents in the Bhagirathi river water results in high damages to underwater parts and equipment carrying the river water such as pipelines, valves,



etc. Further, there is only a single pressure shaft emanating in the downstream of the surge tank of Tiloth HEP (MB-I HEP), which gets trifurcated into 3 nos. penstocks each feeding directly to the individual Units. The problem arises when leakage starts due to detrimental effects of the silt in any of the equipment related to MIV or beyond such as valves, pipelines etc. In order to attend the same, the surge tank gate is required to be lowered and penstocks are required to be dewatered. Since, there is a common pressure shaft from the surge tank, lowering of the surge tank gate results in complete closure of the powerhouse contributing to high quantum of generation as well as availability loss. In light of the above, UJVN Ltd. requested the Commission to consider the NAPAF as proposed.

### **Commission's Analysis**

Regulation 47(1) (b) of UERC Tariff Regulations, 2021 specifies as under:

*“(b) For existing hydro generating stations:*

*The trajectory for NAPAF fixed by the Commission in case of existing hydro generating stations, in the preceding Control Period would continue to be applicable. However, the NAPAF of the stations undergone RMU would be adjusted accordingly, considering the impact of RMU.”*

The Commission has gone through the submission of the Petitioner and is of the view that most of the reasons stated by the Petitioner are related to the operational issues, which has already been considered by the Commission while approving the NAPAF of the generating stations in the MYT Order of the Third Control Period, except the impact on account of implementation of NGT/NMCG Order. Further, as the RMU works for some of the nine old generating stations are yet to be completed, the Commission is of the view that the NAPAF approved vide Tariff Order dated 26.04.2021 for FY 2021-22 shall continue to be applicable for the Fourth Control Period. Accordingly, the Commission has approved the NAPAF for each station for Fourth Control Period equivalent to NAPAF approved vide Tariff Order dated 26.04.2021 for FY 2021-22. However, the Commission shall take a fresh view on the same once the RMU works for the stations get completed.

However, for Ramganga Power Plant, the Commission observed that the Power Plant has been consistently achieving lower PAFY, i.e. between 12% & 16%. The Commission observed that the

Petitioner has sought NAPAF of around 15.00% for the Third Control Period in its previous Business Plan Petition against which the Petitioner achieved PAFY of 16.21% in FY 2020-21. Therefore, the Commission approves the NAPAF of Ramganga generating station as 16.00% for the Fourth Control Period. The Commission further clarifies that no incentive on achievement of higher PAFY shall be allowed in between 16.00% to 19.00%.

With regard to impact of NGT/National Mission for Clean Ganga (NMCG) Order on NAPAF for FY 2022-23 to FY 2024-25, the Commission observed that the Actual generation data for FY 2020-21 vis-à-vis MYT Approved data for the Third Control Period and Revised DE data on account of NGT Order dated 09.07.2017 approved by the Commission vide Order dated 26.04.2021 do not compel for relaxation in the NAPAF as proposed by the Petitioner for the Fourth Control Period. Moreover, there is no substantial impact in the actual generation because of the NGT Order.

Therefore, the Commission, at this point of time has not considered any impact of the NGT/NMCG Order on NAPAF for FY 2022-23 to FY 2024-25. However, the Petitioner is at liberty to submit the actual impact at the time of truing-up of respective financial years, i.e. FY 2022-23 to FY 2024-25 along with the relevant documents in support of the same. The Petitioner is required to submit the actual impact/ loss of availability due to the NGT/NMCG Order based on the actual daily discharge from the Dams/Barrages during the lean season vis-a-vis such flows prior to the NGT/NMCG Order. Accordingly, appropriate view shall be taken in this regard after carrying out due prudence check on case to case basis in case of any severe impact in the actual generation/PAFM.

Accordingly, the Commission approves the NAPAF of 10 LHPs for the Fourth Control Period as shown in the Table below:

**Table 3.25: NAPAF as approved by the Commission for Fourth Control Period**

Station	Approved vide Order dated 26.04.2021 (%)	Proposed by UJVN Ltd. (%)			Approved (%)		
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2022-23	FY 2023-24	FY 2024-25
Dhakrani	66.17	67.31	62.24	63.92	66.17	66.17	66.17
Dhalipur	61.07	58.52	60.12	60.21	61.07	61.07	61.07
Chibro	65.06	65.89	66.08	65.88	65.06	65.06	65.06
Khodri	57.23	58.49	58.62	58.49	57.23	57.23	57.23
Kulhal	65.00	71.56	71.54	70.54	65.00	65.00	65.00
Ramganga	19.00	13.19	12.76	13.02	16.00	16.00	16.00
Chilla	74.00	59.67	57.07	50.89	74.00	74.00	74.00

**Table 3.25: NAPAF as approved by the Commission for Fourth Control Period**

Station	Approved vide Order dated 26.04.2021 (%)	Proposed by UJVN Ltd. (%)			Approved (%)		
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2022-23	FY 2023-24	FY 2024-25
MB-I	79.00	79.17	79.17	79.17	79.00	79.00	79.00
Khatima	69.30	67.85	68.55	67.75	69.30	69.30	69.30
MB-II	76.00	69.46	69.46	69.46	76.00	76.00	76.00

However, while truing up for respective financial years, the Commission shall consider the outage period on account of RMU works while re-stating the actual PAFM subject to prudence check in accordance with the Regulations/Orders of the Commission in this regard.

#### **4      Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing-up of 9 LHPs and MB-II for FY 2020-21**

Regulation 12 of the UERC Tariff Regulations, 2018 specifies as follows:

##### ***"12.    Annual Performance Review***

- (1)    Under the multi-year tariff framework, the performance of the Generating Company or Transmission and Distribution Licensees or SLDC, shall be subject to an Annual Performance Review.*
- (2)    The Applicant shall under affidavit and as per the UERC Conduct of Business Regulations as amended from time to time, make an application for Annual Performance Review by November 30th of every year;*
- ...*
- (3)    The scope of the Annual Performance Review shall be a comparison of the actual performance of the Applicant with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise of following:*
  - a)    A comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenue subject to prudence check including pass through of impact of uncontrollable factors;*
  - b)    Categorisation of variations in performance with reference to approved forecast into factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (un-controllable factors).*
  - c)    Revision of estimates for the current and/or ensuing financial year, if required, based on audited financial results for the previous financial year;*
  - d)    Computation of the sharing of gains and losses on account of controllable factors for the previous year."*

In its present filings, the Petitioner has submitted the data relating to its expenses and revenues for FY 2020-21 for nine LHPs and MB-II based on the audited accounts and has, accordingly, requested the Commission to carry out the truing-up for FY 2020-21 along with the sharing of gain and losses. In addition to the above, with regard to MB-II, the Petitioner for the purpose of the instant Petition has claimed the Capital Cost of Rs. 1,885.50 Crore in line with the approved amount. Notwithstanding the claim of Rs. 1,885.50 Crore, the Petitioner requested the Commission to pass on the impact of the Capital Cost for MB-II (i.e. Rs. 1923.60 Crore) as claimed previously, in case the Appeal No. 283 of 2016 filed before the Hon'ble APTEL in this regard is ruled in its favour.

It is observed that Appeal No. 215 of 2016 and Appeal No. 283 of 2016 before the Hon'ble ATE filed by the Petitioner agitating the issue of Capital Cost of MB-II LHP and RoE on PDF against the principle adopted by the Commission in its MYT Order dated 05.04.2016 are still pending. Hence, the Commission in the current tariff proceedings has decided to carry out truing-up of MB-II for FY 2020-21 considering the capital cost as on CoD as approved by the Commission in the Tariff Order dated April 18, 2020, i.e. Rs. 1885.50 Crore in accordance with the UERC Tariff Regulations, 2018.

#### **4.1 Impact of Sharing of Gains and Losses on account of Controllable Factors for FY 2020-21**

Regulation 14 of the UERC Tariff Regulations, 2018 specifies as follows:

*"14. Sharing of Gains and Losses on account of Controllable factors*

- (1) The approved aggregate gain and loss to the Applicant on account of controllable factors shall be dealt with in the following manner:*
  - a) 1/3<sup>rd</sup> of such gain or loss shall be passed on as a rebate or allowed to be recovered in tariffs over such period as may be specified in the Order of the Commission;*
  - b) The balance amount of such gain or loss may be utilized or absorbed by the Applicant."*

The UERC Tariff Regulations, 2018 requires a comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing-up of expenses and revenues subject to prudence check including pass through of impact of uncontrollable factors.

O&M expenses comprises of the major portion of AFC of UJVN Ltd. and are within the control of the Petitioner and, moreover, in accordance with UERC Tariff Regulations, 2018, these are controllable expenses. Similarly, in accordance with the UERC Tariff Regulations, 2018, the variation in working capital requirements and variations in performance parameters are also a controllable factor. Hence, the sharing of gains and losses has been carried out for these expenses/performance parameters viz. O&M expenses (excluding employee expenses), variation in working capital requirements and variation in performance parameters, i.e. PAFY Vs. NAPAF.

Accordingly, the Commission has worked out the trued up (Surplus)/Gap of the Petitioner after sharing of gains and losses as per the provisions of UERC Tariff Regulations, 2018.

#### 4.1.1 Physical Parameters

##### 4.1.1.1 Relaxation sought in approved NAPAF

#### A. Relaxation sought for 9 LHPs

The Commission vide its MYT Order dated February 27, 2019 had approved the NAPAF for 9 LHPs of UJVN Ltd. in accordance with Regulations 47(1)(b) of UERC Tariff Regulations, 2018 as under:

**Table 4.1: NAPAF approved vide Order dated 27.02.2019  
for FY 2020-21 for 9 LHPs**

Sl. No.	Name and Type of Plant		NAPAF Approved by the Commission in Order dt. 27.02.2019 for FY 2020-21
1	Dhakrani	RoR	66.17%
2	Dhalipur	RoR	61.07%
3	Chibro	Pondage	65.06%
4	Khodri	Pondage	57.23%
5	Kulhal	RoR	65.00%
6	Ramganga	Storage	19.00%
7	Chilla	RoR	74.00%
8	MB-I	Pondage	79.00%
9	Khatima	RoR	69.30%

Further, with regard to outages on account of RMU works, the Commission in its aforesaid Order held that:

*"... while truing up for respective years, the Commission shall consider the outage period on account of RMU works while re-stating the actual PAFM subject to prudence check in accordance with the Regulations/Orders of the Commission in this regard."*

In the current Petition, the Petitioner has submitted the actual PAFY values achieved during FY 2020-21 and requested the Commission to relax the NAPAF norms for its Plants namely Dhalipur, Chibro, Ramganga, Chilla and MB-I to the extent of PAFY achieved during FY 2020-21. The actual PAFY achieved during FY 2020-21 are as under:

**Table 4.2: Plant-wise actual PAFY achieved during FY 2020-21 for 9 LHPs**

Sl. No.	Name and Type of Plant		NAPAF approved in MYT Order dated 27.02.2019 (%)	PAFY (in %)
1	Dhakrani	RoR	66.17%	67.27%
2	Dhalipur	RoR	61.07%	54.38%
3	Chibro	Pondage	65.06%	64.77%
4	Khodri	Pondage	57.23%	57.75%
5	Kulhal	RoR	65.00%	67.20%
6	Ramganga	Storage	19.00%	16.21%
7	Chilla	RoR	74.00%	64.38%
8	MB-I	Pondage	79.00%	46.92%
9	Khatima	RoR	69.30%	67.00%*

*\*Revised claim vide reply dated 31.01.2022*

In support of its claim, the Petitioner submitted the Plant-wise reasons for not being able to achieve the prescribed NAPAF, as follows:

- **Dhalipur HEP:** The Petitioner has submitted that the generating station could not achieve NAPAF as the station is very old & requires more maintenance. The Petitioner further submitted that in order to carry out maintenance works, this station needs to be shut down for longer periods.

The Petitioner further in its additional submission dated 31.01.2022 has submitted that Unit 2 of the Dhalipur HEP has been shut down on account of RMU from 07.02.2019 to 07.06.2021. The Petitioner, therefore, requested the Commission to consider the relaxation in NAPAF on account of RMU works for Dhalipur HEP.

- **Chibro HEP:** The Petitioner has submitted that the generating station could not achieve NAPAF as the station is very old & requires more maintenance. The Petitioner further submitted that in order to carry out maintenance works, this station needs to be shut down for longer periods.
- **Ramganga:** The Petitioner submitted that the water released from Ramganga Dam is purely irrigation based and the control of which rests with Uttar Pradesh Irrigation Department and,

therefore, they have no control over the same. Therefore, the Petitioner has requested the Commission to revise the NAPAF for FY 2020-21 as 16.21% instead of 19.00%.

- **Chilla:** The Petitioner has submitted that the generating station could not achieve NAPAF as the station is very old & requires more maintenance. The Petitioner further submitted that in order to carry out maintenance works, this station needs to be shut down for longer periods.
- **MB-I :** The Petitioner has submitted that the Power Plant is suffering from excessive silt and ageing. The Petitioner further submitted that high erosion & detrimental effects of high quantum of silt with quartzite contents in the Bhagirathi river water results in high damages to under water parts and equipment such as runner, guide vane, stay vanes, DT lines, pipelines, valves etc. The Petitioner further submitted that the slit concentration is more because of land slides in rainy season and other development works. The Petitioner further submitted that the frequent shut downs along with planned maintenance is required during monsoon period (Approximately 1 month) and during lean discharge period (80 days) are required for operating the Unit in safe operating conditions.

Further, the Petitioner also submitted that the most critical aspect in operation of the Power Plant is shortfall in the design aspect. The Petitioner submitted that there is only a single pressure shaft emanating in the downstream of the surge tank of Tiloth HEP (MB-I HEP), which gets trifurcated into 3 nos. penstocks each feeding directly to the individual Units. The problem arises when leakage starts due to detrimental effects of the silt in any of the equipment related to MIV or beyond such as valves, pipelines etc. In order to attend the same, the surge tank gate is required to be lowered and penstocks are required to be dewatered. Since there is a common pressure shaft from the surge tank, hence, lowering of the surge tank gate results in complete closure of the Power Plant contributing to high quantum of generation as well as availability loss. Further, the Petitioner submitted that the Power Plant could not achieve NAPAF mainly due to ageing and RMU of the machines.

Also, the Petitioner further in its additional submission dated 31.01.2022 has submitted that the MB - I HEP has been shut down on account of RMU & MIV works.



The Petitioner, accordingly, requested the Commission to re-state the PAFY of MB-I HEP for True-up of FY 2020-21 on account of shutdowns of the Unit/Plant for RMU in line with previous Tariff Order.

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

- **Dhalipur HEP:** With regard to NAPAF of Dhalipur for FY 2020-21, the Petitioner has achieved PAFY of 54.38% against the approved NAPAF of 61.07%.

The NAPAF was set by the Commission in the MYT Order dated February 27, 2019 without considering any RMU.

The Petitioner's submission in the instant Petition shows that RMU works of Unit 2 was carried out from February 7, 2019 to June 07, 2021. In cases where the NAPAF has not been achieved by the Petitioner on account of genuine reasons, the approach adopted by the Commission is to allow the Petitioner to recover maximum of the approved AFC of the Plant owing to such closure. Considering the fact that Unit 2 of Dhalipur HEP was under shutdown since February 7, 2019, the Commission has considered the same and has re-stated the PAFY of Dhalipur LHP as 60.00% for FY 2020-21 based on the average PAFM of last 5 years.

- **Chibro HEP:** With regard to Chibro HEP, the reasons for not achieving NAPAF as submitted by the Petitioner are on account of ageing. The Commission in its Tariff Order dated 27.02.2019 while approving the NAPAF for FY 2020-21 had already factored in the outages including the shutdowns for maintenance works and relaxed the NAPAF of the generating station. Therefore, the Commission is of the view that there is no case for further relaxation with regard to the NAPAF or re-statement of PAFY for Chibro HEP for FY 2020-21, and, therefore, no relaxation has been allowed by the Commission.
- **Ramganga:** With regard to Ramganga HEP, the Petitioner has achieved a PAFY of 16.21% against the approved NAPAF of 19% and the relaxation sought by the Petitioner is on account of the reason that the control of water release lies with Uttar Pradesh Irrigation Department (UPID).

Further, the Commission vide data gaps dated December 12, 2021 sought justification as to why the performance of Ramganga HEP is deteriorating on year on year basis based on PAF

data. In its reply dated January 12, 2022 and January 31, 2022 the Petitioner reiterated the reasons submitted earlier.

The Commission observes that the Petitioner itself in its Second MYT Petition had projected NAPAF for the station as 17.24% after factoring in the above reason. The Commission while approving NAPAF for the Second Control Period had considered the maximum of NAPAF approved for the First Control Period and that projected by the Petitioner for the Second Control Period, which already factors in the fact that the control of water release lies with UPID and the Commission in MYT Order for Third Control Period has retained the NAPAF considering the similar conditions under which the Plant is operating. The Commission has, therefore, not allowed any relaxation with regard to NAPAF or re-statement of PAFY for Ramganga HEP for FY 2020-21.

- **Chilla :** With regard to Chilla HEP the PAFY achieved for FY 2020-21 was 64.38% against approved NAPAF of 74%, the reasons for not achieving NAPAF as submitted by the Petitioner is on account of ageing and shutdowns. The Commission vide Order dated April 26, 2021 observed that the Petitioner has not finalized the insurance claim with the insurance company as the restoration works were in progress in FY 2019-20 and ruled as below:

*".....Considering the fact that the claim on account of generation loss is yet to be finalized, the Commission has, therefore, not allowed any relaxation with regard to NAPAF or re-statement of PAFY for Chilla HEP for FY 2019-20. The Commission directs the Petitioner to expedite the claim process and submit the details of final Insurance claim received in the next tariff proceedings".*

The Commission vide data gaps dated December 23, 2021 again directed the Petitioner to submit the current status of Insurance claim of Chilla HEP due to flooding event in July 13, 2018. The Petitioner vide its reply dated January 12, 2022 submitted as below:

*"Chilla Power House was damaged on 13.07.2018. The Power house was covered under the insurance policy of M/s Oriental Insurance Company. The insurance company along with the surveyor visited the Chilla Power House on 01.08.2018. Insurance claim amounting to Rs. 32.77 Crore submitted to Insurance company. In this regard, it is to bring to notice that due to incident of 13.07.2018 claim of Rs. 32.77 Crore were submitted along with the supporting documents. On the above claims, net assessed loss of Rs. 10.63 Crore has only been assessed by the surveyor which are merely 32.43% of loss, which has been assessed by UJVNL.*

M/s Oriental Insurance company credited Rs. 4.96 Crore on 07.12.2021 against Rs. 10.63 Crore. Whereas Rs. 5.66 Crore shall be credited after settlement of scrap value. Tender of scrap/salvage was floated, tender was allotted to the M/s Global India Corporation at Rs. 1.25 Crore but M/s Global India Corporation requested that the firm wants 90 days' time for submission of amount. The firm was not able to submit the amount in this regards, Rs. 3 Lakhs was forfeit. In the above context remaining insurance claim shall be settle down after finalization of the salvage tender. Salvage tender shall be published on 10.01.2022".

In view of the above, considering the fact that only Rs. 10.63 Crore of loss has been assessed by the surveyor which is merely 32.43% of loss, which has been assessed by UJVN Ltd. against the claim of Rs. 32.77 Crore, therefore pending its finalization the Commission has, therefore, not allowed any relaxation with regard to NAPAF or re-statement of PAFY for Chilla HEP for FY 2020-21. **The Commission again directs the Petitioner to expedite the claim process and submit the details of final Insurance claim received in the next tariff proceedings.**

- **MB-I:** With regard to NAPAF of MB-I for FY 2020-21, the Petitioner has achieved PAFY of 46.92% against the approved NAPAF of 79%.

The Commission in its review Order dated September 03, 2013 and subsequent Tariff Orders for Second Control Period and Third Control Period while determining NAPAF has already considered the operating problems on account of site conditions. The Commission has, therefore, not considered any change in the NAPAF on account of operational issues.

Further, the Commission observed that Units of MB-I LHP were under shutdown due to RMU and MIV works as shown below:

**Table 4.3: MB-I Shut down details on account of RMU and MIV works**

Year	Unit No.	Date of Start	Date of Completion	Remarks
FY 2020-21	Unit 1	12.12.2018	17.04.2020	RMU completed
		18.11.2020	04.12.2020	MIV work of Unit 2
		03.03.2021	02.04.2021	MIV work of Unit 2
	Unit 2	18.11.2020	-	MIV work of Unit 2
	Unit 3	27.02.2020	-	RMU

The aforesaid shutdown of Units of MB-I LHP was not considered while approving NAPAF for the year. The Commission has considered the same and has re-stated the PAFY of MB-I LHP as 67.89% for FY 2020-21 based on the average PAFM of last 5 years.

## **B. Relaxation sought for MB-II LHP**

### ***Petitioner's Submission***

The Petitioner submitted that the NAPAF for the station has been approved as 76% for the FY 2020-21 in the Tariff Order dated April 18, 2020 passed by the Commission on the recommendation of expert consultant appointed by the Commission. Against it, the Power Plant achieved PAF of 66.51% in the year FY 2020-21.

The Petitioner further submitted that they are making all efforts to achieve NAPAF (76%) determined by the Commission. However, the Petitioner has been able to achieve the actual PAF of 66.51% in FY 2020-21. Hence, the Petitioner requested the Commission to consider NAPAF of FY 2020-21 as 66.51% actually achieved during the financial year for true up. Also, vide TVS dated January 20, 2022, the Petitioner requested the Commission to reconsider the historical NAPAF for MB-II as it is facing considerable disallowances on account of its under achievement.

Further, the Petitioner vide its reply dated January 31, 2022 submitted the constraints in achieving Design Energy and NAPAF as mentioned below:

- Highly abrasive particles present in the water
- Restrictions on Reservoir Level
- High Tail Water level
- Low River Discharge
- Mandatory Release of E-Flow

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

The Commission has gone through the submissions of the Petitioner and the reasons submitted by the Petitioner have already been examined and analysed in detail by the Expert Consultant appointed by the Commission pursuant to the ruling in MYT Order dated February 27, 2019. The Commission does not find it appropriate to deviate from its earlier approach and accordingly, approves the NAPAF of 76% for MB-II for the Fourth Control Period.

#### **4.1.1.2 Energy Generation and Saleable Primary Energy**

The Petitioner during previous tariff proceedings had submitted that in compliance to the NGT Order dated August 9, 2017, GoU issued Order No. 708 dated June 5, 2018 to UJVN Ltd. to maintain the minimum 15% of the average lean season flow in the rivers from the Dams/Barrages situated in the State of Uttarakhand. Further, the Gazette notification has also been issued by Govt. of India on 09.10.2018 in this regard.

The Petitioner had submitted that in view of the aforesaid Orders of NGT and GoU, UJVN Ltd. has maintained the minimum discharges and, therefore, the available water discharge has reduced in the tunnels/power channels of the Power Plants of UJVN Ltd. Consequent to the reduction in the discharge available for power generation, the quantum of power generation as well as the declared capacity of the power Plants have reduced accordingly.

Further, the Commission in its Tariff Order dated 18.04.2020 at 4.2.2 had directed the Petitioner:

*“... to maintain separate discharge data of rivers as well as the data of mandatory discharges being released in compliance to NGT/NMCG Order and any other data to substantiate the impact. Further, the Petitioner shall submit the data at the time of truing-up of FY 2020-21 and, thereafter, appropriate view will be taken by the Commission in this regard after carrying out due prudence check.”*

Accordingly, the Petitioner vide instant Petition has submitted that the actual generation loss due to E-flow released by the Petitioner as per NGT order dated 09.08.2017 and NMCG order dated 10.10.2018 and 14.09.2019 for FY 2020-21 is 435.64 MU against 8 LHPs namely Chibro, Khodri, Dhakrani, Dhalipur, Kulhal, MB-I, MB-II and Chilla.

With regard to actual Generation Loss, the Commission observed that UJVN Ltd. has submitted that CWC monitors and schedules the discharge and CWC has set discharge for Ganga Valley Plants at higher level, i.e. (20%,25%,35%). During TVS, it was pointed out that the Generation loss has been calculated for all 12 months instead of only lean period. In its response, UJVN Ltd. submitted that for Lean season discharge is at 20%, for intermittent season discharge is at 25%, for Monsoon season discharge is at 30%. Also, certain discrepancies were pointed out in the e-flow data for Kulhal LHP and, accordingly, UJVN Ltd. was directed to recheck/verify the Generation loss calculations.

In compliance to the same, the Petitioner vide its reply dated January 31, 2022 submitted that the water for Kulhal Power Plant is available from Dakpathar Barrage through Yamuna Power Channel and Asan River. The major component of water availability at Kulhal LHP is from Dakpathar Barrage. Therefore, any release from Dakpathar Barrage has huge impact on generation at Kulhal along with the Dhakrani and Dhalipur Power Plants.

Therefore, UJVN Ltd. submitted that the E-Flow discharge data considered for Generation loss of Kulhal LHP is based on the sum of E-Flow release from Asan Barrage plus E-Flow release from Dakpathar Barrage, considering the fact that the E-Flow water released from Dakpathar Barrage would have otherwise been available for power generation at Asan Barrage through Yamuna Power Channel and would have contributed in generation at Kulhal also. UJVN Ltd. further submitted that because of E-Flow released from Dakpathar barrage, the same is not available for generation at Kulhal, hence taken into calculation for the effect at Kulhal, the Petitioner confirmed that the calculation loss at Kulhal due to E-Flow are correct.

UJVN Ltd. was also directed to provide the justification of its claimed generation loss after duly factoring in the Unit Outages. UJVN Ltd. vide replies dated January 31, 2022 confirmed that in the computation of generation loss due to E-Flow, i.e. 435.64 MU for FY 2020-21, no other loss have been included. There is no overlapping of the generation loss.

The actual gross generation submitted by the Petitioner vis-à-vis MYT Order approved design energy and the revised design energy as per Tariff Order dated 18.04.2020 is as shown in the following Table:

**Table 4.4: Actual Gross Generation vis-a-vis MYT Approved & Revised on account of NGT Order for 10 LHPs**

Power Plant	FY 2020-21		
	Actual Gross Generation submitted by the Petitioner (MU) (A)	Design Energy Approved in MYT Order (MU) (B)	Revised Design Energy after impact of NGT Order approved vide Order dated 18.04.2020 (MU) (C)
Dhakrani	153.51	156.88	150.85
Dhalipur	175.78 (RMU – 1 Unit)	192.00	182.76
Chibro	830.69	750.00	728.11
Khodri	380.11	345.00	335.37
Kulhal	134.60	153.91	148.91
Ramganga	265.72	311.00	311.00
Chilla	743.58	671.29	557.62

**Table 4.4: Actual Gross Generation vis-a-vis MYT Approved & Revised on account of NGT Order for 10 LHPs**

Power Plant	FY 2020-21		
	Actual Gross Generation submitted by the Petitioner (MU) (A)	Design Energy Approved in MYT Order (MU) (B)	Revised Design Energy after impact of NGT Order approved vide Order dated 18.04.2020 (MU) (C)
MB-I	334.26 (RMU and MIV Repair)	395.00	366.45
Khatima	221.45	235.59	235.59
MB-II	1301.82	1291.00*	1291.00
<b>Total</b>	<b>4541.51</b>	<b>4501.67</b>	<b>4307.66</b>

\* Approved in Tariff Order dated 18.04.2020 for Third Control Period.

From the above, it is observed that consolidated actual gross generation is even higher than the design energy approved in the MYT Order. It is further observed that as Dhalipur and MB-I were under RMU, the generation from the said LHPs are lower than the design energy. It is further observed that the actual data do not compel as of now for further relaxation in the design energy for recovery of energy charges as proposed by the Petitioner for FY 2020-21.

The Commission is of the view that the norms specified through Regulations cannot be subject to frequent reviews unless there are compelling reasons to do so. Therefore, the Commission does not find it appropriate in re-working the impact of NGT/NMGC orders for FY 2020-21. However, the relaxation as provisionally approved for FY 2020-21 in the Tariff Order dated 18.04.2020 shall remain final for the purpose of true-up of FY 2020-21. Accordingly, the approved Design Energy for FY 2020-21 is as under:

**Table 4.5: Design Energy and Saleable Primary Energy Approved for FY 2020-21 (MU) for 10 LHPs**

Name of the Station	Original Design Energy	Design Energy	Impact of NGT	Revised Design Energy	Approved Auxiliary Consumption	Approved Auxiliary Consumption	Saleable Primary Energy
	MU	MU	MU	MU	%	MU	MU
Dhakrani	169.00	156.88	6.03	150.85	0.70%	1.06	149.79
Dhalipur	192.00	192.00	9.24	182.76	0.70%	1.28	181.48
Chibro	750.00	750.00	21.89	728.11	1.20%	8.74	719.37
Khodri	345.00	345.00	9.63	335.37	1.00%	3.35	332.01
Kulhal	164.00	153.91	5.00	148.91	0.70%	1.04	147.87
Ramganga	385.00	311.00	0.00	311.00	0.70%	2.18	308.82
Chilla	725.00	671.29	113.67	557.62	1.00%	5.58	552.04
MB-I	546.00	395.00	28.55	366.45	0.70%	2.57	363.89
Khatima*	235.59*	235.59	0.00	235.59	1.00%	2.36	233.23

**Table 4.5: Design Energy and Saleable Primary Energy Approved for FY 2020-21 (MU)  
for 10 LHPs**

Name of the Station	Original Design Energy	Design Energy	Impact of NGT	Revised Design Energy	Approved Auxiliary Consumption	Approved Auxiliary Consumption	Saleable Primary Energy
	MU	MU	MU	MU	%	MU	MU
MB-II	1566.10	1291	0.00	1291	1.00%	12.91	1278.09
<b>Total</b>	<b>5077.69</b>	<b>4501.67</b>	<b>194.02</b>	<b>4307.66</b>		<b>41.05</b>	<b>4266.60</b>

*\*Post RMU*

#### 4.1.2 Financial Parameters

##### 4.1.2.1 Apportionment of Common Expenses

The Petitioner in its instant Petition has submitted the allocation for indirect expenses in the ratio of 85:10:5 among 9 LHPs, MB-II and SHPs, respectively, as considered by the Commission in its Order dated March 21, 2018.

The Commission in its Order dated April 26, 2021 and Order dated April 18, 2020 had also considered the allocation for indirect expenses in the ratio of 85:10:5 among 9 LHPs, MB-II and SHPs respectively.

With regard to Solar business expenses, the Petitioner submitted that the direct expenses on Solar Business for FY 2020-21 have been separated and the same has not been claimed from the tariff of LHPs.

The Petitioner submitted the allocation of expenses incurred by common Units serving more than one station as below:

- **Head Office/ CSPPPO:** The 85% of the common expenses have been allocated to the 9 LHPs, 10% of such expenses have been allocated to MB-II and the remaining 5% to SHPs. Further the allocation among the LHPs/SHPs is done on the basis of installed capacity of each LHP/SHP.
- **DDD Dakpathar:** The common expenses have been allocated between Chibro, Khodri, Dhakrani, Dhalipur and Kulhal in the ratio of their respective installed capacity.
- **DGM Civil Dhalipur:** The common expenses have been allocated on Chibro, Khodri, Dhakrani, Dhalipur and Kulhal LHPs in the ratio of their installed capacity.



- **Civil Haridwar:** The common expenses have been allocated on Chilla, Ramganga, Khatima and Pathri & Mohammadpur SHPs in the ratio of their installed capacity.

#### 4.1.2.2 Capital Cost

##### A. Old Nine Generating Stations

Pending finalization of the Transfer Scheme, for various reasons recorded in the previous Tariff Orders, the Commission had been approving the opening GFA for the nine LHPs as on 14.01.2000 as Rs. 506.17 Crore.

The Commission vide its Order dated April 26, 2021 had directed the Petitioner to closely follow up the pending issues and submit quarterly status report to the Commission towards finalization of transfer scheme. Further, the Commission vide Order dated April 26, 2021 also pointed out that there has been an inordinate delay in the finalization of the Transfer Scheme, which is attributable to the Petitioner, hence, any consequential claim arising due to finalization of the Transfer Scheme shall be considered on merits by the Commission without any carrying cost on the same.

The Petitioner in the instant Petition submitted that it has made repeated follow-ups with UPJVNL in order to determine the technical details required for determining the GFA. However, in spite of the repeated follow-ups, the Petitioner has received limited technical details which is insufficient to determine the gross fixed assets.

**The Commission has noted the submissions of the Petitioner and directs the Petitioner to closely follow up the pending issues and submit quarterly status report to the Commission. The Commission further directs that there has been an inordinate delay in the finalization of the Transfer Scheme, which is attributable to the Petitioner, hence, any consequential claim arising due to finalization of the Transfer Scheme shall be considered on merits by the Commission without any carrying cost on the same.**

Since, the Transfer Scheme is yet to be finalized, the Commission for the purpose of truing-up for FY 2020-21 has considered the opening GFA of nine LHPs, as on 14.01.2000 as Rs. 506.17 Crore as per the details given below:

**Table 4.6: Approved Capital Cost for 9 LHPs as on COD (Rs. Crore)**

Generating Station	Claimed	Approved
Dhakrani	12.40	12.40
Dhalipur	20.37	20.37

Chibro	87.89	87.89
Khodri	73.97	73.97
Kulhal	17.51	17.51
Ramganga	50.02	50.02
Chilla	124.89	124.89
MB-I*	111.93	111.93
Khatima	7.19	7.19
<b>Total</b>	<b>506.17</b>	<b>506.17</b>

\*Including DRB claim

**B. Maneri Bhali-II**

The Petitioner submitted that in order to comply with the directives issued in Tariff Order dated 05.04.2016, 29.03.2017, 21.03.2018, 27.02.2019 and 18.04.2020 it has claimed the capital cost of Rs. 1885.50 Crore for MB-II in line with the approved amount.

The Petitioner further submitted that it has filed an Appeal before the Hon'ble ATE vide its Appeal No. 283 of 2016 agitating the issue of Capital Cost of MB-II LHP and RoE on PDF against the principle adopted by the Commission in its MYT Order dated 05.04.2016.

Accordingly, the Petitioner requested the Commission to pass on the impact of the Capital Cost for MB-II (i.e. Rs. 1923.60 Crore) as claimed previously, in case the Appeal filed before the Hon'ble APTEL in this regard is ruled in favour of the Petitioner.

The Commission observed that the matter is still pending before the Hon'ble ATE, therefore, pending disposal of the Appeal, the Commission does not find any reason to revisit the capital cost of MB-II LHP approved by it in the Tariff Order dated April 26, 2021.

Accordingly, in line with the decision approved in Order dated April 26, 2021, the Commission for the purposes of this Tariff Order is considering the capital cost for MB-II Power Plant as on CoD, i.e. 15.03.2008, as Rs. 1885.50 Crore as per the details given below:

**Table 4.7: Approved Capital Cost for MB-II as on CoD (Rs. Crore)**

Particulars	Approved in Order dated 26.04.2021	Approved Now
Capital Expenditure	1490.98	1490.98
Add: Adjustment on Account of DRB Award	44.51	44.51
Price Variation	-7.94	-7.94
<b>Sub-total (A)</b>	<b>1527.55</b>	<b>1527.55</b>
<b>IDC &amp; Other Financial Charges</b>		
Interest paid to PFC	257.41	257.41
Guarantee Fee	28.86	28.86
Interest on GoU Loan	5.04	5.04
Interest Repayment AGSP	66.64	66.64
Excess Guarantee Fee Payable	0.00	0.00
<b>Sub-total (B)</b>	<b>357.95</b>	<b>357.95</b>
<b>Total Capital cost (A+B)</b>	<b>1885.50</b>	<b>1885.50</b>

Further, financing of the approved capital cost of MB-II Power Plant as on COD is shown in the Table below:

**Table 4.8: Financing for MB-II as on CoD (Rs. Crore)**

Particulars	Approved in Order dated 26.04.2021	Approved Now
<b>Loans</b>		
PFC Loan	1200.00	1200.00
Unpaid Liability	0.00	0.00
Guarantee Fee Payable	0.00	0.00
Normative Loan	119.85	119.85
<b>Total debts</b>	<b>1319.85</b>	<b>1319.85</b>
<b>Equity</b>		
PDF	326.76	326.76
GoU Budgetary support	74.89	74.89
Pre-2002 expense	164.00	164.00
<b>Total Equity</b>	<b>565.65</b>	<b>565.65</b>
<b>Total Loan and Equity</b>	<b>1885.50</b>	<b>1885.50</b>

In the above Table, the total equity, i.e. Rs. 565.65 Crore which is 30% of the total approved Capital Cost of MB-II, has been considered to be funded by way of pre-2002 expenses of Rs. 164 Crore, actual disbursement from PDF up to COD of Rs. 326.76 Crore and the balance amount of Rs. 74.89 Crore from the GoU budgetary support.

#### **4.1.2.3 Additional Capitalisation**

##### **A. Old Nine Generating Stations**

In addition to the opening GFA of Rs. 506.17 Crore as on 14.01.2000 of 9 LHPs, the Commission had approved the additional capitalization from FY 2001-02 to FY 2019-20 amounting to Rs. 516.10 Crore (including De-capitalisation of Rs. 2.03 Crore) in its previous Tariff Orders.

Accordingly, the additional capitalisation from FY 2001-02 to FY 2019-20 so far considered by the Commission for 9 LHPs is shown in the Table below:

**Table 4.9: Additional Capitalisation already approved by the Commission from FY 2001-02 to FY 2019-20 for 9 LHPs (Rs. Crore)**

Generating Station	Amount
Dhakrani	29.32
Dhalipur	36.67
Chibro	60.63
Khodri	34.36
Kulhal	29.92
Ramganga	36.00
Chilla	75.92**
MB-I	55.93
Khatima	157.36*
<b>Total</b>	<b>516.10</b>

\* Including de-capitalisation of Rs. 2.03 Crore in FY 2014-15

\*\* Including decapitalization of Rs. 19.30 Crore in FY 2016-17 for DRIP

Based on the approved capital cost of 9 LHPs as on 14.01.2000 and considering, the additional capitalisation up to FY 2019-20 for these LHPs, the Commission has considered the opening GFA for FY 2020-21 for nine LHPs as presented below:

**Table 4.10: Opening GFA for 9 LHPs as considered by the Commission for FY 2020-21 (Rs. Crore)**

Generating Station	Amount
Dhakrani	41.72
Dhalipur	57.04
Chibro	148.52
Khodri	108.33
Kulhal	47.43
Ramganga	86.02
Chilla	200.81*
MB-I	167.86**
Khatima	164.55***
<b>Total</b>	<b>1022.28</b>

\* Including de-capitalisation of Rs. 19.30 Crore in FY 2016-17 for DRIP

\*\* Including DRB claim

\*\*\* Including de-capitalisation of Rs. 2.03 Crore in FY 2014-15

The Petitioner in its Petitions for its 9 LHPs has claimed the additional capitalisation for FY 2020-21 as given in the Table below:

**Table 4.11: Additional Capitalisation for 9 LHPs claimed by the Petitioner for FY 2020-21 (Rs. Crore) in its respective Petitions**

Generating Station	Additional Capitalisation
Dhakrani	5.67
Dhalipur	4.78
Chibro	18.98
Khodri	9.41
Kulhal	7.46
Ramganga	1.71
Chilla	20.38
MB-I	92.82
Khatima	5.18
<b>Total</b>	<b>166.38</b>

Simultaneously, the Commission also sought a consolidated sheet with the details of all the works pertaining to DRIP Scheme executed during the period FY 2015-16 to FY 2020-21 and details of expenditure proposed to be incurred/capitalized in FY 2021-22. The Petitioner vide its reply dated January 22, 2022 submitted the consolidated sheet of DRIP works and further submitted a revised sheet vide its revised submission dated February 25, 2022. A summary of the DRIP works as per submission dated 25.02.2022 is as follows:

**Table 4.12: DRIP Additional Capitalisation for 9 LHPs claimed by the Petitioner up to 2020-21 (Rs. Crore)**

Dam/ Barrage	FY 2015-16		FY 2016-17		FY 2017-18		FY 2018-19		FY 2019-20		FY 2020-21		Total	
	Add Cap	R&M	Add Cap	R&M	Add Cap	R&M	Add Cap	R&M	Add Cap	R&M	Add Cap	R&M	Add Cap	R&M
Ichari dam					0.49	0.12	0.64	0.15	19.86	0.08	9.90	0.02	30.9	0.37
Dakpathar dam					2.65	0.25	3.43		35.26	0.41	6.85	0.05	48.19	0.71
Asan Barrage					2.43		1.23		16.59		6.56	0.09	26.81	0.00
Virbhadra Barrage	17.48		1.83		12.67		5.36		2.67		16.38		56.39	0.00
Maneri Dam							0.54		14.31		24.09		38.94	0.00
Khatima											3.92		3.92	0.00
Head Office											1.13		1.13	
<b>Total</b>	<b>17.48</b>		<b>1.83</b>		<b>18.24</b>	<b>0.37</b>	<b>11.21</b>	<b>0.15</b>	<b>88.70</b>	<b>0.49</b>	<b>*68.83</b>	<b>0.16</b>	<b>206.29</b>	<b>1.17</b>
<b>Total of expenses from FY 2015-16 to FY 2019-20</b>									<b>137.46</b>	<b>1.01</b>				

\*Rs. 68.83 Crore included in the claim of Rs. 166.38 Crore claimed as additional capitalization for FY 2020-21

From the above, it can be observed that a total of Rs. 207.46 Crore (Rs. 206.29 Crore +Rs. 1.17 Crore) was incurred till FY 2020-21 pertaining to DRIP works.

The Commission has gone through the details of the expenditure submitted in the consolidated sheet and found the same to be in order. With regard to the issue of considering whether the DRIP expenses should be booked under R&M head or under additional capitalization, considering that these works are found to be similar to the Renovation and Modernization of

Dams/Barrages, the Commission is of the view that the DRIP expenses booked under R&M head have to be considered as additional capitalization as a one-time expense. Accordingly, an expense of Rs. 1.17 Crore (Rs. 0.16 Crore pertaining to the expenses incurred in FY 2020-21 and Rs. 1.01 Crore pertaining to the deferred claim till FY 2019-20) has been considered as additional capital expenditure. Further, the Commission has considered the additional capitalization on account of DRIP works by directly considering the same under the Plant to which the Dam/Barrage is associated and in case the Dam/Barrage is associated with one or more Plants the expenditure on account of the same is apportioned to the Plants based on installed capacity of the Plants.

During the scrutiny of additional capitalization for Dhakrani, Dhalipur & Kulhal the Commission observed certain deviations in the claimed figure. The Petitioner submitted that some of the expenses pertaining to energy meters have not been correctly apportioned amongst the respective cost centres. Accordingly, the Petitioner vide its reply dated February 17, 2022 submitted the revised add cap sheet for Dhakrani, Dhalipur & Kulhal.

With regard to the claim of additional capitalization for FY 2020-21 for 9 LHPs, the Petitioner vide its reply dated January 22, 2022 submitted that there is a revision in the claim of Add. Cap. for MB-I, MB-II, Chilla, Ramganga and Khatima HEPs.

The Petitioner vide its submission dated February 25, 2022 submitted its revised add caps sheet for 9 LHPs. The Commission has considered the same for the purpose of this Order and Plant wise/ Cost centre wise observations are discussed hereunder.

With regard to the claim of Add Cap for Khatima HEP, the Commission observed that the total claim of Rs. 3.92 Crore for FY 2020-21 against DRIP works were neither specifically approved by the Commission nor UJVN Ltd. has approached/apprised the Commission. In this regard, the Commission vide its letter dated February 11, 2022 sought justification and copy of necessary approvals from DSRP/CPMU for the same along with reasons for not bringing the issue specifically before the Commission during its DRIP-I works. UJVN Ltd. vide its submission dated 17.02.2022 submitted that the said works were done by taking necessary approval of CPMU/CWC (under Institutional Strengthening component). In this regard, the Commission is of the view that the Petitioner should have approached/apprised the Commission while scrutiny/review of DRIP-I works, however, the Commission is taking a considerate view as the said expenses were incurred

under Institutional Strengthening component of DRIP-I scheme. The Commission cautions the Petitioner from adopting the aforesaid approach and ensure to take prior approval as per provisions of Regulations.

Further, during the scrutiny of the additional capitalization claimed for Khatima, the Commission observed that the total claim of Rs. 11.09 Lakh for FY 2020-21 includes the expense on account of Construction of new borewell. The Commission vide its letter dated February 10, 2022 sought clarification for booking said expense under Major Civil work head. The Petitioner vide its reply dated February 25, 2022 requested the Commission to treat the same under Plant & Machinery head. The Commission has considered the Construction of new borewell expense of Rs. 11.09 Lakh under the Plant & Machinery head. **In this regard, Petitioner is directed to ensure booking of items appropriately under relevant head and any expenditure incurred on account of repetition of such instances in future shall be liable for disallowance.**

During the scrutiny of the additional capitalization expenses claimed for Chilla HEP, the Commission observed that the total claim of Rs. 0.36 Crore for FY 2020-21 includes the expenses on account of restoration works carried out for Machine No. 4 at Chilla HEP. The Commission vide its letter dated February 10, 2022 sought confirmation that the said expenditure incurred is not on account of flooding event (occurred on July 13, 2018) and also sought confirmation that the said expenditure has not been claimed through insurance. The Petitioner vide its reply dated February 17, 2022 confirmed that the total amount incurred on account of Restoration works is related to flooding event of July 13, 2018. The Commission is of the view that the expense of Rs. 0.36 Crore has to be deferred and the same can be adjusted after the finalization of insurance claim.

During the scrutiny of the additional capitalization claimed for MB-I, the Commission observed that the claim of the Petitioner includes an expenditure of Rs. 66.79 Crore pertaining to the works against the RMU. The Commission vide its letter dated February 05, 2022 sought details & justification of works executed under RMU which were not specifically allowed by the Commission in its Order dated 30.07.2015 as it appears that the Petitioner has executed certain works over and above the works approved by the Commission. The Petitioner vide its reply dated February 17, 2022 submitted the details of works along with the justification for executing such works under RMU which were not allowed by the Commission as follows:

- 1) Turbine Shaft (including Shaft Accessories-Bolts, Super Bolts, Cover, Friction Material, etc.)
- 2) Turbine Guide Bearing Housing & Associated Parts
- 3) Stator Frame
- 4) Upper Bracket including thrust bearing platform, thrust bearing & guide bearing support system, external oil Plant for upper thrust & Guide bearing and generator.
- 5) Lower Bracket including Guide bearing support system for lower bracket.
- 6) Cooling Water system
- 7) 220 kV CVT structure of Line and Bus Side
- 8) Unit Auxiliaries Board (3sets), Station Service Board (A&B) including spares, 3 Nos. ACB (1600A) with cooling water panels (A+B)

The Petitioner vide its reply dated 17 February, 2022 submitted that the RMU works/activities of machine No. 1 (M/c No. 1) under RMU had been completed and machine was handed over to UJVN Ltd. after successful trial run/commissioning. Hence, the expenditure made on machine No. 1 under RMU and other common works of HEP and switchyard completed under RMU had only been capitalized in FY 2020-21.

The Commission after the detailed analysis and scrutiny is of the view that the works carried out under RMU have resulted to increase in Generation of the Plant & the machine undergone for RMU is attaining its full efficiency. Further, the Petitioner vide its reply dated February 26, 2022 submitted that UJVN Ltd. has decided to withdraw its Appeal no 176 of 2017 filed before the Hon'ble APTEL and requested the Commission to consider the capital investment incurred by UJVN Ltd. towards RMU of MB-I HEP for true up of FY 2020-21 and for tariff determination of Fourth Control Period.

The Commission subsequently also sought the Auditors Certificate certifying the above costs claimed by the Petitioner, which was submitted by the Petitioner vide submission dated 11.03.2022.

The Commission observed that the work covered in the RMU of MB-I HEP had been awarded as a single contract. The Commission, as of now has allowed the additional capitalisation claimed by



the Petitioner for FY 2020-21 provisionally, however, the Commission after carrying out detailed analysis of RMU works post completion shall carry out necessary adjustments in case the cost claimed appears to be higher with associated carrying cost.

Besides above, certain Add Cap nature items have been identified which were booked under R&M expenses, the Plant wise/ Cost center wise details are discussed hereunder.

The Commission, while scrutinizing the R&M expenses for FY 2020-21 for Khatima HEP has observed that the Petitioner in R&M expenses has booked some expenses, which are of capital nature. The Commission vide letter dated February 10, 2022 sought explanation of the same and the Petitioner vide its letter dated February 25, 2022 submitted that procurement of dewatering pump amounting to Rs. 6.68 Lakh is of Capital nature. The Commission has, accordingly, shifted the expenses of Add Cap nature booked under R&M expenses to Add Cap in FY 2020-21.

Further, the Commission while scrutinizing the R&M expenses for FY 2020-21 for Civil Dhalipur observed that UJVN Ltd has claimed an expenditure Rs. 3.04 Crore and Rs. 2.33 Crore of Add cap nature item 'Slope Protection works of silt ejector channel of Dakpathar Barrage' under R&M Expenses. The Commission vide its letter dated February 9, 2022 sought clarification for executing the said works under R & M Expenses. The Petitioner vide its reply dated February 17, 2022 submitted that as per direction received from Head Office the Add Capital expenditure were transferred to R&M Expenditure. The Commission has gone through the submissions of the Petitioner and is of the view that the said works carried out were of Add cap nature as the life of such works lasts for a longer period. The Commission has, accordingly, shifted the said expenses to additional capitalization in FY 2020-21 from R&M expenses.

The Commission while scrutinizing the R&M expenses for FY 2020-21 for Chibro HEP observed that the total claim of Rs. 8.77 Crore includes the expenses on account of Reverse Engineering, Design, engineering works carried out at Chibro. The Commission vide its letter dated February 7, 2022 sought clarification for claiming the said works in R&M expenses. The Petitioner vide its reply dated February 17, 2022 submitted that against aforesaid work amounting to Rs. 9,60,000 (excluding GST) an amount of Rs. 11,32,800 (inclusive tax) was paid to M/s I-Sat Network Engineers Pvt. Ltd. and booked in CWIP as per placed PO. However, during transferring of payment from CWIP to R&M expenses, due to typographical error instead of Rs. 11,32,800 (Rs. 8,49,600 + Rs. 283200) an amount of Rs. 8,77,900 (Rs. 8,49,600 + 28300) has been transferred and rest amount of Rs.

2,54,900 is lying in CWIP during FY 2020-21 against aforesaid PO. This amount has now been transferred to R&M expenses in FY 2021-22 and would be claimed accordingly.

In this regard, the Commission observed that partial booking of the expenditure has been done in additional capitalization as well as in R&M expenditure. This approach is not prudent as it may lead to double accounting. The Commission further suggests that some checks & balances in the ERP system be implemented in order to avoid such instances in future.

Further, the Commission, while scrutinizing the Additional Capitalization and R&M expenses of cost centres observed that ABT meters are being treated differently in different cost centers/Plants. For instance Chibro is claiming Rs.1.88 Lakh against Installation Charges of ABT Meters under R &M Expense whereas Chilla/Dhakrani/Dhalipur/Kulhal is claiming expenses for ABT Energy Meters under Additional Capitalization. With regard to this the Commission vide its letter dated February 16, 2022 sought a brief writeup with respect to booking of Add cap/R&M nature works at its respective Cost/Profit centres from Material Management & Contract Department. The Petitioner vide its reply dated February 26, 2022 submitted that Procurement/Expenditure in UJVN Ltd. is broadly categorized as under:

- O&M supplies.
- O&M Service.
- O&M works.
- Capital supply (Procurement of readymade assets).
- Capital works (SITC/Construction of assets).

The Petitioner also submitted that the process of procurement of Goods & Services/Works is implemented through SAP. Asset accounting in SAP is done asset wise instead of traditional accounting i.e. General Ledger (GLs) head wise and accordingly, the asset code in SAP is created well before creation of Purchase Requisition.

In this regard, the Commission suggests that some checks & balances in the ERP/SAP system be implemented in order to have uniform treatment for same type of material/nature of work all across the different cost centres.

Based on above, The Commission has, accordingly, shifted the expenses of Add Cap nature

booked under R&M expenses to additional capitalization in FY 2020-21. The details of all such expenses amounting to Rs. 5.61 Crore are provided at **Annexure-5** of this Order. The Plant-wise details are as per Table below:

**Table 4.13: Expenses of additional capitalization nature but included under R&M for 9 LHPs during FY 2020-21 (Rs. Crore)**

Generating Station	Amount
Dhakrani	2.16
Dhalipur	3.27
Chibro	0.01
Khodri	0.01
Kulhal	0.09
Ramganga	-
Chilla	-
MB-I	-
Khatima	0.07
<b>Total</b>	<b>5.61</b>

The Commission, accordingly, approves an additional capitalisation for FY 2020-21 for 9 LHPs as shown below:

**Table 4.14: Additional Capitalisation approved for 9 LHPs for FY 2020-21**

Generating Station	Claimed#(As per revised add cap submission dated 25.02.2022)	Approved in this Order ##
Dhakrani	4.99	7.15
Dhalipur	5.10	8.37
Chibro	18.98	18.99
Khodri	9.41	9.41
Kulhal	7.82	7.91
Ramganga	1.56	1.56
Chilla	20.27	19.91
MB-I	92.80	92.80
Khatima	5.46	5.52
<b>Total</b>	<b>166.38</b>	<b>171.62</b>

# Including claim of Rs. 68.83 Crore against DRIP works included in add cap

## including claim of Rs. 68.83 Crore against DRIP works included in add cap, shifting of expenses after prudence check of Add cap & R&M expenses, and excluding Rs. 0.36 Crore of disallowed expenses in Chilla

## B. Maneri Bhali-II

In addition to the Capital Cost of Rs. 1885.50 Crore as on CoD, the Commission had approved additional capitalization from FY 2007-08 to FY 2019-20 amounting to Rs. 351.17 Crore in its previous Tariff Orders, as shown in the Table below:

**Table 4.15: Year-wise Additional Capitalisation already approved by the Commission from FY 2007-08 to FY 2019-20 for MB-II LHP (Rs. Crore)**

Financial Year	Amount
2007-08	0.09
2008-09	10.26
2009-10	8.14
2010-11	21.70
2011-12	2.01
2012-13	17.90
2013-14	35.32
2014-15	36.77
2015-16	127.24
2016-17	55.08
2017-18	17.00
2018-19	10.64
2019-20	9.02
<b>Total</b>	<b>351.17</b>

Based on the above closing GFA approved for FY 2019-20, the opening GFA for FY 2020-21 for MB-II LHP is shown below:

**Table 4.16: Opening GFA for MB-II as considered by the Commission for FY 2020-21 (Rs. Crore)**

Particulars	Amount
Capital Cost	1885.50
Additional Capitalization from FY 2007-08 to FY 2019-20	351.17
<b>Opening GFA for FY 2020-21</b>	<b>2236.67</b>

The Petitioner in its Petition for MB-II LHP has claimed additional capitalization for FY 2020-21 as given in the Table below:

**Table 4.17: Additional Capitalisation for MB-II claimed by the Petitioner for FY 2020-21 (Rs. Crore)**

Components	Additional Capitalisation
Land	0.00
Building	0.000
Hydraulic works	0.00
Major Civil Works	31.87
Plant & Machinery	1.54
Vehicles	0.00
Furniture and Fixtures	0.01
Office Equipment & Others	0.03
IT Equipment's including Software	0.05
<b>Total</b>	<b>33.50</b>

The Commission with regard to de-capitalisation (De-cap) of the assets sought details of assets de-capitalised and the reasons for de-capitalisation of the assets. The Petitioner submitted the details

of De-cap of Rs. 14.74 Crore for MB-II LHP including the original value of asset (Rs. 14.74 Crore), value of asset damaged (Rs. 14.74 Crore), total depreciation recovered till the date of de-capitalization (for the damaged asset is Rs. 5.92 Crore) and value of insurance claim recovered (Rs. 14.57 Crore). The Petitioner also submitted that out of Rs. 14.74 Crore of decapitalized assets, Rs. 13.92 Crore were capitalized as on COD (15.03.2008) and Rs. 0.82 Crore was capitalized in FY 2010-11.

The Commission has gone through the submissions of the Petitioner and has taken serious note of delayed de-capitalisation of assets. It is observed that the assets were not in use since FY 2013-14 and due to delayed de-capitalisation, the Petitioner was recovering tariff on the assets that were not in service since FY 2013-14. Further, the Petitioner has carried out restoration works associated with such de-capitalisation in FY 2017-18 and such works was also being serviced through tariff. In view of the Petitioner recovering tariff on such de-capitalised assets, the Commission has separately computed excess tariff recovered since the assets were not in service. As this is first such instance, the Commission has not recovered such amounts with carrying cost, however, the Commission would like to caution that in future any such adjustment shall entail carrying cost.

**The Commission directs the Petitioner that as a matter of de-capitalisation policy, the Petitioner should carry out de-capitalisation in the same year in which the asset is taken out from its useful service.**

The Commission in its Order dated February 27, 2019 approved the additional capitalisation of Rs. 12.05 Crore for FY 2020-21 subject to prudence check at the time of true up. Further, the Commission in its Order April 18, 2020 while truing-up the additional capitalization for MB-II for FY 2018-19 had directed the Petitioner as follows:

*"The Commission upon the scrutiny of the justification provided along with supporting documents it was observed that the Pending works except testing of surge shaft gate are uncontrollable in nature as the same were pending before various Courts. With regard to Testing of Surge Shaft Gate the Commission observes that the works are very important with respect to safety of the Plant and delaying of such works may be catastrophic from Plant safety perspective.*

***The Commission directs the Petitioner to complete the said works as soon as possible and cautions that any occurrence of damage to safety of the MB-II in future due to delay in execution of the testing of surge shaft gate shall solely be attributable to UJVN Ltd."***

The Commission observed that the Petitioner, apart from the details of additional capitalization for FY 2020-21, has not submitted any information with respect to status of pending balance capital works. Accordingly, the Commission vide its letter dated December 23, 2021 sought details of expenditure incurred for works covered under balance capital works. The Petitioner vide its reply dated January 12, 2022 submitted that the expenditure incurred in FY 2020-21 for the work of testing of surge shaft gates is Nil against the estimated expenditure of Rs. 5 Crore. Considering that the information regarding the status of other pending works was not provided in soft copy, the Commission vide its Minutes of TVS dated January 20, 2022 again sought the status of balance capital works at MB-II in line with the Format provided in previous Tariff Order at Annexure 7. The Petitioner, vide its reply dated January 31, 2022 submitted a detailed sheet showing the status of works in soft copy, the Commission vide its letter dated February 05, 2022 asked the Petitioner to furnish the details of year-wise expenditure incurred against add cap for other works (works not covered under balance capital works) in the format provided in previous Tariff Order dated March 21, 2018. The Petitioner vide its reply dated February 25, 2022 submitted that the revised sheet for Balance capital work and requested the Commission to consider the revised sheet and allow the balance capital works upto March 31, 2022 subject to condition that remaining 03 items (1, 4, & 16) namely Rehabilitation compensation payment to Joshiyara villagers, compensation payment to Gyansu villagers & testing of surge shaft gate costing Rs 9.09 Crore may be allowed separately under normal capital work as & when required. The Petitioner further submitted that the add cap works are proposed to be completed by March 31, 2022.

Accordingly, the Commission has considered the revised sheet submitted vide its reply dated February 25, 2022 and **directs the Petitioner to complete the said works by the stipulated timelines set by them.**

Further, any Plant specific add cap work proposed or planned by the Petitioner to be carried out under a consolidated DPR duly approved by the Commission should be completed within the timelines set to avoid any burden arising due to IDC and price variations. The Commission may take appropriate view in this regard, in case it is found that there has been inordinate delay in execution of the works for which approval has been sought by the Commission in the next year tariff proceedings.

**Further, with regard to the additional capitalization pertaining to Civil Works, the**

**Commission is of view that the Petitioner should give priority to those Civil Works which directly/genuinely influence the generation of the Plant or are essentially required for safety of the Plants.**

The sub-head-wise details of expenses for works covered under Balance Capital Works is given in **Annexure-7** of this Order. It was further observed that out of 20 no. main items approved in DPR of Balance Capital Works (as summarized in **Annexure-7**) only 6 items, viz., 1, 4, 14, 16 and 20(g)(h)(i) and payment of court decree amount to Continental Company Ltd. are pending and the rest have been completed. The summary of justification of pending works as submitted by the Petitioner submission dated 25.02.2022 is as follows:

**Table 4.18: Summary of pending works of Balance Capital Works of MB-II as per latest submission**

S. No	Particulars	Justification
1	Item No. 1 (Rehabilitation) and 14 (Construction of Infrastructure for affected villagers)	<ul style="list-style-type: none"> <li>In some cases, land could not be exchanged due to dispute. Compensation shall be paid after settlement of dispute.</li> <li>All works in rehabilitation areas as per demand of villagers shall be completed by March 2022. Thereafter if any work remains balance the same shall be completed in routine capital O&amp;M. No work shall be taken up in balance capital under this head.</li> <li>Since this is uncontrollable factor beyond the control of UJVN Ltd., the Petitioner requested to grant extension in the completion date up to March 2022.</li> </ul>
2	Item No. 4 (Compensation for affected people)	<ul style="list-style-type: none"> <li>Order of land rate has issued by District Administration, variation in cost shall be put for approval after making actual payment to the project affected villagers. It is not possible to predict the completion date of this activity at present and may take long time.</li> <li>District Magistrate Office Uttarkashi has given decision for rate of compensation of land submerge in Joshiyara reservoir. Due to increase in rate, the compensation amount has increased. However, the variation shall be put up after payment of allocated amount. This land was submerged in 1994. Thereafter main land owners' family has divided into several separate families. Due to disputes between these family members, some payments will be finalised after settlement of disputes.</li> <li>.Since these are uncontrollable reasons beyond the control of UJVN Ltd., the Petitioner requested to grant extension in the completion date up to March 2022.</li> </ul>
3	Item No. 16 (Testing of Surge Shaft Gate)	<ul style="list-style-type: none"> <li>This item of work belongs to E&amp;M Unit of MB-II. Complete closure of project is required to execute this work. Despite various efforts this work could not be started. At present timeline for completion of this activity cannot be given.</li> </ul>

**Table 4.18: Summary of pending works of Balance Capital Works of MB-II as per latest submission**

S. No	Particulars	Justification
		<ul style="list-style-type: none"> <li>It is also submitted that there is already a spherical valve at valve house before the MIV in power house to control the water flow. The justification report regarding non-completion of testing of surge shaft gate has been already submitted to the Commission for consideration. It is proposed that the testing of surge gate will be taken up separately in due course of time as &amp; when required.</li> </ul>
4	Item No. 20 (g)(h)(i) (Expenditure incurred for arbitration) (Claim due to incentive & Idle Charges) (Claim due to foreclosure)	<ul style="list-style-type: none"> <li>Arbitration/Court cases are beyond the control of UJVN Ltd. It is requested that kindly grant extension in the completion date up to March 2022</li> </ul>
5	Payment of decree amount to M/s Continental Company Ltd against arbitration case	<ul style="list-style-type: none"> <li>This is old arbitration case of MB-II, started in 1995.</li> <li>After order of Hon'ble Supreme Court, New Delhi the Hon'ble District Court Uttarkashi has passed order of amounting to Rs 1.99 Cr against 09 claims out of 12 claims in favour of M/s Continental Company on dated on 16-03-2018.</li> <li>In compliance of order of District Court (Uttarkashi) dated 09-09-2019 amount of Rs 1.99 Cr against 09 claims has been deposited in account of ADJ, Commercial, Dehradun in favour of M/s CCL. Now the case is pending before District Judge (Commercial), Dehradun.</li> </ul>

The Commission observed that UJVN Ltd. with regard to MB-II has claimed expenses of Rs. 252.83 Crore against balance capital works (Rs. 235.27 Crore of Balance Capital works + Rs. 17.56 Crore against provisionally allowed IDC in Tariff Order dated 21.03.2018) till FY 2020-21 as against estimated DPR cost of Rs. 211.74 Crore and revised estimate of Rs. 238.62 Crore.

The Commission vide its letter dated February 5, 2022 sought the details of year-wise expenditure incurred against add cap for other works (works not covered under balance capital works). The Petitioner vide its reply dated February 25, 2022 submitted the details of year-wise expenditure incurred against add cap for other works (works not covered under balance capital works) amounting to Rs. 26.56 Crore the same is enclosed as **Annexure-8**.

Further, the Commission, while scrutinizing the R&M expenses for FY 2020-21 for MB-II observed that several Capital nature items vis 245KV CVT, 220KV circuit breaker, have been claimed under R&M expense. The Commission vide its letter dated February 7, 2022 sought clarification for claiming the said works in R&M expenses. The Petitioner vide its reply dated February 17, 2022 submitted that a requirement for procurement of five numbers CVTs were sent to MM&CM



Department UJVN Ltd., which after procurement process were supplied at site. The Petitioner submitted that MM&CM is a central procurement department, had carried out the procurement on the basis of R&M budget allocated to different Plants. The status of Capital budget allocated to Plants was not known to MM&CM. Therefore, the procurement was carried out under R&M expenditure head. The above CVTs were installed in-house by the Petitioner in the year 2020-21. The CVTs were replaced to improve the metering and protection of the respective 220kV Feeders. The Petitioner further requested the Commission to consider the expenditure against the 245 kV CVT in Add Cap of FY 2020-21.

With regard to 220 kV Circuit Breakers, the Petitioner further submitted that in view of urgency of work, the procurement, erection, testing & commissioning of the 245 kV Breakers was carried out under the budget allocated to R&M expenses. As the said work against the above purchase order has been completed in the FY 2021-22, hence, the Petitioner requested the Commission that the same may be considered capitalized in Add Cap of FY 2021-22.

The Commission has gone through the submissions of the Petitioner and is of the view that the expense of Rs. 38.64 Lakh against 245 kV CVT for 220 kV switchyard is of Capital nature and should be shifted from R&M to Add Cap for FY 2020-21. However, the expense of Rs.30 Lakh against the 2 Nos. 220kV SF-6 Circuit Breakers should be deferred to FY 2021-22 as per Petitioner's submission. The details of the items shifted from R&M to Add Cap and items disallowed differed are detailed at **Annexure-5** and **Annexure-6** respectively.

The Commission cautions the Petitioner that stock issue items booked in R&M expenses should not be an escape route for booking capital nature items. The Petitioner is cautioned not to repeat such mistakes in future submissions as the same may raise concerns of double accounting.

With regard to Testing of Surge Shaft Gate, the Commission observes that there has been no progress against it and these works are very important with respect to safety of the Plant. Further, delaying such works may be catastrophic from Plant safety perspective.

**The Commission again directs the Petitioner to complete the said works as soon as possible and cautions that any occurrence of damage to safety of the MB-II Plant in future due to delay in execution of the testing of surge shaft gate shall be solely attributable to UJVN Ltd. However, the Commission shall approve the additional capitalisation subject to prudence check during the truing up of the same.**

The Commission further vide its letter dated February 16, 2022 sought details of Spares Policy/Procedure, Scrap Policy/Procedure and Decap Policy/Procedure from Material Management & Contract Department. The Petitioner vide its reply dated February 26, 2022 submitted the Scrap Disposal Procedure and further submitted that currently the spares are purchased and kept in store based upon requirement of the individual Power Plant/Unit.

Further, the Commission vide its letter dated February 16, 2022 directed the Petitioner to ensure the timely release of SOR of ensuing year, positively by 1st April of the ensuing year and the approved SOR to be uploaded in its websites for ready reference of all Units. The Petitioner vide its reply dated February 26, 2022 submitted that it shall take necessary steps in order to release the SOR within time line and publishing it in the website. **The Commission directs the Petitioner to release its SOR for FY 2022-23 positively by 30.04.2022 and uploading of the same on its website. Further, SOR for the subsequent FY be released and uploaded prior to commencement of the respective FY.**

The Commission has, accordingly, approved additional capitalisation for FY 2020-21 for MB-II LHP as shown below:

**Table 4.19: Asset-wise Additional Capitalization approved by the Commission for FY 2020-21 for MB-II (Rs. Crore)**

Particulars of Assets	Approved vide Order dated 18.04.2020 for FY 2020-21	Claimed		Approved now after Truing-up for FY 2020-21
		Revised Additional Capitalization claim as per submission dated 25.02.2022	Net Revised Additional Capitalization Claimed including de-capitalization	Net Additional Capitalization Approved*
Land	0.01	0.00	0.00	0.00
Building	0.07	0.005	0.01	0.01
Hydraulic works	1.19	0.00	0.00	0.00
Major Civil Works	2.85	31.87	17.13	17.13
Plant & Machinery	7.67	1.56	1.56	1.95
Vehicles	0.03	0.00	0.00	0.00
Furniture and Fixtures	0.03	0.01	0.01	0.01
Office Equipment & Other Items	0.20	0.03	0.03	0.03
IT Equipment including Software	0.00	0.05	0.05	0.05
<b>Total</b>	<b>12.05</b>	<b>33.53</b>	<b>18.79</b>	<b>19.17</b>

*\*including shifting of expenses after prudence check of Add Cap and R&M*

#### **4.1.2.4 Depreciation**

##### **A. Old Nine Generating Stations**

Regulation 28 of the UERC Tariff Regulations, 2018 specifies as follows:

“28. Depreciation

- (1) *The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.*

*Provided that depreciation shall not be allowed on assets funded through Consumer Contribution and Capital Subsidies/Grants.*

- (2) *The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.*

...

- (4) *Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix - II to these Regulations.*

...”

The Petitioner has submitted that no depreciation has been claimed on opening GFA as on January 2000 since depreciation of 90% has already been recovered.

The Petitioner submitted that it has computed depreciation on additional capitalisation from FY 2001-02 onwards at the rates specified by the Commission in UERC Tariff Regulations, 2004, UERC Tariff Regulations, 2011, UERC Tariff Regulations, 2015 and UERC Tariff Regulations, 2018.

With regard to the depreciation on opening GFA as on January, 2000, as all the 9 LHPs are over 12 years old and 9 out of 9 stations have depreciated by 90% of the original cost, no depreciation has been allowed by the Commission in line with the submission of UJVN Ltd.

As regards the depreciation computation on the asset added during the period from FY 2001-02 to FY 2019-20, the Commission has computed the depreciation in accordance with the provisions of UERC Tariff Regulations, 2011, UERC Tariff Regulations, 2015 and UERC Tariff Regulations, 2018. The Commission has computed the balance depreciable value for assets added in each year after January, 2000 by deducting the cumulative depreciation as admitted by the Commission up to 31.03.2016 from the gross depreciable value of the assets. The Commission, further, computed the

difference between the cumulative depreciation as on 31.03.2016 and the depreciation so arrived and in case, where asset life has crossed 12 years of such asset addition, the remaining depreciable value as on 31<sup>st</sup> March of the year has been spread over the balance life.

Based on the above discussed approach, the summary of depreciation as approved in Order dated April 18, 2020 and as approved now by the Commission for FY 2020-21 after truing-up is shown in the following Table:

**Table 4.20: Depreciation approved for 9 LHPs after truing-up of FY 2020-21 (Rs. Crore)**

Generating Station	On Opening GFA as on 14.01.2000		On Additional Capitalisation up to FY 2019-20		Total Depreciation		
	Approved in ARR Order dated 18.04.2020 for FY 2020-21	Approved now after Truing-up for FY 2020-21	Approved in ARR Order dated 18.04.2020 for FY 2020-21	Approved now after Truing-up for FY 2020-21	Approved in ARR Order dated 18.04.2020 for FY 2020-21	Claimed by the Petitioner in FY 2020-21	Approved now after Truing-up for FY 2020-21
Dhakrani	0.00	0.00	0.82	1.38	0.82	1.46	1.38
Dhalipur	0.00	0.00	2.23	1.59	2.23	1.80	1.59
Chibro	0.00	0.00	3.24	3.46	3.24	3.76	3.46
Khodri	0.00	0.00	1.95	1.96	1.95	2.10	1.96
Kulhal	0.00	0.00	0.62	1.35	0.62	1.45	1.35
Ramganga	0.00	0.00	2.52	2.13	2.52	2.54	2.13
Chilla	0.00	0.00	2.13	3.35	2.13	2.90	3.35
MB-I	0.00	0.00	4.54	2.61	4.54	3.42	2.61
Khatima	0.00	0.00	8.13	8.24	8.13	8.48	8.24
<b>Total</b>	0.00	0.00	<b>26.18</b>	<b>26.07</b>	<b>26.18</b>	<b>27.90</b>	<b>26.07</b>

## B. Maneri Bhali-II

As discussed earlier, the Commission has worked out the additional capitalization for FY 2020-21 for MB-II Plant considering the Capital Cost approved as on CoD of the project and year-wise additional capitalisation approved by the Commission.

The Commission has computed depreciation for FY 2020-21 in accordance with the UERC Tariff Regulations, 2018. As MB-II has completed 12 years from CoD in FY 2019-20, as the balance depreciable value of the capital cost as on COD has been spread equally throughout the balance useful life of the assets.

With regard to additional capitalisation post commissioning, the Commission for computing depreciation has adopted the same approach as stated in its previous Orders.

In line with the above approach, the Commission has computed the depreciation for FY 2020-

21 for MB-II on the approved capital cost as on CoD of Rs. 1885.50 Crore along with additional capitalisation of Rs. 351.17 Crore approved up to FY 2019-20. Accordingly, the Commission in this Order has Trued Up the depreciation for FY 2020-21 as follows:

**Table 4.21: Depreciation for MB-II for FY 2020-21 (Rs. Crore)**

Particulars	Approved in ARR Order dated 18.04.2020 for FY 2020-21	Claimed	Approved now after truing-up
Depreciation	46.38	67.56	46.21

#### 4.1.2.5 Return on Equity (RoE)

##### A. Old Nine Generating Stations

The Petitioner has submitted that it has claimed RoE in accordance with the aforesaid UERC Tariff Regulations, 2018 at the rate of 16.50% for Chibro, Khodri, Ramganga and MB-I and at the rate of 15.50% for Dhakrani, Dhalipur, Kulhal, Chilla and Khatima on post-tax basis. Accordingly, the Commission has allowed RoE at the rates as claimed by the Petitioner in line with Regulation 26 of UERC Tariff Regulations, 2018.

Regulation 26 of the UERC Tariff Regulations, 2018 specifies as follows:

#### **“26. Return on Equity**

- (1) *Return on equity shall be computed on the equity base determined in accordance with Regulation 24.*

*Provided that, Return on Equity shall be allowed on amount of allowed equity capital for the assets put to use at the commencement of each financial year.*

- (2) *Return on equity shall be computed on at the base rate of 15.5% for thermal generating stations, Transmission Licensee, SLDC and run of the river hydro generating station and at the base rate of 16.50% for the storage type hydro generating stations and run of river generating station with pondage and distribution Licensee on a post-tax basis.*

...”

In the previous Tariff Orders, pending finalisation of the Transfer Scheme of the Petitioner, the Commission had allowed RoE on the provisional value of the opening equity of Rs. 151.19 Crore in accordance with the directions of the Hon’ble Appellate Tribunal for Electricity issued in the Order dated 14.09.2006 (Appeal No. 189 of 2005), and detailed in the Commission’s Order dated 14.03.2007.

As regards RoE on additional Capitalisation, the Commission has considered the normative equity of 30% where entire financing has been done through internal resources and on actual basis in other cases subject to a ceiling of 30% as specified in the UERC Tariff Regulations, 2018.

Further, for Khatima LHP, in line with earlier Orders of this Commission the Commission has carried out adjustment on account of de-capitalised assets of Rs. 2.03 Crore and has computed RoE on Rs. 150.58 Crore.

Further, with regard to funding of additional capitalization for the works for FY 2020-21, the Petitioner submitted that normative Debt: Equity ratio of 70:30 has been considered for non-DRIP works and for DRIP works Debt: Equity ratio of 80:20 has been considered. Accordingly, the Commission has also considered normative Debt: Equity ratio of 70:30 for non-DRIP works and Debt: Equity ratio of 80:20 for DRIP works.

As the Transfer Scheme is yet to be finalized, the Commission is provisionally allowing a return on normative equity at the rate of 16.50% for Chibro, Khodri, Ramganga and MB-I and at the rate of 15.50% for Dhakrani, Dhalipur, Kulhal, Chilla and Khatima in accordance with the provisions of UERC Tariff Regulations, 2018. The summary of the Return on Equity approved for 9 LHPs for FY 2020-21 is shown in the Table given below:

**Table 4.22: Equity and Return on Equity for 9 LHPs for FY 2020-21 (Rs. Crore)**

Generating Station	RoE approved in ARR Order dated 18.04.2020 for FY 2020-21			Claimed by the Petitioner		Approved now after truing-up for FY 2020-21					
	On Transferred Asset as on 14.01.2000	On Additional Capitalisation	RoE	Opening Equity	RoE	On Transferred Asset as on Jan 14, 2000		On Additional Capitalisation up to FY 2019-20			Total RoE
						Normative Equity	RoE	Opening Equity - General	Opening Equity - DRIP	RoE	
Dhakrani	0.58	0.57	1.14	10.84	1.68	3.72	0.58	3.78	3.35	1.10	1.68
Dhalipur	0.95	1.90	2.85	14.58	2.26	6.11	0.95	3.42	5.06	1.31	2.26
Chibro	4.35	2.47	6.82	43.13	7.12	26.37	4.35	13.74	2.85	2.74	7.09
Khodri	3.66	1.51	5.18	31.78	5.24	22.19	3.66	8.11	1.42	1.57	5.23
Kulhal	0.81	0.42	1.24	12.20	1.89	5.25	0.81	2.90	4.05	1.08	1.89
Ramganga	2.48	2.10	4.57	25.80	4.26	15.01	2.48	10.80	-	1.78	4.26
Chilla	5.81	1.66	7.46	56.25	8.72	37.47	5.81	10.69	8.00	2.90	8.70
MB-I	5.43	4.38	9.81	48.87	8.06	32.92	5.43	11.92	2.97	2.46	7.89
Khatima	0.24	7.17	7.41	49.37	7.65	1.55	0.24	47.21	-	7.32	7.56
<b>Total</b>	<b>24.30</b>	<b>22.17</b>	<b>46.47</b>	<b>292.82</b>	<b>46.89</b>	<b>150.58</b>	<b>24.30</b>	<b>112.56</b>	<b>27.70</b>	<b>22.26</b>	<b>46.56</b>

With regard to the Income Tax, the Petitioner, in the Petitions submitted that Tax Audit of UJVN Ltd. under Section (u/s) 44AB of Income Tax Act was in progress and only after receipt of the

same the Income Tax filing can be done. The last date for obtaining Tax Audit Report by Income Tax Department was extended to January 15, 2022 and the last date for filing of Income Tax Return was February 15, 2022. Since the amount recoverable from beneficiaries can be determined after filing of Income tax Return, Further, in Petition, the Petitioner submitted that the actual claim along with documentary evidence shall be submitted during the scrutiny of the Petition and further requested that it may be allowed to recover Income Tax on actual basis for its 10 LHPs including MB-II in respect of sale of energy to UPCL, as per Regulations 34 of UERC Tariff Regulations, 2018, which specifies as follows:

**“34. Tax on Income**

*Income Tax, if any, on the income stream of the regulated business of Generating Companies, Transmission Licensees, Distribution Licensees and SLDC shall be reimbursed to the Generating Companies, Transmission Licensees, Distribution Licensees and SLDC as per actual income tax paid, based on the documentary evidence submitted at the time of truing up of each year of the Control Period, subject to the prudence check.”*

Further, the Petitioner vide reply dated March 09, 2022 submitted the ITR acknowledgement (Assessment year FY 2021-22).

With regard to allocation of actual taxes paid among its generating stations and then to beneficiaries, the Commission has already specified the methodology while carrying out true up for FY 2019-20 in its Order dated April 26, 2021 and needs to be adopted for FY 2020-21.

The Commission is of the view that the Regulation 34 of UERC Tariff Regulations, 2018 allows recovery of actual Tax paid subject to submission of documentary proof. Therefore, the Commission allows the Petitioner to recover (actual) Income Tax paid separately from its beneficiaries in accordance with Regulation 34 of the UERC Tariff Regulations, 2018.

**B. Maneri Bhali-II**

As discussed earlier, the Commission has considered the Capital Cost of MB-II project as on CoD as Rs. 1885.50 Crore as approved by the Commission in its Order dated 05.04.2016. In the said Order, the Commission had approved financing of the Capital Cost and held as follows:

*“As discussed earlier, the Commission has approved the Capital cost of MB-II project as on COD and, accordingly, the financing of the project. The Commission has reworked the total equity component as*

*on COD to Rs. 685.50 Crore. In accordance with the Tariff Regulations, equity in excess of 30% has to be treated as normative loan. Accordingly, the equity for MB-II LHP as on COD works out to Rs. 565.65 Crore which includes pre-2002 expenses of Rs. 164 Crore, power development fund of Rs. 326.76 Crore and GoU budgetary support of Rs. 74.89 Crore and the balance amount of Rs. 119.85 Crore has been considered as normative loan."*

The Commission has not been allowing Return on Equity on funds deployed by the GoU out of PDF fund for reasons recorded in the previous Tariff Orders. In line with the approach considered in previous Tariff Orders, the Commission is of the view that unlike other funds available with the Government, collected through taxes and duties, PDF is a dedicated fund created in accordance with the provisions of the PDF Act passed by the GoU and the amount is collected directly from the consumers through the electricity bills as the same forms part of the power purchase cost of UPCL, which in turn is loaded on to the consumers. PDF Act and Rules made thereunder, further, clearly indicate that money available in this fund has to be utilized for the purposes of development of generation and transmission assets.

Thus, the Commission has not deviated from its earlier approach and is of the view that the money for the purpose of this fund is collected by the State Government through cess imposed on the electricity generated from old hydro generating stations, which are more than 10 years old. The cost of such cess is further passed on to UPCL, which in turn recovers the same from ultimate consumers of electricity through tariffs. Further, as the Petitioner in this regard has preferred an Appeal before the Hon'ble APTEL, the Commission is not deviating from its approach, since the matter is sub-judice.

The Commission with regard to funding of additional capitalisation post COD till FY 2019-20 has considered the funding approved by it in its Order dated April 26, 2021. Further, with regard to additional capitalisation for FY 2020-21, the normative Debt: Equity ratio of 70:30 has been considered by the Commission.

As discussed above, against amount to be recovered for income tax, the Petitioner is allowed to recover the same in accordance with Regulation 34 of the UERC Tariff Regulations, 2018.

The opening equity considered by the Commission for the purpose of return on equity is as shown in the Table below:



**Table 4.23: Opening Equity approved by the Commission for MB-II for FY 2020-21(Rs. Crore)**

Particulars	Claimed	Approved now after truing-up
Opening Equity	332.13	307.50

The Commission on account of the financing of the additional capitalisation for FY 2019-20 has revised the RoE allowed for FY 2020-21 as shown below:

**Table 4.24: RoE approved for MB-II for FY 2020-21 (Rs. Crore)**

Particulars	Approved in ARR Order dated 18.04.2020 for FY 2020-21	Claimed	Approved now after truing up
RoE	50.89	54.80	50.74

#### 4.1.2.6 Interest on Loans

##### A. Old Nine Generating Stations

Regulation 27 of the UERC Tariff Regulations, 2018 specifies as follows:

**“27. Interest and finance charges on loan capital and on Security Deposit**

- (1) The loans arrived at in the manner indicated in Regulation 24 shall be considered as gross normative loan for calculation of interest on loan.
- (2) The normative loan outstanding as on 01.04.2019 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2019 from the gross normative loan.
- (3) The repayment for each year of the Control Period shall be deemed to be equal to the depreciation allowed for that year
- ...
- (5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio of the previous year after providing appropriate accounting adjustment for interest capitalised:

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

*Provided further that if the generating station or the transmission system or the distribution system or SLDC, as the case may be, does not have actual loan, then the*

*weighted average rate of interest of the generating company or the Transmission Licensee or the Distribution Licensee or SLDC as a whole shall be considered.*

- (6) *The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*

...”

The Petitioner submitted that as per the provisions of Regulation 24 of UERC Tariff Regulations, 2018, interest on normative debt has been considered on the value equivalent to 70% of additional capitalisation only.

The Petitioner vide reply dated January 31, 2022 submitted that the Petitioner is adopting the practice of capitalizing the assets as soon as assets are available to use/put to use, instead of booking at the end of financial year. The Petitioner also submitted a letter dated 12.03.2021 directing the concerned officials to ensure circulation of Work Completion Certificate after completion of capital works to ensure service equity in SAP (measurement) and technical completion of respective WBS in ERP followed by timely capitalization of the works in the accounting records of company in line with applicable Ind-AS.

The Commission has noted down the submission of the Petitioner and only for the purpose of allowing interest on loan, it has calculated the interest rate on opening loan less average repayment. Accordingly, the Commission has considered the interest rate of 10.25% for Khatima and 8.13% for other 8 LHPs (including DRIP loans).

The opening/closing loan for FY 2020-21 for 9 LHPs as considered by the Commission is shown in the Table below:

**Table 4.25: Opening/Closing Loan considered for FY 2020-21 for 9 LHPs (Rs. Crore)**

Particulars	Opening Balance	Loan For Asset Capitalized	Repayment	Closing Balance
Dhakrani	19.08	5.28	1.38	22.98
Dhalipur	23.32	6.27	1.59	28.01
Chibro	29.75	14	3.46	40.28
Khodri	11.02	6.94	1.96	16.01
Kulhal	20.49	6.12	1.35	25.26
Ramganga	18.58	1.09	2.13	17.55
Chilla	42.01	15.6	3.35	54.26
MB-I	12.8	67.38	2.61	77.57
Khatima	83.73	4.26	8.24	79.75
<b>Total</b>	<b>260.78</b>	<b>126.94</b>	<b>26.07</b>	<b>361.67</b>

Further, the Petitioner has submitted that repayment has been considered as equal to the depreciation claimed for the year. The details of quarter-wise actual loan repayment, and interest paid towards existing loans along with interest refund received for FY 2020-21 for the 10 LHPs have been submitted by the Petitioner.

Also, for Khatima, the Petitioner submitted that on account of its continuous efforts, PFC had agreed to reduce the Rate of Interest (RoI) of 11.50% by reset of the RoI to 10.40% (excluding timely payment of rebate of 0.25%) w.e.f 09.11.2017. This resulted in higher saving of interest. In accordance with Regulation 21(12) of the UERC Tariff Regulations, 2018, the Petitioner pleaded before the Commission to approve the total claim on interest on loan including the gain on account of re-financing. The Commission has gone through the submissions of the Petitioner and observed that the claim of the Petitioner is a refund mechanism and not re-financing. Also, there is no decrement in the claimed value of interest rate in comparison to its claim of previous year true up. Hence, the Commission has not considered the same.

Based on the above considerations, the Commission has approved interest on loan based on the average of opening and closing loans for 9 LHPs for FY 2020-21 after excluding the loan corresponding to Additional Capitalisation during the year as the practice of the Petitioner is to capitalise the assets at the end of the year. The same is shown in Table below:

**Table 4.26: Interest on Loan as approved for 9LHPs for FY 2020-21 (Rs. Crore)**

Generating Station	Approved in ARR Order dated 18.04.2020	Interest Claimed	Interest Approved
Dhakrani	0.49	2.13	1.50
Dhalipur	2.23	2.63	1.83
Chibro	1.93	3.60	2.28
Khodri	0.67	1.73	0.82
Kulhal	0.35	2.33	1.61
Ramganga	2.15	1.88	1.42
Chilla	0.85	5.26	3.28
MB-I	3.23	5.49	2.84
Khatima	7.66	9.27*	8.16
<b>Total</b>	<b>19.55</b>	<b>34.33</b>	<b>23.73</b>

*\* including sharing of gain/loss*

## **B. Maneri Bhali-II**

The Commission has considered the Capital Cost of Maneri Bhali-II as on CoD and the financing thereof as approved in Tariff Order dated April 26, 2021. The Commission has considered the equity

in excess of 30% of the capital cost of MB-II as normative loan, which works out to Rs. 119.85 Crore in addition to PFC loan of Rs. 1200 Crore.

The details of interest refund/rebate received on loans pertaining to MB-II LHP for FY 2020-21 were submitted by UJVN Ltd.

In case of MB-II station, as the actual loans have been availed for the project, therefore, the interest has been computed on the basis of interest rate applicable to these loans availed for the project.

For calculating the interest expense for FY 2020-21, the Commission has computed the weighted average rate of interest as per the methodology specified above and has considered interest rate of 10.26% for MB-II as claimed by the Petitioner.

The Opening/Closing loan for FY 2020-21 for MB-II considered by the Commission is shown in the Table below:

**Table 4.27: Opening/Closing Loan considered for MB-II for FY 2020-21 (Rs. Crore)**

Particulars	PFC Loan	GoU Loan	Normative Loan
Opening Loan	455.42	32.70	31.93
Addition	13.42	-	-
Repayment	40.47	2.91	2.84
Closing loan	428.37	29.79	29.09

The Commission based on the approved capital cost and the opening and closing loan including the normative loan for MB-II as on 31.03.2021 has computed the interest expenses for FY 2020-21 after excluding the loan corresponding to the additional capitalisation during the year as the practice of the Petitioner is to capitalise the asset at the end of the year. The Commission, in accordance with Regulation 27(3) of UERC Tariff Regulations, 2018 has considered the repayment for FY 2020-21 equal to the depreciation allowed for the year.

With regard to the claim of the Petitioner on account of savings of interest account of Rs. 5.27 Crore and claim of Guarantee Fee for MB-II, the Commission observed that there is no decrement in the claimed value of interest rate of FY 2020-21 in comparison to its claim of previous year true-up. Hence, the Commission has not considered any sharing of savings of interest amount as claimed by the Petitioner. Also, the Commission has adjusted the rebate received by the Petitioner and Guarantee Fee for FY 2020-21 as per the methodology followed by the Commission in the Order dated April 26, 2021.

Based on the above considerations and the UERC Tariff Regulations, 2018, the Commission has calculated the interest expenses for MB-II for FY 2020-21 as shown in the Table below:

**Table 4.28: Interest on Loan as approved for MB-II for FY 2020-21 (Rs. Crore)**

Particulars	Approved in ARR Order dated 18.04.2020	Claimed	Approved now after truing-up
Interest on Loan	53.76	57.13*	55.54

\* including sharing

#### 4.1.2.7 Operation & Maintenance (O&M) Expenses

##### A. Truing up of O&M Expenses for FY 2020-21 (Nine Large Generating Stations)

The Petitioner submitted that O&M expenses for FY 2020-21 have been considered as per the audited accounts. Further, as per Regulation 30(1) of UERC Tariff Regulations, 2018, the Petitioner submitted the O&M expenses comprising Employee Expenses, Repair & Maintenance expenses and Administrative & General expenses. The components of total O&M expenses have been bifurcated into direct and indirect expenses. Direct expenses have been allocated to respective hydro power project for which corresponding expenses have been incurred. The Petitioner has allocated indirect expenses as already detailed in the Section dealing with apportionment of common expenses of this Order. The Commission, in this regard, has also taken a similar view on the approach of allocating indirect expenses.

The Commission has considered the revision in CPI Inflation and WPI Inflation on the basis of actual data and has computed the O&M expenses on the basis of Regulation 48(2) of UERC Tariff Regulations, 2018. Accordingly, for arriving at the normative O&M expenses for FY 2020-21, the Commission has escalated the expenses of FY 2019-20. The Commission for the purpose of escalation has considered following escalation rates.

**Table 4.29: Escalation Rates as considered by the Commission for FY 2020-21**

Particulars	FY 2020-21
CPI Inflation	5.35%
WPI Inflation	2.96%

Further, for the purpose of arriving at employee expenses for FY 2020-21, the Commission has considered the value of Growth Factor 'Gn' on the basis of actual details of recruitment provided by UJVN Ltd vide reply dated March 09, 2022. Further, the Commission has considered the 'K' factor as approved in the MYT Order dated 27.02.2019.

#### 4.1.2.7.1 Employee Cost for 9 LHPs

The Commission has considered the same approach for computation of employee expenses for FY 2020-21 as considered by it in the Tariff Order dated April 26, 2021.

With regard to calculation for 'Gn', the Commission observed that opening number of employees for FY 2020-21, i.e. 1956 submitted by the Petitioner for UJVN Ltd. as a whole was not correlating with the closing number of employees for FY 2019-20, i.e. 1681 approved by the Commission during truing up of FY 2019-20 vide Order dated April 26, 2021. The Commission, vide its email dated March 04, 2022 sought justification for the variation in the number. The Petitioner, vide its reply dated March 09, 2022 submitted that the closing balance for FY 2019-20 as per ARR Order dated April 26, 2021 is 1681 (considering only 10 LHPs & HQ) employees whereas the opening balance for FY 2020-21 is 1956 (considering total staff strength). Further, the Petitioner also submitted that a total of 106 No. of employees were transferred from LHPs & HQ to SHP/Projects/Solar since 2019. The adjustment of the aforesaid 106 No. employees was shown in the employee detail for FY 2021-22.

The Commission in further query dated March 04, 2022 sought the details of number of employees located at HQ and 10 LHPs for arriving the Gn factor for FY 2020-21. The Petitioner, vide reply dated March 09, 2022 submitted the break-up and the Commission has considered the same for arriving the Gn factor for FY 2020-21. The Commission observed that the actual additions during the year were less than the nos. of retirements and, accordingly, the Growth Factor 'Gn' considered by the Commission is as given below:

**Table 4.30: Growth Factor 'Gn' considered for FY 2020-21**

Particulars	FY 2020-21
Opening No. of Employees (Pertaining to HQ & 10 LHPs)	1681
Employee Addition (Pertaining to HQ & 10 LHPs)	51
Retirement/expired/resigned (Pertaining to HQ & 10 LHPs)	70
Closing Balance (Pertaining to HQ & 10 LHPs)	1662
<b>Gn</b>	<b>0.00%</b>

With regard to approval of normative employee expenses for FY 2019-20, the Commission vide its Order dated February 27, 2019 had stated as follows:

*"The Commission for arriving at the normative employee expense for FY 2019-20, has first calculated the normative employee expense for FY 2018-19 by escalating the normative employee expense of the base year i.e. FY 2017-18 without considering the impact of VII Pay Commission arrear and*

considering the Gn as 0% for FY 2018-19 and CPI of 4.34% for FY 2018-19. The Employee expense for FY 2018-19 so calculated have been multiplied considering a factor of 1.15 for taking care the impact of VII Pay Commission arrear to form the normative employee expense for FY 2018-19. Thus, the above calculated normative employee expense for FY 2018-19 has been used for calculating the normative employee expense for the Third Control Period by considering the Gn and CPI factor applicable for the respective years as mentioned in the Table below in accordance with the provisions of Regulation 48(2) of the UERC Tariff Regulations, 2018

**Table 5.21: Gn and CPI approved by the Commission**

Particulars	FY 2018-19 (%)	FY 2019-20 (%)	FY 2020-21 (%)	FY 2021-22 (%)
Gn	0.00	0.78	1.29	3.05
CPI	4.34	4.34	4.34	4.34

The Commission shall consider the actual impact of VII Pay Commission during the True Up of FY 2018-19. Further, the Commission rules that the employee expenses shall be allowed at actual for FY 2019-20 subject to prudence check at the time of True Up without any sharing of gains and losses...."

From the above, it can be observed that the employee expenses shall be allowed at actuals subject to prudence check at the time of True Up without any sharing of gains and losses. It is also observed that the Petitioner has included interest on GPF trust liabilities. The Commission has not considered the claim of interest on GPF trust liability in line with its earlier approach.

A summary of the employee expenses claimed and approved by the Commission for FY 2020-21 are shown in the Table below:

**Table 4.31: Employee Expenses for 9 LHPs approved and claimed for FY 2020-21 (Rs. Crore)**

Generating Station	Approved in ARR Order dated 18.04.2020	Claimed	Actual Expenses*
Dhakrani	11.54	10.54	10.36
Dhalipur	17.41	10.75	10.48
Chibro	48.15	39.99	38.71
Khodri	26.59	19.85	19.21
Kulhal	10.26	8.22	8.06
Ramganga	32.30	27.79	26.74
Chilla	35.18	30.17	29.40
MB-I	25.72	23.83	23.35
Khatima	14.30	10.91	10.69
<b>Total</b>	<b>221.45</b>	<b>182.03</b>	<b>177.00</b>

\* Excluding the GPF trust interest

#### 4.1.2.7.2 Repairs and Maintenance Expenses for 9 LHPs

The Commission in its MYT Order dated February 27, 2019 had computed the percentage of actual R&M expenses vis-a-vis actual opening GFA for each year from FY 2015-16 to FY 2017-18. Thereafter, the Commission had considered the average of such percentages as 'K' factor. The Commission had considered the constant factor 'K' as follows:

**Table 4.32: K-Factor for 9 LHPs as considered by the Commission**

Station	Average of 3 years
Dhakrani	47.60%
Dhalipur	32.05%
Chibro	11.97%
Khodri	8.12%
Kulhal	26.36%
Ramganga	9.72%
Chilla	9.84%
MB-I	7.90%
Khatima	2.00%

The Commission vide in its Order dated April 26, 2021, in view of higher actual R&M expenses, increased the K factor for Khatima LHP from 2% to 3% during true-up of FY 2019-20.

For computing the R&M expenses for FY 2020-21, the Commission has multiplied the 'K' Factor as given above with the opening GFA approved for FY 2020-21. The Commission observed that the actual expenses claimed by the Petitioner includes the expenses on account of implementation of ERP, whereas, the normative O&M Expenses approved for the Third Control Period in MYT Order did not include the GFA on account of ERP. Accordingly, the Commission has adjusted the opening GFA for FY 2020-21 with the addition on account of ERP approved in FY 2018-19.

Further, in line with earlier approach, with regard to DRIP works, the Commission has considered R&M expenses as 4% of DRIP works for computing normative R&M expenses. Further, as one of the Units of Dhalipur and MB-I were under shutdown in FY 2020-21, proportionate R&M for balance Units under operations have been allowed.

The Commission has revised the WPI Inflation for FY 2020-21 based on the WPI Indices for the preceding three years and, accordingly, approved the WPI Inflation of 2.96% for FY 2020-21.



#### 4.1.2.7.2.1 Transfer of R&M expenses to additional capitalization

The Commission, while scrutinizing the R&M expenses for FY 2020-21 for Khatima HEP and Civil Dhalipur has observed that the Petitioner in R&M expenses has booked some expenses, which are of capital nature. As discussed in Add Cap section of this Chapter the said expenses have been shifted to Add Cap.

#### 4.1.2.7.2.2 Disallowed/ Deferred R&M Expenses

The Commission, while scrutinizing the R&M expenses for Chilla HEP observed that the total claim of Rs. 96.64 Lakh includes the expenses on account of overhauling of 42.5 MVA Transformer. The Commission vide its letter dated February 10, 2022 sought confirmation that the said expenditure incurred is not on account of flooding event that occurred on July 13, 2018 along with confirmation that the said expenditure has not been claimed in insurance. The Petitioner vide its reply dated February 17, 2022 confirmed that the fault during flooding incident resulted in damage to Unit transformer No. 3. The spare transformer was used in Unit No. 3 and faulty generator transformer was got overhauled and put to use again for the same Unit. The Commission is of the view that the expense of Rs. 96.64 Lakh has to be deferred and the same can be adjusted after the finalization of insurance claim against flooding event of July 13, 2018.

The details of all the disallowed/deferred works have been mentioned in **Annexure-6** of this Order. The Plant wise details of the same is as follows:

**Table 4.33: Disallowed/deferred claim of R&M Expenses for 9 LHPs for FY 2020-21 (Rs. Crore)**

Generating Station	Expenditure
Dhakrani	-
Dhalipur	-
Chibro	-
Khodri	-
Kulhal	-
Ramganga	-
Chilla	0.97
MB-I	-
Khatima	-
<b>Total</b>	<b>0.97</b>

Accordingly, the Commission has trued up the normative R&M expenses for FY 2020-21 as shown in the Table below:

**Table 4.34: R&M Expenses approved for 9 LHPs for FY 2020-21 (Rs. Crore)**

Generating Station	ARR Order dated 18.04.2020 for FY 2020-21	Claimed	Approved now after truing-up as per norms for FY 2020-21
Dhakrani	12.06	7.50	12.52
Dhalipur	11.01	8.32	7.39
Chibro	17.05	10.27	16.40
Khodri	8.76	12.66	8.50
Kulhal	7.23	7.16	7.99
Ramganga	9.25	6.52	8.13
Chilla	16.28	17.73	17.53
MB-I	12.51	5.05	8.63
Khatima	3.32	8.47	4.91
<b>Total</b>	<b>97.47</b>	<b>83.68</b>	<b>92.00</b>

#### 4.1.2.7.3 Administrative & General Expenses for 9 LHPs

The Commission in its MYT Order dated February 27, 2019 on approval of ARR for FY 2019-20 approved the A&G expenses in accordance with the UERC Tariff Regulations, 2018. The Commission is considering the same approach for truing up of the A&G expenses for FY 2019-20 in accordance with the aforesaid Regulations.

With regard to the insurance expenses, the Commission in the MYT Order dated February 27, 2019, observed as follows:

*“The UERC Tariff Regulations, 2018 stipulate the normative O&M expenses for the Third Control Period to be approved taking into account the actual O&M expenses for FY 2013-14 to FY 2017-18. The Commission observed that the A&G expenses have increased significantly in the immediately preceding years partly on account of the increase in insurance expenses. In view of the above, as discussed in Chapter 4, the Commission has decided to treat insurance expense as uncontrollable in nature.*

....

*In addition to the above, the Commission shall allow to recover actual Petition filing fees and insurance charges subject to prudence check at the time of truing up”*

The normative A&G expenses for FY 2020-21 have been arrived by escalating the normative A&G expenses for FY 2019-20 with the revised WPI escalation rate of 2.96% after excluding Petition filing fees, insurance expenses paid in FY 2019-20, and thereafter, adding the actual insurance

expenses incurred in FY 2020-21, Petition filing fees for FY 2020-21. Security expenses has also been allowed by the Commission on actual basis for FY 2020-21.

**However, in future tariff/true-up filings, the Petitioner is directed to furnish cost centre-wise details of security expenses.**

The Commission has not considered the claim of the Petitioner pertaining to CSR expenses amounting to Rs. 5.47 Crore for 9 LHPs as per its approach in previous Tariff Orders.

The A&G expenses approved by the Commission for FY 2020-21 is as shown in the Table given below:

**Table 4.35: A&G Expenses approved for 9 LHPs for FY 2020-21 (Rs. Crore)**

Generating Station	ARR Order dated 18.04.2020 for FY 2020-21	Claimed	Approved now after Truing-up as per norms for FY 2020-21 and considering the actual security expenses/ insurance expenses & Petition filing fees
Dhakrani	0.84	2.30	1.43
Dhalipur	1.38	2.51	1.86
Chibro	5.71	9.70	6.61
Khodri	2.69	5.97	3.84
Kulhal	0.72	2.28	1.40
Ramganga	4.27	6.97	4.71
Chilla	3.95	6.49	4.92
MB-I	2.37	4.56	3.24
Khatima	0.85	2.02	1.17
<b>Total</b>	<b>22.79</b>	<b>42.80</b>	<b>29.18</b>

The Petitioner under the A&G expenses, has included expenses of Rs. 5.60 Crore on account of operational expenses of ERP implemented in UJVN Ltd. The Petitioner has apportioned the said amount of Rs. 5.32 Crore for 10 LHPs by apportioning the total in the ratio of 85:10:5 between 9 LHPs, MB-II and SHPs, which works out to Rs. 4.76 Crore for 9 LHPs.

The Commission observed that the Petitioner has substantially reduced the projection of cost against the AMC of ERP implementation from Rs. 2.59 Crore (Jan 2021-Dec 2021) to Rs. 1.46 Crore (Jan 2022-Dec 2022) which will be further reduced to Rs. 0.96 Crore in Jan 2023-Dec 2023. The Commission sought justification for it vide letter dated 11.02.2022 for such reduction in projection of its cost. In response, the Petitioner submitted that existing agreement with M/s Accenture Solutions Ltd. has completed on December 2021. Based on retender, the Petitioner appointed M/s Highbar

Technocrat Ltd. Mumbai wherein best possible efforts is being done to reduce the recurring expenditure on ERP system. Accordingly, the Commission has considered the same for FY 2020-21.

Further, the Commission is of the view that as the expenses on account of the same were not included in the normative expenses approved in the Tariff Order dated April 18, 2020 and as the nature of such expenses falls under A&G expenses, the Commission has, accordingly, considered the same on actual basis by excluding the same from sharing and has added in the net entitlement of O&M expenses after sharing of O&M expenses.

#### **4.1.2.7.4 Sharing of O&M expenses for 9 LHPs**

As per the UERC Tariff Regulations, 2018, O&M Expenses are controllable expenses and, accordingly, the sharing of gains and losses have been carried out for O&M expenses.

The Petitioner has submitted the actual O&M expenses of Rs. 308.52 Crore including interest on GPF trust and provision for VII Pay Commission arrears for 9 LHPs. Further, the Petitioner has claimed Rs. 330.63 Crore after sharing of gains and losses as per UERC Tariff Regulations, 2018.

As discussed in above sections, the employee expenses for FY 2020-21 have been considered as actuals without any sharing of gains and losses.

From the total claim, the Commission has deferred/disallowed a claim of Rs. 0.97 Crore pertaining to claim of R&M Expenses as discussed above and further shifted expenses of additional capitalization nature from R&M of Rs. 5.61 Crore for FY 2020-21.

For computing net gain or loss with respect to R&M and A&G expenses, the Commission has considered actual O&M expenses excluding the Petition filing fee of Rs. 1.20 Crore, Expenses pertaining to ERP of Rs. 4.76 Crore, insurance expense of Rs. 8.57 Crore, security expenses of Rs. 10.53 Crore and adjusted the expenses of additional capitalization nature shifted from R&M for FY 2020-21 along with the deferred works for FY 2020-21.

The Insurance expenses of Rs. 8.57 Crore, Petition filing fee of Rs. 1.20 Crore, Expenses pertaining to ERP of Rs. 4.76 Crore, security expenses of Rs. 10.53 Crore and employee expenses adjusted with interest on GPF trust of Rs. 5.03 Crore have been allowed on actual basis and added in the Net O&M Entitlement as shown in Table below.

Accordingly, the Commission has approved the total O&M expenses for FY 2020-21 after sharing of gains and losses as shown in the Table below:

**Table 4.36: O&M Expenses approved for 9 LHPs for FY 2020-21 (Rs. Crore)**

Generating Station	Approved in ARR Order dt. 18.04.2020 for FY 2020-21	Claimed based on actual	Actual Adjusted Emp. Exp	R&M, A&G Actual Adjusted for sharing	R&M, A&G Normative for Sharing	Efficiency gain/(loss) of R&M and A&G	R&M and A&G approved after sharing	Net O&M Entitlement
			(A)	(B)	(C)	(D)=(C)-(B)	(E)=(B)+2/3 of (D)	
Dhakrani	24.45	20.34	10.36	5.91	12.60	6.69	10.37	22.25
Dhalipur	29.80	21.58	10.48	5.64	7.90	2.26	7.15	19.23
Chibro	70.90	59.96	38.71	13.43	19.05	5.61	17.18	61.06
Khodri	38.04	38.47	19.21	14.29	9.28	(5.00)	10.95	33.82
Kulhal	18.21	17.66	8.06	7.59	7.95	0.36	7.83	17.48
Ramganga	45.81	41.29	26.74	8.51	10.04	1.54	9.53	40.06
Chilla	55.42	54.39	29.40	18.62	19.40	0.78	19.14	52.31
MB-I	40.60	33.44	23.35	6.33	9.52	3.19	8.46	34.62
Khatima	18.47	21.39	10.69	8.97	5.08	(3.89)	6.38	18.27
<b>Total</b>	<b>341.70</b>	<b>308.52</b>	<b>177.00</b>	<b>89.28</b>	<b>100.83</b>	<b>11.54</b>	<b>96.98</b>	<b>299.09</b>

#### **B. O&M Expenses for Maneri Bhali-II**

With regard to the O&M expenses of MB-II, the Commission has adopted the same approach as adopted for O&M expenses of 9 LHPs.

The escalation rates have been computed on the basis of revised CPI Inflation and WPI Inflation. The Commission has considered the revision in CPI Inflation and WPI Inflation on the basis of actual data and has computed the normative O&M expenses on the basis of Regulation 48(2) of UERC Tariff Regulations, 2018.

With regard to the employee expenses for FY 2020-21, the Commission, as discussed in earlier Sections, has considered the actual employee expenses for FY 2020-21 without any sharing of gains and losses after disallowing GPF trust interest of Rs. 0.59 Crore in line with the ruling of the Commission in MYT Order dated February 27, 2019.

For computing the normative R&M expenses for FY 2020-21, the Commission has multiplied the K Factor as approved in MYT Order dated February 27, 2019 with the opening GFA approved for FY 2020-21. The Commission has considered the average increase in WPI for preceding three years from FY 2017-18 to FY 2019-20 as 2.96%.

As discussed in additional capitalization section, an expense of Rs. 38.64 Lakh has been transferred from R&M expenses to additional capitalization and expense of Rs. 30 Lakhs is deferred for FY 2021-22.

For computing the normative A&G Expenses for FY 2020-21, the Commission has considered the normative A&G expenses for FY 2019-20 and escalated the same with the revised WPI escalation rate of 2.96% after excluding Petition filing fees, actual insurance expenses and security expenses incurred in FY 2020-21. Thereafter, the actual insurance expenses incurred in FY 2020-21 of Rs. 5.06 Crore, the actual security expenses incurred in FY 2020-21 of Rs. 2.17 Crore and Petition filing fees for FY 2020-21 of Rs. 0.30 Crore has been added to the normative expenses.

As discussed in above section for 9 LHPs, with regard to claim of A&G Expenses, the Commission has not considered the claim of the Petitioner pertaining to CSR expenses amounting to Rs. 0.867 Crore, which has been adjusted from the claim of the Petitioner.

The Commission, accordingly, approves the normative O&M expenses for MB-II as shown in the Table below:

**Table 4.37: Normative O&M Expenses as approved for MB-II Station for FY 2020-21 (Rs. Crore)**

Particulars	Approved in ARR Order dated 18.04.2020	Claimed	Normative O&M Expenses
Employee Expenses	27.01	23.33	26.87
R&M Expenses	20.74	25.04	20.69
A&G Expenses	10.75	10.87	11.73
<b>Total O&amp;M</b>	<b>58.51</b>	<b>59.24</b>	<b>59.29</b>

Further, the UERC Tariff Regulations, 2018 provide for sharing of gains/losses due to controllable factors. For computing net gain or loss, the Commission has considered actual R&M and A&G expenses, Petition filing fee of Rs. 0.30 Crore, Expenses pertaining to ERP of Rs. 0.53 Crore, Insurance Expense of Rs. 5.06 Crore, security expenses of Rs. 2.17 Crore, adjusted the expenses of additional capitalization nature of Rs. 0.38 Crore from R&M to additional capitalization for FY 2020-21 and deferred works of Rs. 0.30 Crore for FY 2021-22. The Insurance expenses of Rs. 5.06 Crore, Petition filing fee of Rs. 0.30 Crore, Expenses pertaining to ERP of Rs. 0.56 Crore, security expenses of Rs. 2.17 Crore and actual employee expenses after disallowing GPF interest of Rs 0.59 Crore have been allowed on actual basis and added in the Net O&M Entitlement as shown in Table below:

**Table 4.38: O&M Expenses approved after sharing of gains and losses for MB-II for FY 2020-21 (Rs. Crore)**

Particulars	Claimed based on actual	Actual Adjusted Employee Expenses	Actual adjusted claim of R&M and A&G	Normative R&M and A&G	Efficiency gain/(loss)	Generator Share	R&M and A&G approved after sharing	Net O&M Entitlement
		(A)	(B)	(C)	(D)=(C)-(B)	(E)=2/3 of (D)	(F)=(B)+(E)	
O&M Expenses of MB-II	59.24	22.74	26.17	25.70	(0.47)	(0.31)	25.85	56.78

#### 4.1.2.8 Interest on Working Capital

##### A. Old Nine Large Hydro Generating Stations

The Petitioner has claimed that it has computed the working capital for each Plant in accordance with the provisions of the UERC Tariff Regulations, 2018, on normative basis. The rate of interest considered by the Petitioner for computing interest on working capital for FY 2020-21 has been considered as 13.75% on the basis of State Bank Advance Rate as applicable on the date of filing of petition for Tariff Determination.

The components of working capital as per Regulation 33 (1) b) of UERC Tariff Regulations, 2018 are as follows:

*“In case of hydro power generating stations and transmission system and SLDC, the working capital shall cover:*

- (i) Operation and maintenance expenses for one month*
- (ii) Maintenance spares @ 15% of operation and maintenance expenses; and*
- (iii) Receivables equivalent to two months of the annual fixed charges”*

With respect to the interest on working capital, Regulation 33 of the UERC Tariff Regulations, 2018 specifies as under:

*“Rate of interest on working capital shall be on normative basis and shall be equal to the State Bank Advance Rate (SBAR) of State Bank of India as on the date on which the application for determination of tariff or trueing up or annual performance review is made.*

*....”*

**4.1.2.8.1 One Month O&M Expenses**

The Commission has trued up the Plant-wise annual O&M expense for FY 2020-21. Based on the approved Plant-wise O&M expenses, one month's O&M expenses has been worked out for determining the working capital requirement.

**4.1.2.8.2 Maintenance Spares**

The Commission has considered the maintenance spares in accordance with UERC Tariff Regulations, 2018. The Commission has determined the Plant-wise maintenance spares requirement at the rate of 15% of the Trued-up O&M Expenses for FY 2020-21.

**4.1.2.8.3 Receivables**

The UERC Tariff Regulations, 2018 envisages receivables equivalent to two months of fixed charges for sale of electricity as an allowable component of working capital. Plant-wise Annual Fixed Charges (AFC) for the Petitioner includes O&M expenses, depreciation, interest on loan, return on equity and interest on working capital. The Commission has considered the receivables for two months based on the Plant-wise Trued-up AFC for FY 2020-21.

As regards the interest on working capital, Regulation 33 of the UERC Tariff Regulations, 2018 specifies rate of interest on working capital to be taken equal to the State Bank Advance Rate (SBAR) of State Bank of India as on the date on which the application for determination of tariff or true-up or Annual Performance Review is made. As the true Petition for FY 2020-21 was filed on 30.11.2021, the Commission has considered the prevailing SBAR, i.e. 12.20% for computing the Interest on Working Capital.

Accordingly, the normative Interest on Working Capital for FY 2020-21 as approved by the Commission is shown in the Table below:

**Table 4.39: Interest on Working Capital for 9 LHPs for FY 2020-21 (Rs. Crore)**

Generating Station	Approved Working Capital after Truing up				Interest on Working Capital		
	1-month O&M Expenses	Maintenance Spares @15% of O&M	2 months Receivables	Total Working Capital	Approved in ARR Order dated 18.04.2020	Claimed	Normative Approved
Dhakrani	1.85	3.34	4.45	9.64	1.42	1.26	1.18
Dhalipur	1.60	2.88	4.00	8.49	1.83	1.37	1.04
Chibro	5.09	9.16	11.91	26.16	4.23	3.70	3.19



**Table 4.39: Interest on Working Capital for 9 LHPs for FY 2020-21 (Rs. Crore)**

Generating Station	Approved Working Capital after Truing up				Interest on Working Capital		
	1-month O&M Expenses	Maintenance Spares @15% of O&M	2 months Receivables	Total Working Capital	Approved in ARR Order dated 18.04.2020	Claimed	Normative Approved
Khodri	2.82	5.07	6.81	14.70	2.30	2.37	1.79
Kulhal	1.46	2.62	3.74	7.81	1.07	1.12	0.95
Ramganga	3.34	6.01	7.68	17.03	2.76	2.52	2.08
Chilla	4.36	7.85	11.13	23.34	3.34	3.44	2.85
MB-I	2.88	5.19	7.94	16.02	2.68	2.27	1.95
Khatima	1.52	2.74	7.08	11.34	1.57	1.77	1.38
<b>Total</b>	<b>24.92</b>	<b>44.86</b>	<b>64.74</b>	<b>134.53</b>	<b>21.19</b>	<b>19.83</b>	<b>16.41</b>

Further, the UERC Tariff Regulations, 2018 provides for sharing of gains/losses due to controllable factors and as per UERC Tariff Regulations, 2018, variation in working capital requirements is a controllable factor. The Commission during the TVS sought the details of actual interest on working capital for all 10 LHPs. In reply to the query, the Petitioner submitted that actual interest on Over Draft facility availed for only MB-II. Therefore, the Commission for 9 LHPs has considered actual interest on working capital as NIL. As the actual interest on working capital incurred by the Petitioner is less than the normative interest on working capital, the Commission has shared the gain in interest on working capital in accordance with the provisions of UERC Tariff Regulations, 2018.

The interest on working capital for nine LHPs after sharing the gains is as given in the Table below:

**Table 4.40 Interest on Working Capital for 9 LHPs for FY 2020-21 after sharing of Gains (Rs. Crore)**

Particulars	Actual	Normative	Efficiency gain/(loss)	Rebate in Tariff	Net Entitlement
	(A)	(B)	(C)=(B)-(A)	(D)=1/3x (C)	(E)= (A)+(C)-(D)
Interest on Working Capital	0.00	16.41	16.41	5.47	10.94

## B. Maneri Bhali-II

As discussed earlier, the Commission has approved the Capital Cost of MB-II as on CoD and considered additional capitalisation and reviewed all the components of AFC. The Interest on Working Capital calculated in accordance with UERC Tariff Regulations, 2018 is shown in the Table below:

**Table 4.41: Interest on Working Capital as approved for MB-II for FY 2020-21 (Rs. Crore)**

Particulars	Approved in ARR Order dated 18.04.2020	Claimed	Normative Approved
Interest on Working Capital	6.79	7.38	5.91

As discussed above, with regard to actual interest on working capital, the Petitioner vide its submission dated January 31, 2022 submitted the details of overdraft drawn for O&M purpose and submitted the amount of Rs. 1.15 Crore towards interest on overdraft for FY 2020-21. The Commission has, accordingly, considered the same. As the actual interest on working capital incurred by the Petitioner for FY 2020-21 is less than the normative interest on working capital, the Commission has shared the gain in interest on working capital in accordance with the provisions of UERC Tariff Regulations, 2018.

The interest on working capital for MB-II after sharing the gains for FY 2020-21 is as given in the Table below:

**Table 4.42: Interest on Working Capital for MB-II for FY 2020-21 after sharing of gains (Rs. Crore)**

Particulars	Actual	Normative	Efficiency gain/(loss)	Rebate in Tariff	Net Entitlement
Interest on Working Capital	(A)	(B)	(C)=(B)-(A)	(D)=1/3x(C)	(E)=(A)+(C)-(D)
	1.15	5.91	4.77	1.59	4.32

#### 4.1.2.9 Annual Fixed Charges for Nine LHPs for FY 2020-21

Based on the above analysis, the Commission has worked out the approved figures of Gross AFC for FY 2020-21 after truing-up. The summary of Gross AFC for FY 2020-21 is as shown in the Table below:

**Table 4.43: Summary of AFC for 9 LHPs for FY 2020-21 (Rs. Crore)**

Generating Station	Approved in ARR Order dated 18.04.2020 for FY 2020-21	AFC* Claimed	AFC Approved after truing-up of FY 2020-21					
			Depreciation	Interest on loan	Interest on Working Capital after sharing of gains	O&M expenses	RoE	Gross Annual Fixed Cost
Dhakrani	28.31	29.61	1.38	1.50	0.78	22.25	1.68	27.59
Dhalipur	38.93	35.12	1.59	1.83	0.69	19.23	2.26	25.60
Chibro	87.11	85.43	3.46	2.28	2.13	61.06	7.09	76.01
Khodri	48.14	49.63	1.96	0.82	1.20	33.82	5.23	43.02
Kulhal	21.49	24.83	1.35	1.61	0.64	17.48	1.89	22.97
Ramganga	57.81	55.49	2.13	1.42	1.38	40.06	4.26	49.26

**Table 4.43: Summary of AFC for 9 LHPs for FY 2020-21 (Rs. Crore)**

Generating Station	Approved in ARR Order dated 18.04.2020 for FY 2020-21	AFC* Claimed	AFC Approved after truing-up of FY 2020-21					
			Depreciation	Interest on loan	Interest on Working Capital after sharing of gains	O&M expenses	RoE	Gross Annual Fixed Cost
Chilla	69.20	75.40	3.35	3.28	1.90	52.31	8.70	69.54
MB-I	60.85	57.46	2.61	2.84	1.30	34.62	7.89	49.26
Khatima	43.24	46.61	8.24	8.16	0.92	18.27	7.56	43.14
<b>Total</b>	<b>455.10</b>	<b>459.57</b>	<b>26.07</b>	<b>23.73</b>	<b>10.94</b>	<b>299.09</b>	<b>46.56</b>	<b>406.39</b>

\* including sharing of gain/losses

#### 4.1.2.10 Non Tariff Income

##### A. Old Nine Large Hydro Generating Stations

Regulation 46 of the UERC Tariff Regulations, 2018 specifies as follows:

##### “46. Non Tariff Income

*The amount of non-tariff income relating to the Generation Business as approved by the Commission shall be deducted from the Annual Fixed Charges in determining the Net Annual Fixed Charges of the Generation Company.*

*Provided that the Generation Company shall submit full details of its forecast of non-tariff income to the Commission in such form as may be stipulated by the Commission from time to time.*

*The indicative list of various heads to be considered for non-tariff income shall be as under:*

- a) *Income from rent of land or buildings;*
- b) *Income from sale of scrap;*
- c) *Income from statutory investments;*
- d) *Interest on delayed or deferred payment on bills;*
- e) *Interest on advances to suppliers/contractors;*
- f) *Rental from staff quarters;*
- g) *Rental from contractors;*
- h) *Income from hire charges from contractors and others;*

- i) *Income from advertisements, etc.;*
- j) *Any other non- tariff income.*

*Provided that the interest earned from investments made out of Return on Equity corresponding to the regulated business of the Generating Company shall not be included in Non-Tariff Income."*

The Petitioner has submitted the details of actual Non-Tariff Income for 9 old large hydro generating stations as well as for MB-II LHP for FY 2020-21 in accordance with the audited accounts. The Petitioner has further submitted that Non-Tariff income for FY 2020-21 has been claimed in accordance with the following exception provided in Regulation 46 of UERC Tariff Regulations, 2018.

*"...Provided that the interest earned from investments made out of Return on Equity corresponding to the regulated business of the Generating Company shall not be included in Non-Tariff Income."*

The Commission observed that Petitioner has not considered interest on fixed deposit as a part of Non-Tariff Income stating that the interest amount is from investments out of Return on Equity for 9 LHPs and MB-II.

The Commission vide letter dated January 21, 2022 directed the Petitioner to substantiate its claim towards "other income" from fixed deposits, which has been through Return on Equity earned by the Petitioner in the prescribed format as shared by the Commission.

The Petitioner vide its reply dated January 31, 2022 submitted that the information is under compilation and will be submitted in due course of time. The Petitioner after a delay of 26 days, Vide reply dated 26.02.2022, submitted the details sought vide letter dated 21.01.2022. However, certain discrepancies were observed in the submitted information. Accordingly, the Commission again vide email dated 04.03.2022 directed the Petitioner to submit its replies on the following queries:

- *"It was observed that the numbers in the Cash Flow Statement as per the Accounts and as per the Reply dated 26.02.2022, were in variance. UJVN Ltd. was directed to submit the justification for all such variance for all the Financial years as per the prescribed format.*
- *It was observed from the submission made in Cash Flow Sheet and RoE sheet, that no RoE was approved by the Commission till 31.03.2004. However, UJVN Ltd. had FDR deposits amounting to Rs. 105.96 Crore. UJVN Ltd. was directed to justify/substantiate its claims that*

*such investment have been made from RoE and Efficiency Gains.*

- *It was observed that UJVN Ltd. has shown Rs. 86.80 Crore amount stating that the same have been allowed vide Order dated 16.12.2004 for the period FY 2001-02 to FY 2003-04. However, it was observed that the said amount was towards excess tariff recovered by UJVN Ltd. from UPCL against which the Commission had issued specific directions. In view of the same, UJVN Ltd. was directed to clarify its submissions.*
- *It was observed that the net cash and cash equivalents have reduced in FY 2004-05 and FY 2006-07 vis-à-vis previous year. However, it was observed that UJVN Ltd. has increased its FDR deposits in the said years. In this regard, the Petitioner was directed to submit as to how the same deposits can be attributed to earned RoE and Efficiency gains.*
- *From the balance sheet of FY 2001-02, it was observed that UJVN Ltd. has Opening Balance of grant of Rs. 77.51 Crore. UJVN Ltd. was directed to provide where this amount has been accounted for in the cash flow statement”.*

The Petitioner could submit the replies against it only by March 09, 2022.

In view of the delayed submissions and as the data submitted needs to be thoroughly analysed, the Commission for the purpose of this Order, due to paucity of time has not considered the submissions of the Petitioner. However, the claims of the Petitioner shall be relooked into in the next tariff filing and shall be considered if required, without any carrying cost.

For the purpose of this Order, the Commission has considered the interest earned from Fixed Deposits of Rs. 15.84 Crore for FY 2020-21 as Non-Tariff Income for FY 2020-21. The Commission has apportioned the amount of Rs. 15.84 Crore in the ratio of 85:10:5 for 9 LHPs, MB-II and SHPs, respectively, as considered by the Commission in its Tariff Order dated April 26, 2021 (As in True-up for FY 2019-20) and accordingly the Non-Tariff Income for 9 LHPs works out to Rs. 17.93 Crore, which also includes the amount of Rs. 4.47 Crore as claimed by the Petitioner for 9 LHPs.

The Non-Tariff income as approved by the Commission for FY 2020-21 is shown in the Table below:

**Table 4.44: Non-Tariff Income for 9 LHPs for FY 2020-21 (Rs. Crore)**

Generating Station	Approved in ARR Order dated 18.04.2020 for FY 2020-21	Claimed	Approved now after true-up for FY 2020-21
Dhakrani	0.39	0.42	0.90

**Table 4.44: Non-Tariff Income for 9 LHPs for FY 2020-21 (Rs. Crore)**

Generating Station	Approved in ARR Order dated 18.04.2020 for FY 2020-21	Claimed	Approved now after truing-up for FY 2020-21
Dhalipur	0.50	0.85	1.58
Chibro	1.18	1.11	4.52
Khodri	0.69	0.47	2.18
Kulhal	0.30	0.12	0.55
Ramganga	1.01	0.37	3.18
Chilla	0.54	0.70	2.74
MB-I	0.38	0.32	1.60
Khatima	0.37	0.10	0.69
<b>Total</b>	<b>5.34</b>	<b>4.47</b>	<b>17.93</b>

**B. MB-II**

In case of MB-II, the Non-Tariff Income approved vide Order dated April 18, 2020 for FY 2020-21 was Rs. 0.92 Crore, and the Petitioner has now claimed Rs. 0.73 Crore.

As held for 9 LHPs, the Commission has considered the Non-Tariff Income as Rs. 2.31 Crore after including the apportionment of Interest on FDs for MB-II as discussed above and Rs. 0.73 Crore as claimed by the Petitioner.

**4.1.2.11 Truing-up for Nine LHPs for FY 2020-21 and its net impact on UPCL**

The Commission has trued up the (Surplus)/Gap for 9 LHPs pertaining to FY 2020-21 to be recovered by UJVN Ltd. from UPCL and HPSEB. Based on the above, the total amount recoverable by UJVN Ltd. from UPCL and HPSEB excluding the carrying cost is as summarized in the Table below:

**Table 4.45: Summary of net AFC as Trued Up by the Commission for 9 LHPs for FY 2020-21 to be recovered from UPCL (Rs. Crore)**

Generating Stations	Approved Net AFC in ARR Order dated 18.04.2020 for FY 2020-21	Total Net AFC to be recovered
Dhakrani	20.85	19.80
Dhalipur	28.70	17.63
Chibro	64.16	52.48
Khodri	35.42	30.09
Kulhal	16.89	17.83
Ramganga	56.80	46.07
Chilla	68.66	66.80
MB-I	60.48	47.66
Khatima	42.87	42.46
<b>Total</b>	<b>394.83</b>	<b>340.81</b>

The summary of truing-up for FY 2020-21 for UPCL after considering the actual performance parameters achieved in FY 2020-21 is shown in the Table below:

**Table 4.46: Summary of net truing-up for 9 LHPs for FY 2020-21 for UPCL (Rs. Crore)**

Generating Station	Net AFC to be recovered from UPCL (Rs. Crore)	Capacity Charges (Rs. Crore)	NAPAF (%)	Actual / Re-stated PAFY (%)	Capacity charges allowable (Rs. Crore)	Capacity charges after sharing	Actual Billed Energy (MU)	Per Unit rate approved (Rs./kWh)	Allowable EC (Rs. Crore)	Secondary energy (MU)	Sec Energy Rate (Rs./kWh)	Total Sec. Energy charges (Rs. Crore)	Total allowable (EC+CC) (Rs. Crore)	Total Billed to UPCL	Truing-up-impact Gap/(Surplus)
Dhakrani	19.80	9.90	66.17%	67.27%	10.06	10.01	108.81	0.881	9.59	0.00	0.787	0.00	19.60	20.71	(1.11)
Dhalipur	17.63	8.81	61.07%	60.00%	8.66	8.71	131.04	0.647	8.48	0.00	0.616	0.00	17.19	26.59	(9.40)
Chibro	52.48	26.24	65.06%	64.77%	26.13	26.17	619.92	0.472	26.24	64.17	0.472	3.03	55.44	67.86	(12.42)
Khodri	30.09	15.04	57.23%	57.75%	15.18	15.14	275.69	0.587	15.04	19.53	0.587	1.15	31.33	36.98	(5.65)
Kulhal	17.83	8.91	65.00%	67.20%	9.21	9.11	104.13	0.753	7.85	0.00	0.684	0.00	16.96	16.17	0.79
Ramganga	46.07	23.04	19.00%	16.21%	19.65	20.78	261.79	0.746	19.53	0.00	0.603	0.00	40.31	48.04	(7.73)
Chilla	66.80	33.40	74.00%	64.38%	29.06	30.50	731.61	0.503	33.40	13.86	0.465	0.64	64.55	65.18	(0.63)
MB-I	47.66	23.83	79.00%	67.89%	20.48	21.60	327.25	0.655	21.43	0.00	0.440	0.00	43.03	45.14	(2.11)
Khatima	42.46	21.23	69.30%	67.00%	20.52	20.76	214.51	0.910	19.52	0.00	0.900	0.00	40.28	40.50	(0.21)
<b>Total</b>	<b>340.81</b>	<b>170.41</b>			<b>158.95</b>	<b>162.77</b>	<b>2774.75</b>		<b>161.09</b>	<b>97.56</b>		<b>4.82</b>	<b>328.68</b>	<b>367.17</b>	<b>(38.49)</b>

Thus, for 9 LHPs, the Commission has computed the net surplus of Rs. 38.49 Crore for FY 2020-21 after sharing of gains and losses and considering the actual performance parameters.

Accordingly, the Commission has trued up the (Surplus)/Gap for 9 LHPs pertaining to FY 2020-21 to be refunded/recovered by UJVN Ltd. to/from UPCL. Based on the above, the total amount to be refunded by UJVN Ltd. to UPCL along with the carrying cost is as summarized in the Table below:

**Table 4.47: Summary of net AFC as Trued Up by the Commission for 9 LHPs to be refunded to UPCL (Rs. Crore)**

Particulars	FY 2020-21	FY 2021-22
Opening Balance Gap/(Surplus)		(40.83)
True Up Amount Gap/(Surplus)	(38.49)	
Carrying Cost	(2.35)	(4.98)
Closing Balance Gap/(Surplus)	(40.83)	(45.81)
Interest Rate	12.20%	12.20%

The Commission directs UJVN Ltd. to refund Rs. 45.81 Crore to UPCL in accordance with the provisions of UERC Tariff Regulations, 2018 in twelve equal monthly instalments starting from April 2022 to March 2023.

**4.1.2.12 Truing up of 5 LHPs of UJVN Ltd. for FY 2020-21 for HPSEB**

The Commission has determined the Plant-wise total truing-up expenses to be recovered from HPSEB as follows:

**Table 4.48: Summary of net AFC as Trued up for FY 2020-21 by the Commission for 9 LHPs to be recovered from HPSEB (Rs. Crore)**

Generating Stations	Approved Net AFC in ARR Order dated 18.04.2020 for FY 2020-21	Total AFC to be recovered
Dhakrani	7.08	6.90
Dhalipur	9.73	6.40
Chibro	21.78	19.00
Khodri	12.04	10.76
Kulhal	4.30	4.59
Ramganga	-	-
Chilla	-	-
MB-I	-	-
Khatima	-	-
<b>Total</b>	<b>54.92</b>	<b>47.65</b>

Based on the above, the total amount to be refunded by UJVN Ltd. to HPSEB along with carrying cost is as summarised in the Table below:

**Table 4.49: Summary of net AFC as Trued Up by the Commission to be refunded to HPSEB (Rs. Crore)**

Particulars	FY 2020-21	FY 2021-22
Opening Balance	-	(7.72)
True Up Amount Gap/(Surplus)	(7.27)	-
Carrying Cost	(0.44)	(0.94)
Closing Balance Gap/(Surplus)	(7.72)	(8.66)
Interest Rate	12.20%	12.20%

The Commission directs UJVN Ltd. to refund Rs. 8.66 Crore to HPSEB on the basis of actual PAFY and energy billed in accordance with the provisions of UERC Tariff Regulations, 2018 in twelve equal monthly instalments starting from April, 2022 to March, 2023.

**4.1.2.13 Net Annual Fixed Charges for MB-II from FY 2020-21**

Based on the approved capital cost of MB-II, the approved additional capitalisation and O&M expenses in accordance with MYT Regulations 2018, the net truing-up of AFC for FY 2020-21 is as shown in the Table below:



**Table 4.50: Summary of truing up of Net AFC of MB-II for FY 2020-21 (Rs. Crore)**

Particulars	Approved in ARR Order dated 18.04.2020 for FY 2020-21	Claimed*	Approved now after truing-up
Depreciation	46.38	67.56	46.21
Interest on loan	53.76	57.13	55.54
Interest on Working Capital	6.79	7.38	4.32
O&M expenses	58.51	58.75	56.78
RoE	50.89	54.80	50.74
Total Annual Fixed Costs	<b>216.33</b>	<b>245.62</b>	<b>213.59</b>
NTI	0.92	0.73	2.31
<b>Net AFC</b>	<b>215.41</b>	<b>244.89</b>	<b>211.28</b>

\* including sharing of gain/losses

#### 4.1.2.14 Net impact on account of Truing up of FY 2020-21 of MB-II

The summary of truing-up of MB-II after considering the actual performance parameter achieved in FY 2020-21 is as shown in the Table below:

**Table 4.51: Net impact on account of truing up of FY 2020-21 for MB-II**

AFC to be recovered from UPCL (Rs Crore)	Capacity Charges (Rs Crore)	NAPAF (%)	Actual/ Re-stated PAFY (%)	Capacity charges allowable (Rs Crore)	Capacity charges after sharing	Actual Energy Considered (MU)	Actual Billed Energy (MU)	Allowable EC (Rs Crore)	Total allowable (EC+CC) (Rs Crore)	Total recovered from UPCL	Truing up impact Gap/(Surplus)
211.28	105.64	76.00%	66.51%	92.45	96.85	1278.09	1294.12	105.64	202.49	202.13	0.36

#### 4.1.2.15 Excess Tariff Recovered on De-Capitalised Assets and Adjustment of Insurance Proceeds

As discussed earlier, the Petitioner's assets with historical value of Rs. 14.74 Crore got damaged beyond repair during the natural calamity in FY 2013-14 and were put out of service from FY 2013-14. The Petitioner, however, did not de-capitalise the assets due to which such assets continued to be serviced through tariff and due to which the Petitioner has recovered tariff on de-cap assets since then. The Petitioner has de-capitalised the assets in FY 2020-21 only when it received insurance proceeds amounting to Rs. 14.577 Crore.

The Commission in order to compute the excess tariff recovered on the de-cap assets have carried worked out the impact considering the previous workings and the actual PAFY achieved during the respective years. The year wise impact allowed to the Petitioner on account of the same is shown in the Table below.

**Table 4.52: Year Wise Impact on Decap Asset allowed by the Commission for MB-II (Rs. Crore)**

Financial Year	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	Total
Impact Allowed	1.04	1.19	1.32	1.15	1.09	1.08	0.69	7.54

As ruled earlier, the Commission is not recovering the above amount along with carrying cost and therefore has added this as surplus accrued in FY 2020-21.

With regard to insurance proceeds, the Commission has adjusted the loss suffered by UJVN Ltd. on account of de-capitalisation of assets i.e. Rs. 7.35 Crore [(Loss on Retirement of Assets = Depreciable value of decapitalised assets (90%\* Rs. 14.74 Crore) – Cumulative Depreciation on assets charged (Rs. 5.92 Crore)] from the insurance proceeds of Rs. 14.58 Crore. The adjustment of loss has been carried out as the de-capitalisation of assets has been on account of Force Majeure conditions.

The balance amount after adjusting for loss is Rs. 7.23 Crore (Rs. 14.58 less Rs. 7.35 Crore).

Impact of insurance proceeds i.e. Rs. 7.23 Crore and the excess tariff recovered on the De-cap asset in previous years i.e. Rs. 7.54 Crore are to be recovered from UJVN Ltd. by UPCL, accordingly Rs. 14.77 Crore (Surplus) has been added to the net Gap of Rs. 0.36 Crore computed for FY 2020-21.

#### **4.1.2.16 Summary of Net Impact on Account of truing-up of FY 2020-21 of MB-II including Carrying Cost**

The Commission has trued up the (Surplus)/Gap for MB-II pertaining to FY 2020-21 to be refunded/recovered by UJVN Ltd. to/from UPCL. Based on the above, the total amount to be refunded to UPCL along with the carrying cost is summarized in the Table below:

**Table 4.53: Summary of net amount Trued Up by the Commission for FY 2020-21 to be refunded from UPCL for MB-II (Rs. Crore)**

Particulars	FY 2020-21	FY 2021-22
Opening (Surplus)/Gap	0.00	(15.30)
True Up Amount	(14.42)	0.00
Carrying Cost	(0.88)	(1.87)
Closing (Surplus)/Gap	(15.30)	(17.16)
Interest Rate	12.20%	12.20%

The Commission directs UJVN Ltd. to refund Rs. 17.16 Crore on account of truing-up of MB-II for FY 2020-21 to UPCL in accordance with the provisions of UERC Tariff Regulations, 2018 in twelve equal monthly instalments starting from April, 2022 to March, 2023.

## **5 Petitioner's Submissions, Commission's Analysis, Scrutiny & Conclusion on APR for FY 2021-22 and MYT for the Fourth Control Period from FY 2022-23 to FY 2024-25**

### **5.1 Annual Performance Review**

The Commission vide its Order dated February 27, 2019 had approved the Multi Year Tariff for the Petitioner for the Third Control Period from FY 2019-20 to FY 2021-22. Further, the Commission vide its Order dated April 26, 2021, approved the Tariff for FY 2021-22. Regulation 12(3) of the UERC Tariff Regulations, 2018 specifies that under the MYT framework, the performance of the generating company shall be subject to Annual Performance Review.

Regulation 12(3) of the UERC Tariff Regulations, 2018 specifies as under:

*"The scope of Annual Performance Review shall be a comparison of the actual performance of the Applicant with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise of following:*

- a) A comparison of the audited performance of the applicant for the previous financial year with the approved forecast for such previous financial year and truing up of expenses and revenue subject to prudence check including pass through of impact of uncontrollable factors;*
- b) Categorization of variations in performance with reference to approved forecast into factors within the control of the applicant (controllable factors) and those caused by factors beyond the control of the applicant (un-controllable factors);*
- c) Revision of estimates for the current and/ or ensuing financial year, if required, based on audited financial results for the previous financial year;*
- d) Computation of sharing of gains and losses on account of controllable factors for the previous year."*

The Commission vide its Order dated February 27, 2019, on approval of Business Plan and MYT Petition for the Third Control Period from FY 2019-20 to FY 2021-22 approved the AFC for the Control Period based on the audited accounts till FY 2017-18. Further, the Commission vide its Order dated April 26, 2021, approved AFC for FY 2021-22 based on the Audited accounts till FY 2019-20. The Petitioner, in this Petition, has proposed revision of estimates for FY 2022-23 based on the audited

accounts for FY 2020-21 and revised estimates for FY 2021-22.

The Commission, in Chapter 4 of this Order, has carried out the Truing-up of 9 LHPs and MB-II for FY 2020-21 in accordance with the UERC Tariff Regulations, 2018. In accordance with Regulation 12(3) of the UERC Tariff Regulations, 2018, the scope of Annual Performance Review is limited to the revision of estimates for the current and /or ensuing financial year, if required, based on the audited financial results for the previous year.

The Commission shall carry out the Truing-up of FY 2021-22 based on the audited accounts for that year and give effect on this account in the AFC of FY 2023-24.

The Commission, as discussed in Chapter 4, has Trued Up the expenses for FY 2020-21 for 9 LHPs and MB-II. The approach adopted by the Commission for approval of each element of Fourth MYT Control Period from FY 2022-23 to FY 2024- 25 is elaborated in the subsequent paragraphs.

## 5.2 Physical Parameters

### 5.2.1 NAPAF

The Commission, in the approval of Business Plan for the Fourth Control Period from FY 2022-23 to FY 2024-25 as discussed in Chapter 3 of the Order, has already taken a view on the NAPAF for the large hydro generating stations. The Commission has accordingly approved the NAPAF for the generating stations for Fourth Control Period as follows:

**Table 5.1: NAPAF as approved by the Commission for 10 LHPs for the Fourth Control Period from FY 2022-23 to FY 2024-25**

Station	Approved vide Order dated 26.04.2021 (%) for FY 2021-22	Proposed by UJVN Ltd. (%)			Approved (%)		
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2022-23	FY 2023-24	FY 2024-25
Dhakrani	66.17	67.31	62.24	63.92	66.17	66.17	66.17
Dhalipur	61.07	58.52	60.12	60.21	61.07	61.07	61.07
Chibro	65.06	65.89	66.08	65.88	65.06	65.06	65.06
Khodri	57.23	58.49	58.62	58.49	57.23	57.23	57.23
Kulhal	65.00	71.56	71.54	70.54	65.00	65.00	65.00
Ramganga	19.00	13.19	12.76	13.02	16.00	16.00	16.00
Chilla	74.00	59.67	57.07	50.89	74.00	74.00	74.00
MB - I	79.00	79.17	79.17	79.17	79.00	79.00	79.00
Khatima	69.30	67.85	68.55	67.75	69.30	69.30	69.30
MB-II	76.00	69.46	69.46	69.46	76.00	76.00	76.00

## 5.2.2 Design Energy and Saleable Primary Energy

### A. Old Nine Large Generating Station

As discussed in detail in Chapter 3 and for reasons spelt out therein, the Commission accordingly approves the design energy of 10 LHPs for the Fourth Control Period. The Saleable Primary Energy for Fourth Control Period has been derived by deducting the Normative Auxiliary Energy Consumption from the considered Design Energy in accordance with UERC Tariff Regulations, 2021 for the purpose of calculation of Energy Change Rate.

The Commission accordingly approves the Design Energy and Saleable Primary Energy as shown in the Table below:

**Table 5.2: Original Design Energy, Design Energy and Saleable Primary Energy for 9 LHPs for Fourth Control Period from FY 2022-23 to FY 2024-25 as approved by the Commission**

Name of the Generating Station	Original Design Energy	Design Energy	Auxiliary Consumption including Transformation Loss		Saleable Primary Energy
	MU	MU	%	MU	MU
Dhakrani	169.00	150.85	0.70%	1.06	149.79
Dhalipur	192.00	182.76	0.70%	1.28	181.48
Chibro	750.00	728.11	1.20%	8.74	719.37
Khodri	345.00	335.37	1.00%	3.35	332.02
Kulhal	164.00	148.91	0.70%	1.04	147.87
Ramganga	385.00	311.00	1.00%	3.11	307.89
Chila	725.00	557.62	1.00%	5.58	552.04
MB-I	546.00	478.00#	1.00%	4.78	473.22
Khatima	208.00	235.59	1.00%	2.36	233.23
<b>Total</b>	<b>3484.00</b>	<b>3128.21</b>		<b>31.30</b>	<b>3096.91</b>

# Provisional Design Energy

Recognising the fact, that most of the 9 LHPs are old and have run for 32 to 60 years, the Commission has not considered the Original Design Energy for calculation of energy charge rate (ECR) as it would result in under-recovery of the AFC of the Petitioner. The Commission has, accordingly, relaxed the requirement of the UERC Tariff Regulations, 2021 for calculation of ECR. The ECR will be calculated based on the approved Saleable Primary Energy as already discussed in Chapter 3 of this Order.

With respect to the benefit of excess generation over and above the Original Design Energy, i.e. the Secondary Energy, the rate of Secondary Energy shall be based on the Original Design Energy and not on the basis of Design Energy considered by the Commission for recovery of Energy Charges.

Further, in case such energy charge rate is higher than 90 paise/kWh, the rate of Secondary Energy shall be considered as 90 paise/kWh in accordance with Regulation 50 (7) of the UERC Tariff Regulations, 2021.

Further, recovery from Energy Charges shall in no case exceed 50% of the Annual Fixed Cost up to the Original Design Energy. However, the Commission as discussed in Chapter 3 of this Order shall revisit the Design Energy once the RMU works get completed and actual impact/loss of generation by **maintaining separate discharge data of rivers as well as the data of mandatory discharges being released in compliance to NGT/NMCG Order and any other data to substantiate the impact and thereafter appropriate view will be taken by the Commission in this regard after carrying out due prudence check on case to case basis in case of any severe impact in the actual generation.**

#### **B. Maneri Bhali-II**

With regard to the Design Energy and Saleable Primary Energy, UJVN Ltd. in its Petition has claimed the Design Energy of 1291 MUs for Fourth Control Period from FY 2022-23 to FY 2024-25 after considering the impact of the NGT Order dated 09.07.2017 which states that all rivers in the Country shall maintain a minimum of 15% to 20% of the average lean season flow of the river.

The Commission has gone through the submission of the Petitioner and as detailed in Chapter 3 of this Order, the Commission as of now has not considered the impact of the NGT Order and hence approves the Design Energy as 1291 MU of the station and Saleable Primary Energy after deducting the normative auxiliary consumption (including transformation losses) of 1% as 1278.09 MU.

### **5.3 Financial Parameters**

#### **5.3.1 Apportionment of Common Expenses**

As discussed in detail in Chapter 4 of this Order, the Commission has considered the ratio of 85:10:5 for allocating common expenses on 9 LHPs, MB-II and SHPs, respectively, as considered in the earlier Tariff Order dated April 26, 2021.

#### **5.3.2 Capital Cost**

##### **A. Old Nine Generating Stations**

As detailed earlier in truing-up Section, pending finalization of the Transfer Scheme, for

various reasons recorded in the previous Tariff Orders, the Commission had been approving opening GFA for the nine old LHPs as on 14.01.2000, as Rs. 506.17 Crore.

Since, the Transfer Scheme is yet to be finalized, the Commission for the purpose of tariff determination for the Fourth Control Period from FY 2022-23 to FY 2024-25 is considering the opening GFA of nine old LHPs, as on 14.01.2000, as Rs. 506.17 Crore only.

Further, as discussed in Chapter 4 of this Order, the Commission has revised the original cost of Khatima LHP as on 01.04.2015 on account of de-capitalisation of Rs. 2.03 Crore carried out in FY 2014-15. The GFA considered are as per the details given below:

**Table 5.3: Approved Original Cost inherited from UPJVNL for 9 LHPs (Rs. Crore)**

Generating Station	Claimed	Approved as on 14.01.2000	Approved as on 01.04.2016
Dhakrani	12.40	12.40	12.40
Dhalipur	20.37	20.37	20.37
Chibro	87.89	87.89	87.89
Khodri	73.97	73.97	73.97
Kulhal	17.51	17.51	17.51
Ramganga	50.02	50.02	50.02
Chilla	124.89	124.89	124.89
MB-I*	111.93	111.93	111.93
Khatima	7.19	7.19	5.16**
<b>Total</b>	<b>506.17</b>	<b>506.17</b>	<b>504.14</b>

\*Including DRB

\*\*Including de-capitalisation of Rs. 2.03 Crore in FY 2014-15

## B. Maneri Bhali-II

The issues related to Capital Cost of MB-II generating station as on COD have been discussed in detail in Chapter 4. Based on the above, the Commission has considered the capital cost as on CoD of Rs. 1885.50 Crore in accordance with the Order dated April 26, 2021. The financing for the project has been considered as shown in the Table below:

**Table 5.4: Approved Capital Cost and Financing for MB-II as on CoD (Rs. Crore)**

Particulars	Approved in ARR Order dated 26.04.2021	Approved Now
<b>Loans</b>		
PFC Loan	1200.00	1200.00
Unpaid Liability	0.00	0.00
Guarantee Fee Payable	0.00	0.00
Normative Loan	119.85	119.85
<b>Total debts</b>	<b>1319.85</b>	<b>1319.85</b>
<b>Equity</b>		
PDF	326.76	326.76
GoU Budgetary support	74.89	74.89

**Table 5.4: Approved Capital Cost and Financing for MB-II as on CoD (Rs. Crore)**

Particulars	Approved in ARR Order dated 26.04.2021	Approved Now
Pre-2002 expense	164.00	164.00
<b>Total Equity</b>	<b>565.65</b>	<b>565.65</b>
<b>Total Loan and Equity</b>	<b>1885.50</b>	<b>1885.50</b>

### 5.3.3 Additional Capitalisation

#### A. Old Nine Generating Stations

The Commission in addition to the opening GFA of Rs. 506.17 Crore as on 14.01.2000, has also approved additional capitalisation of Rs. 687.74 Crore from FY 2001-02 to FY 2020-21 as discussed in Chapter 4 of this Order.

With regard to additional capitalisation for FY 2021-22, the Commission directed the Petitioner to submit the details of additional capitalisation for FY 2021-22. The Petitioner submitted the actual additional capitalisation from April to September, 2021 in its submission dated November 30, 2021 and proposed capitalization from October to March, 2022, in its submission dated February 26, 2022. The details of same are as below:

**Table 5.5: Details of additional capitalization proposed during FY 2021-22 for 9 LHPs (Rs. in Crore)**

Stations	April-Sept 2021	Oct-March 2022	Total for FY 2021-22
Dhakrani	0.13	2.45	2.58
Dhalipur	0.09	36.90	36.99
Chibro	3.37	34.19	37.57
Khodri	0.79	5.23	6.01
Kulhal	0.34	9.21	9.55
Ramganga	0.17	9.22	9.39
Chilla	0.18	13.75	13.93
MB-I	0.38	67.87	68.25
Khatima	0.36	0.31	0.67
<b>Total</b>	<b>5.81</b>	<b>179.12</b>	<b>184.92</b>

The Commission has gone through the submissions of the Petitioner and has provisionally considered Rs. 184.92 Crore as additional capitalisation submitted by the Petitioner for FY 2021-22. The same shall however be subject to detailed scrutiny during the truing up of FY 2021-22 and shall be finally allowed after carrying out due prudence check of actual expenditure incurred. The Commission has, accordingly, considered the opening GFA for the Fourth Control Period as shown in the Table below:



**Table 5.6: Opening GFA as considered by the Commission for 9 LHPs for Fourth Control Period (Rs. Crore)**

Generating Station	Opening GFA as on 01.04.2021 (2021-22)	Additions during FY 2021-22	Opening GFA as on 01.04.2022
Dhakrani	48.87	2.58	51.45
Dhalipur	65.41	36.98	102.39
Chibro	167.51	37.56	205.07
Khodri	117.74	6.02	123.76
Kulhal	55.34	9.54	64.88
Ramganga	87.58	9.39	96.97
Chilla	220.72	13.93	234.65
MB-I	260.66	68.24	328.90
Khatima	170.07	0.67	170.74
<b>Total</b>	<b>1193.91</b>	<b>184.92</b>	<b>1378.82</b>

The Petitioner in its reply dated 25.02.2022 submitted revised capitalization claim against RMU works. The Plant wise revised additional capitalisation for FY 2022-23 to FY 2024-25 as claimed by the Petitioner is shown in the Table below:

**Table 5.7: Additional Capitalization proposed by UJVN Ltd. for the Fourth Control Period for 9 LHPs (Rs. Crore)**

Name of the Generating Station	FY 2022-23				FY 2023-24				FY 2024-25			
	General	DRIP	RMU	Total	General	DRIP	RMU	Total	General	DRIP	RMU	Total
Dhakrani	12.90	3.92	0.00	<b>16.82</b>	3.56	8.12	0.00	<b>11.68</b>	0.75	6.51	30.24*	<b>37.50</b>
Dhalipur	12.51	5.93	36.50*	<b>54.94</b>	1.50	4.96	42.80*	<b>49.26</b>	1.13	9.83	0.00	<b>10.96</b>
Chibro	30.46	4.35	0.00	<b>34.81</b>	12.56	11.71	0.00	<b>24.27</b>	4.10	4.73	0.00	<b>8.83</b>
Khodri	20.83	2.18	0.00	<b>23.01</b>	3.23	5.86	0.00	<b>9.09</b>	3.93	2.37	0.00	<b>6.30</b>
Kulhal	10.22	5.60	0.00	<b>15.82</b>	6.66	10.70	0.00	<b>17.36</b>	5.00	2.62	0.00	<b>7.62</b>
Ramganga	8.09	0.00	0.00	<b>8.09</b>	20.87	0.00	0.00	<b>20.87</b>	18.37	0.00	0.00	<b>18.37</b>
Chilla	35.45	32.63	0.00	<b>68.08</b>	16.33	30.24	86.00*	<b>132.57</b>	8.45	0.00	75.00*	<b>83.45</b>
MB-I	18.73	4.74	69.72*	<b>93.19</b>	21.55	9.32	0.00	<b>30.87</b>	11.75	77.59	0.00	<b>89.34</b>
Khatima	35.34	0.00	0.00	<b>35.34</b>	64.84	0.00	0.00	<b>64.84</b>	16.00	0.00	0.00	<b>16.00</b>
<b>Sub-Total</b>	<b>184.53</b>	<b>59.35</b>	<b>106.22</b>	<b>350.10</b>	<b>151.10</b>	<b>80.91</b>	<b>128.80</b>	<b>360.81</b>	<b>69.48</b>	<b>103.65</b>	<b>105.24</b>	<b>278.37</b>

\*As per revised capitalization claim against RMU works vide Petitioner's submission dated 25.02.2022

The Commission with regard to the additional capitalisation projected for FY 2022-23 to FY 2024-25, has considered the additional capitalisation as approved in Chapter 3 of this Order, i.e. the Commission has provisionally considered the additional capitalisation projected against RMU and DRIP schemes only. For works to be carried out under general works that do not fall either under RMU or DRIP, the Petitioner has been directed to seek specific approval under Regulation 22(4) of

UERC Tariff Regulations, 2021.

The provisionally approved additional capital expenses shall be subject to detailed scrutiny during Annual Performance Review/True Up and shall be finally allowed after carrying out due prudence check based on the approval of the Commission and actual expenditure incurred.

The Commission, accordingly, approves the following additional capitalisation for the Fourth Control Period as follows.

**Table 5.8: Additional Capitalization Approved by the Commission for 9 LHPs for the Fourth Control Period (Rs. Crore)**

Name of the Generating Station	FY 2022-23		FY 2023-24		FY 2024-25	
	DRIP	RMU	DRIP	RMU	DRIP	RMU
Dhakrani	3.92	0.00	8.12	0.00	6.51	30.24
Dhalipur	5.93	36.50	4.96	42.80	9.83	0.00
Chibro	4.35	0.00	11.71	0.00	4.73	0.00
Khodri	2.18	0.00	5.86	0.00	2.37	0.00
Kulhal	5.60	0.00	10.70	0.00	2.62	0.00
Ramganga	0.00	0.00	0.00	0.00	0.00	0.00
Chilla	32.63	0.00	30.24	86.00	0.00	75.00
MB-I	4.74	69.72	9.32	0.00	77.59	0.00
Khatima	0.00	0.00	0.00	0.00	0.00	0.00
Sub-Total	<b>59.35</b>	<b>106.22</b>	<b>80.91</b>	<b>128.80</b>	<b>103.65</b>	<b>105.24</b>
<b>Total</b>	<b>165.57</b>		<b>209.71</b>		<b>208.89</b>	

## B. Maneri Bhali-II

The Commission, as discussed earlier in Chapter 4 of this Order has decided to consider additional capitalisation since COD and has approved additional capitalisation of Rs. 370.34 Crore till 31.03.2021.

With regard to FY 2021-22, the Petitioner submitted the actual additional capitalisation from April to September, 2021, i.e. Rs. 0.966 Crore as per submission dated November 30, 2021 and proposed capitalization from October to March, 2022, i.e. Rs. 18.79 Crore as per submission dated February 26, 2022. The Commission has gone through the submissions of the Petitioner and has provisionally considered Rs. 19.78 Crore as additional capitalisation submitted by the Petitioner for FY 2021-22. The same shall be subject to detailed scrutiny during the truing up of FY 2021-22 and shall be finally allowed after carrying out due prudence check of actual expenditure incurred.

**Table 5.9: Opening GFA approved by the Commission for MB-II for FY 2022-23 (Rs. Crore)**

Generating Station	Opening GFA as on 01.04.2021	Additions during FY 2021-22	Opening GFA as on 01.04.2022
MB-II	2255.84	19.78	2275.62

The Commission with regard to the additional capitalisation projected for FY 2022-23 to FY 2024-25, has considered the additional capitalisation as approved in Chapter 3 of this Order, i.e. the Commission has provisionally considered the additional capitalisation projected against RMU and DRIP schemes only. For works to be carried out under general works that do not fall either under RMU or DRIP, the Petitioner has been directed to seek specific approval under Regulation 22(4) of UERC Tariff Regulations, 2021.

The provisionally approved additional capital expenses as shown in the below Table shall be subject to detailed scrutiny during Annual Performance Review/True Up and capex shall be finally allowed after carrying out due prudence check based on the approval of the Commission and actual expenditure incurred.

**Table 5.10: Additional Capitalization approved for Fourth Control Period for MB-II Station**

Generating Station	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
MB-II	52.15	19.55	47.98	21.06	79.88	50.84

#### 5.3.4 Depreciation

##### A. Old Nine Generating Stations

Regulation 28 of the UERC Tariff Regulations, 2021 specifies as follows:

##### *"28. Depreciation*

- (1) *The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.*

*Provided that depreciation shall not be allowed on assets funded through Consumer Contribution and Capital Subsidies/Grants.*

- (2) *The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.*

...

- (4) *Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix - II to these Regulations.*

..."

The Petitioner submitted that no depreciation has been claimed on the opening GFA determined for the transfer of assets, since the asset is already 90% depreciated. The depreciation has only been claimed for additional expenditure capitalized post the transfer scheme. Accordingly, the depreciation is calculated by the Petitioner for the Fourth Control Period.

The Commission in accordance with Regulation 28 of UERC Tariff Regulations, 2021 has computed the depreciation for the Fourth Control Period as detailed below:

- (i) **Depreciation on Opening GFA as on 14.01.2000:** All the 9 LHPs are over 12 years old and all of them have already depreciated by 90% of the original cost, hence, no depreciation would be applicable for the Fourth Control Period on opening GFA as on 14.01.2000 for the 9 LHPs.
- (ii) **Depreciation on additional capitalisation:** In accordance with the UERC Tariff Regulations, 2021, the Commission has computed the balance depreciable value for assets added in each year after January 2000 by deducting the cumulative depreciation as admitted by the Commission up to 31.03.2022 from the gross depreciable value of the assets. The Commission further computed the difference between the cumulative depreciation as on 31.03.2022 and the depreciation so arrived at by applying the depreciation rates as specified in the UERC Tariff Regulations, 2021 corresponding to 12 years. The Commission has spread over the above difference in the remaining period up to 12 years of such asset addition. Further, in case where the asset life has exceeded 12 years from the year of addition, the remaining depreciable value as on March 31 of the year closing has been spread over the balance useful life.

In line with the above approach, the Commission has computed the depreciation for 9 LHPs for the Fourth Control Period, i.e. FY 2022-23 to FY 2024-25.

The depreciation expenses will be Trued Up in accordance with the provisions of UERC Tariff Regulations, 2021 once the final Truing-up for all the years prior to the Fourth Control Period is carried out.

The summary of Depreciation Charges for FY 2022-23 to FY 2024-25 as approved by the Commission is shown in the Table below:

**Table 5.11: Depreciation Charges as approved by the Commission for 9 LHPs for Fourth Control Period (Rs. Crore)**

Name of the Generating Stations	FY 2022-23				FY 2023-24				FY 2024-25			
	Claimed	Approved			Claimed	Approved			Claimed	Approved		
		On Opening GFA	On Additional Capitalization	Total		On Opening GFA	On Additional Capitalization	Total		On Opening GFA	On Additional Capitalization	Total
Dhakrani	4.36	0.00	1.82	<b>1.82</b>	6.73	0.00	1.99	<b>1.99</b>	8.91	0.00	2.37	<b>2.37</b>
Dhalipur	4.36	0.00	3.78	<b>3.78</b>	6.73	0.00	5.85	<b>5.85</b>	8.91	0.00	8.14	<b>8.14</b>
Chibro	6.27	0.00	6.01	<b>6.01</b>	8.03	0.00	6.17	<b>6.17</b>	9.20	0.00	6.66	<b>6.66</b>
Khodri	2.63	0.00	2.33	<b>2.33</b>	3.70	0.00	2.36	<b>2.36</b>	4.18	0.00	2.63	<b>2.63</b>
Kulhal	2.43	0.00	2.18	<b>2.18</b>	3.20	0.00	2.43	<b>2.43</b>	4.10	0.00	2.94	<b>2.94</b>
Ramganga	3.97	0.00	2.61	<b>2.61</b>	4.37	0.00	2.59	<b>2.59</b>	5.46	0.00	2.56	<b>2.56</b>
Chilla	4.97	0.00	4.93	<b>4.93</b>	8.79	0.00	6.41	<b>6.41</b>	13.12	0.00	11.98	<b>11.98</b>
MB-I	11.99	0.00	10.21	<b>10.21</b>	15.85	0.00	13.48	<b>13.48</b>	17.04	0.00	13.70	<b>13.70</b>
Khatima	8.86	0.00	8.48	<b>8.48</b>	10.67	0.00	8.47	<b>8.47</b>	14.01	0.00	8.47	<b>8.47</b>
<b>Total</b>	<b>49.83</b>	<b>0.00</b>	<b>42.36</b>	<b>42.36</b>	<b>68.08</b>	<b>0.00</b>	<b>49.75</b>	<b>49.75</b>	<b>84.95</b>	<b>0.00</b>	<b>59.46</b>	<b>59.46</b>

## B. Maneri Bhali-II

The Commission has computed depreciation for Fourth Control Period for MB-II in accordance with the UERC Tariff Regulations, 2021.

As MB-II has completed 12 years from CoD in FY 2019-20, the balance depreciable value of the capital cost as on COD has been spread equally throughout the balance useful life of the assets.

With regard to additional capitalisation post commissioning, the Commission in accordance with the UERC Tariff Regulations, 2021, has computed the balance depreciable value for assets added in each year by deducting the cumulative depreciation as admitted by the Commission up to 31.03.2022 from the gross depreciable value of the assets. The Commission further computed the difference between the cumulative depreciation as on 31.03.2022 and the depreciation so arrived at by applying the depreciation rates as specified in the UERC Tariff Regulations, 2021 corresponding to 12 years. The Commission has spread over the above difference in the remaining period up to 12 years of such asset addition. Further, in case where the asset life has exceeded 12 years from the year of addition, the remaining depreciable value as on March 31 of the year closing has been spread over

the balance useful life.

In line with the above approach, the Commission has computed the depreciation for the Fourth Control Period, i.e. from FY 2022-23 to FY 2024-25 for MB-II on the approved GFA.

The depreciation expenses will be Trued Up in accordance with the provisions of UERC Tariff Regulations, 2021 once the final Truing-up for all the years prior to the Fourth Control Period is carried out.

The depreciation for MB-II for the Fourth Control Period, accordingly, works out as shown in the Table below:

**Table 5.12: Depreciation Charges as approved by the Commission for MB-II for Fourth Control Period (Rs. Crore)**

Particular	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Depreciation	69.34	46.65	70.98	46.52	73.04	47.19

### 5.3.5 Return on Equity

#### A. Old Nine Generating Stations

Regulation 26 of the UERC Tariff Regulations, 2021 specifies as follows:

#### *“26. Return on Equity*

- (1) *Return on equity shall be computed on the equity base determined in accordance with Regulation 24.*

*Provided that, Return on Equity shall be allowed on account of allowed equity capital for the assets put to use at the commencement of each financial year.*

*Provided further that, if the generating stations/licensees are able to demonstrate the actual date of asset being put to use and capitalized in its accounts of each asset for the purposes of business carried on by it through documentary evidence, including but not limited to 'asset put to use certificate, 'audited accounts' etc. then in such cases after due satisfaction of the Commission, the ROE shall be allowed on pro-rata basis after considering additional capitalization done during the year out of the equity capital.*

- (2) *Return on equity shall be computed on at the base rate of 15.5% for thermal generating stations, transmission licensee, SLDC and run of the river hydro generating station and*

*at the base rate of 16.50% for the storage type hydro generating stations and run of river generating station with pondage and distribution licensee on a post-tax basis.*

*Provided that Return on Equity in respect of additional capitalization after cut-off date beyond the original scope of work excluding additional capitalization due to Change in Law, shall be computed at the weighted average rate of interest on actual loan portfolio of the distribution company or the generating station or the transmission system*

*.....”*

The Petitioner submitted that it has claimed RoE in accordance with the aforesaid Regulations at the rate of 16.50% for Chibro, Khodri, Ramganga and MB-I and at the rate of 15.50% for Dhakrani, Dhalipur, Kulhal, Chilla & Khatima on post-tax basis. Further, the Petitioner submitted that RoE has been calculated on average equity during the year as per the applicable regulations for the Fourth Control Period.

The Petitioner further submitted that it may be allowed to recover Income Tax as per Regulations 34 of UERC Tariff Regulations, 2021, which specifies as follows:

*“Income Tax, if any, on the income stream of the regulated business of Generating Companies, Transmission Licensees, Distribution Licensees and SLDC shall be reimbursed to the Generating Companies, Transmission Licensees, Distribution Licensees and SLDC as per actual income tax paid, based on the documentary evidence submitted at the time of truing up of each year of the Control Period, subject to the prudence check.”*

The Petitioner claimed the reimbursement of income tax immediately on final assessment of tax & payment of the same to the income tax department and requested to allow the same on actual basis to be recovered from the beneficiaries.

The Commission observed that pending finalisation of the Transfer Scheme, the Commission had allowed RoE on the provisional value of the opening equity of Rs. 150.58 Crore in accordance with the directions of the Hon’ble Appellate Tribunal for Electricity issued in the Order dated 14.09.2006 (Appeal No. 189 of 2005) and detailed in the Commission’s Order dated 14.03.2007.

As regards RoE on additional Capitalisation, the Commission has considered the normative equity of 30% where entire financing has been done through internal resources and on actual basis in other cases subject to a ceiling of 30% as specified in the Regulations.

The additional capitalization approved by the Commission for the Fourth Control Period, i.e. FY 2022-23 to FY 2024-25 includes DRIP works and the works were financed with a debt - equity ratio of 80:20. The same has been considered and RoE at the respective rates have been applied on the equity amount corresponding to 20% of asset addition on account of DRIP.

With regard to recovery of Income Tax paid, the Commission is of the view that Regulation 34 of UERC Tariff Regulations, 2021 allows recovery of actual Tax paid, subject to submission of documentary proof. Therefore, the Petitioner is entitled to claim the same at the time of truing-up as per the actuals in accordance with Regulation 34 of UERC Tariff Regulations, 2021 for the respective financial years.

As the Transfer Scheme is yet to be finalized, the Commission is provisionally allowing return on normative equity at the rate of 16.50% for Chibro, Khodri, Ramganga and MB-I and at the rate of 15.50% for Dhakrani, Dhalipur, Kulhal, Chilla and Khatima in accordance with the provisions of UERC Tariff Regulations, 2021. The summary of the Return on Equity approved for 9 LHPs for Fourth Control Period is shown in the Table given below:

**Table 5.13: Return on Equity for 9 LHPs for FY 2022-23 (Rs. Crore)**

Name of the Generating Stations	Claimed	Approved		
		On Transferred Asset as on Jan 14, 2000	On Additional Capitalization	Total
Dhakrani	2.53	0.58	1.51	2.09
Dhalipur	5.60	0.95	3.36	4.30
Chibro	10.56	4.35	5.29	9.64
Khodri	6.06	3.66	2.21	5.88
Kulhal	3.08	0.81	1.70	2.51
Ramganga	5.90	2.48	2.32	4.80
Chilla	12.22	5.81	4.96	10.77
MB-I	18.49	5.43	10.03	15.46
Khatima	8.87	0.24	7.54	7.78
<b>Total</b>	<b>73.29</b>	<b>24.30</b>	<b>38.94</b>	<b>63.24</b>

**Table 5.14: Return on Equity for 9 LHPs for FY 2023-24 (Rs. Crore)**

Name of the Generating Stations	Claimed	Approved		
		On Transferred Asset as on Jan 14, 2000	On Additional Capitalization	Total
Dhakrani	3.10	0.58	1.64	2.21
Dhalipur	7.63	0.95	5.24	6.19
Chibro	11.89	4.35	5.43	9.79
Khodri	7.16	3.66	2.29	5.95



**Table 5.14: Return on Equity for 9 LHPs for FY 2023-24 (Rs. Crore)**

Name of the Generating Stations	Claimed	Approved		
		On Transferred Asset as on Jan 14, 2000	On Additional Capitalization	Total
Kulhal	3.72	0.81	1.87	2.69
Ramganga	6.61	2.48	2.32	4.80
Chilla	15.32	5.81	5.98	11.78
MB-I	21.44	5.43	13.64	19.07
Khatima	11.20	0.24	7.54	7.78
<b>Total</b>	<b>88.08</b>	<b>24.30</b>	<b>45.95</b>	<b>70.25</b>

**Table 5.15: Return on Equity for 9 LHPs for FY 2024-25 (Rs. Crore)**

Name of the Generating Stations	Claimed	Approved		
		On Transferred Asset as on Jan 14, 2000	On Additional Capitalization	Total
Dhakrani	4.09	0.58	1.89	2.46
Dhalipur	8.78	0.95	7.38	8.33
Chibro	12.57	4.35	5.82	10.17
Khodri	7.51	3.66	2.48	6.14
Kulhal	4.20	0.81	2.21	3.02
Ramganga	7.59	2.48	2.32	4.80
Chilla	18.23	5.81	10.91	16.72
MB-I	23.70	5.43	13.94	19.38
Khatima	13.08	0.24	7.54	7.78
<b>Total</b>	<b>99.75</b>	<b>24.30</b>	<b>54.50</b>	<b>78.81</b>

## B. Maneri Bhali-II

The Petitioner in its Petition has submitted that they have computed return on equity on average equity during the year as per UERC Tariff Regulations, 2021.

As discussed earlier in Chapter 3, the Commission has revised the Capital Cost as on COD to Rs. 1885.50 Crore. As per the financing considered by the Commission for the total approved Capital Cost of Rs. 1885.50 Crore and additional capitalisation of Rs. 390.12 Crore till FY 2021-22, Rs. 670.58 Crore has only been funded through equity as already discussed in Chapter 3 of this Order and detailed in the Table below:

**Table 5.16: Details of Equity for MB-II up to 31.03.2022**

Particular	Amount (Rs. Crore)
Approved Capital cost as on 15.03.2008 (CoD)	1885.50
Additional Capitalisation up to 31.03.2022	390.12
GFA as on 31.03.2022	2275.62
Financing through grant received from GoU as relief for natural calamity	40.37
Net GFA	2235.25
<b>Equity @30%</b>	<b>670.58</b>

**Table 5.16: Details of Equity for MB-II up to 31.03.2022**

Particular	Amount (Rs. Crore)
(i) Through PDF	351.39
(ii) GoU budgetary support	155.19
(iii) Pre-2002 expenses	164.00

However, since, out of the total equity of Rs. 670.58 Crore, Rs. 351.39 Crore had come through PDF, the Commission has not allowed the Return on Equity on the GoU contribution from PDF in the approval of ARR and truing-up for the Petitioner for past years for reasons recorded in the respective Orders of the Commission. Hence, the Commission does not find the need to allow Return on Equity on GoU contribution from PDF.

The Commission has, therefore, considered the equity of Rs. 319.19 Crore [Rs 155.19 Crore (GoU budgetary support) + Rs 164.00 Crore (Pre-2002 expenses)] eligible for return purposes for FY 2021-22. The Commission has computed the RoE at the rate of 16.50% as specified in UERC Tariff Regulations, 2021. The summary of the Return on Equity approved for MB-II for the Fourth Control Period is shown in the Table given below:

**Table 5.17: Return on Equity for MB-II for Fourth Control Period (Rs. Crore)**

Particular	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Return on Equity	58.76	52.67	60.90	53.31	63.47	54.01

### 5.3.6 Interest on Loans

#### A. Old Nine Generating Stations

Regulation 27 of the UERC Tariff Regulations, 2021 specifies as follows:

**"27. Interest and finance charges on loan capital and on Security Deposit**

- (1) The loans arrived at in the manner indicated in Regulation 24 shall be considered as gross normative loan for calculation of interest on loan.
- (2) The normative loan outstanding as on 01.04.2022 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.03.2022 from the approved gross normative loan.
- (3) The repayment for each year of the Control Period shall be deemed to be equal to the depreciation allowed for that year.

...

- (5) *The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio of the previous year after providing appropriate accounting adjustment for interest capitalised:*

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

*Provided further that if the generating station or the transmission system or the distribution system or SLDC, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the Transmission Licensee or the Distribution Licensee or SLDC as a whole shall be considered.*

- (6) *The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.*

*..."*

It is to be noted that the additional capitalization approved by the Commission in FY 2020-21 includes DRIP works, which were financed with a Debt - Equity ratio of 80:20 and the rate of interest on the loan component is zero. Accordingly, the opening balance of the loan pertaining to debt component of DRIP works has been considered for FY 2021-22 with interest rate as zero during the calculation of weighted average interest rate for FY 2021-22. The weighted average rate arrived for FY 2021-22 is also considered for the Fourth Control Period.

The Petitioner vide reply dated January 31, 2022 submitted that the Petitioner is adopting the practice of capitalizing the assets as soon as assets are available to use/put to use, instead of booking at the end of financial year. The Petitioner also submitted a letter dated 12.03.2021 directing the concerned officials to ensure circulation of work completion certificate for capital works to ensure Service entry in SAP (Measurement) and Technical Completion (TECO) of respective WBS in ERP followed by timely capitalization of works in the accounting records of the company in line with the applicable Indian Accounting Standards (Ind-AS).

The Commission has noted down the submission of the Petitioner and only for the purpose of allowing interest on loan, it has calculated the interest rate on the basis of Opening loan less average repayment. Accordingly, the Commission has considered the interest rate of 10.25% for Khatima and 8.13% for other 8 LHPs (including DRIP loans).

Based on the above considerations, the Commission has approved interest on loan based on the average of opening and closing loans for 9 LHPs for respective financial years after excluding the loan corresponding to Additional Capitalisation during the year as the practice of the Petitioner is to capitalise the assets at the end of the year, which is as shown in the Table below:

**Table 5.18: Interest on Loan for 9 LHPs for Fourth Control Period (Rs. Crore)**

Name of the Generating Stations	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Dhakrani	2.87	1.80	3.38	1.90	4.36	2.25
Dhalipur	7.29	5.11	10.04	6.14	11.27	8.33
Chibro	7.00	4.89	8.47	4.67	8.86	4.91
Khodri	3.07	1.40	3.94	1.35	4.13	1.53
Kulhal	3.89	2.41	4.88	2.59	5.47	3.07
Ramganga	3.60	1.68	4.21	1.47	5.11	1.26
Chilla	10.42	4.74	15.59	6.40	19.47	12.51
MB-I	15.72	11.20	18.81	12.53	21.89	12.03
Khatima	7.90	6.92	10.53	6.05	12.19	5.19
<b>Total</b>	<b>61.75</b>	<b>40.16</b>	<b>79.85</b>	<b>43.11</b>	<b>92.74</b>	<b>51.09</b>

## B. Maneri Bhali-II

As discussed in the preceding paras, the Commission has considered the weighted average interest rate of 10.26% based on the outstanding loans for the project. The Commission for computing interest for MB-II station for the Fourth Control Period has considered the above-mentioned interest rate.

In case of MB-II station, as the actual loans have been availed for the project, therefore, the interest has been computed on the basis of interest rate applicable to these loans availed for the project. The Commission has adjusted the yearly interest refunds received by the Petitioner as done previously in the Order dated April 26, 2021.

The Commission has calculated Interest on Loan based on the approach adopted for 9 LHPs for the Fourth Control Period. The Commission in accordance with UERC Tariff Regulations, 2021 has considered the repayment for each year of the Control Period equal to the depreciation allowed for that year. Further, for the purpose of computation of interest on loan for Fourth Control Period, the Commission has considered guarantee fee on PFC loan equal to the actual guarantee fee paid in FY 2020-21 i.e. 2.28 Crore. However, during the true-up of FY 2022-23 to 2024-25, the Commission shall consider the actual guarantee fee post prudence check for the same.

Based on the above considerations and the UERC Tariff Regulations, 2021, the Commission has calculated the interest expense for MB-II for the Fourth Control Period as shown in the Table below:

**Table 5.19: Interest on Loan for MB-II for Fourth Control Period (Rs. Crore)**

Particular	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
<b>Interest on Loan</b>	42.13	46.55	38.73	41.77	36.30	36.98

### 5.3.7 Operation and Maintenance expenses

Regarding the Operation and Maintenance expenses, Regulation 48(2) of the UERC Tariff Regulations, 2021 specifies as follows:

#### **“48 Operation and Maintenance Expenses**

##### **(2) For Hydro Generating Stations**

- (a) ***For Generating Stations in operation for more than five years preceding the Base Year***

*The operation and maintenance expenses for the first year of the control period will be approved by the Commission taking in to account the actual O&M expenses for last five years till base year, based on the audited balance sheets, excluding abnormal operation and maintenance expenses, if any, subject to prudence check and any other factors considered appropriate by the Commission.*

- (b) ***For Generating Stations in operation for less than 5 years preceding the base year:***

*In case of the hydro electric generating stations, which have not been in existence for a period of five years preceding the base year, i.e. FY 2020-21, the operation and maintenance expenses for the base year of FY 2020-21 shall be fixed at 4% and 2.5% of the actual capital cost (excluding cost of rehabilitation & resettlement works) as admitted by the Commission, for stations less than 200 MW projects and for stations more than 200 MW respectively, for the first year of operation and shall be escalated from the subsequent year in accordance with the escalation principles specified in clause (e) below.*

(c) ***For Generating Stations declared under commercial operation on or after 01.4.2022.***

*In case of new hydro electric generating stations, i.e. the hydro electric generating stations declared under commercial operation on or after 1.4.2022, the base operation and maintenance expenses for the year of commissioning shall be fixed at 4% and 2.5% of the actual capital cost (excluding cost of rehabilitation & resettlement works) as admitted by the Commission, for stations less than 200 MW projects and for stations more than 200 MW respectively and shall be escalated from the subsequent year in accordance with the escalation principles specified in clause (e) below.*

(d) *Post determination of base O&M Expenses for the base year, i.e. FY 2020-21, the O&M expenses for the nth year and also for the year immediately preceding the Control Period, i.e. 2021-22 shall be approved based on the formula given below:-*

$$O\&M_n = R\&M_n + EMP_n + A\&G_n$$

*Where –*

- *O&M<sub>n</sub> – Operation and Maintenance expenses for the nth year;*
- *EMP<sub>n</sub> – Employee Costs for the nth year;*
- *R&M<sub>n</sub> – Repair and Maintenance Costs for the nth year;*
- *A&G<sub>n</sub> – Administrative and General Costs for the nth year;*

*The above components shall be computed in the manner specified below:*

$$EMP_n = (EMP_{n-1}) \times (1+G_n) \times (1+CPI_{inflation})$$

$$R\&M_n = K \times (GFA_{n-1}) \times (1+WPI_{inflation}) \text{ and}$$

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

*Where -*

- *EMP<sub>n-1</sub> – Employee Costs for the (n-1)th year;*
- *A&G<sub>n-1</sub> – Administrative and General Costs for the (n-1)th year;*

- *Provision: Cost for initiatives or other one-time expenses as proposed by the Generating Company and approved by the Commission after prudence check.*
- *'K' is a constant to be specified by the Commission %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on Generating Company's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;*

*Provided that for the projects whose Renovation and Modernisation has been carried out, the R&M expenses for the nth year shall not exceed 4% of the capital cost admitted by the Commission.*

- *CPI inflation – is the average increase in the Consumer Price Index (CPI) for immediately preceding three years;*
- *WPI inflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three years;*
- *GFA<sub>n-1</sub> – Gross Fixed Asset of the Generating Company for the n-1th year;*
- *G<sub>n</sub> is a growth factor for the nth year and it can be greater than or less than zero based on the actual performance. Value of G<sub>n</sub> shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on Generating Company's filings, benchmarking and any other factor that the Commission feels appropriate*

*Provided that repair and maintenance expenses determined shall be utilised towards repair and maintenance works only.*

- (e) *O&M expenses determined in sub-Regulation 2(b) & 2(c) above, shall be escalated for subsequent years to arrive at the O&M expenses for the control period by applying the Escalation factor (EF<sub>k</sub>) for a particular year (Kth year) which shall be calculated using the following formula:*

$$EF_k = 0.55 \times WPI_{\text{Inflation}} + 0.45 \times CPI_{\text{Inflation}}$$

- (f) *In case of multi-purpose hydroelectric stations, with irrigation, flood control and power components, the O&M expenses chargeable to power component of the station only shall be considered for determination of tariff."*

The O&M expenses comprise Employee expenses, R&M expenses and A&G expenses. In accordance with Regulation 48(2) of the UERC Tariff Regulations, 2021, the O&M expenses for the Fourth Control Period has been determined by the Commission taking into account actual O&M expenses of the previous years and any other factors considered appropriate by the Commission.

The Commission has calculated the annual growth in values of CPI (overall) for Industrial Workers and WPI (overall) based on the average of FY 2018-19 to FY 2020-21 and has considered the same for determination of indices for FY 2021-22 and subsequently for the Fourth Control Period, i.e. FY 2022-23 to FY 2024-25. The summary of the same is provided in the Table below:

**Table 5.20: Escalation Rate as considered by the Commission**

Particulars	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
CPI	6.00%	6.00%	6.00%	6.00%
WPI	2.42%	2.42%	2.42%	2.42%

The submissions of the Petitioner and the Commission's analysis for approving the various components of the O&M expenses for the Fourth Control Period for FY 2022-23 to FY 2024-25 is detailed below:

#### **A. Old Nine Generating Stations**

##### **5.3.7.1 Employee expenses**

The Petitioner submitted that the Employee expenses for the Fourth Control Period from FY 2022-23 to FY 2024-25 has been proposed as per the UERC Tariff Regulations, 2021.

The UERC Tariff Regulations, 2021 stipulate the normative O&M expenses for the Fourth Control Period to be approved taking into account the actual O&M expenses of last five years i.e. FY 2016-17 to FY 2020-21. The Commission observed that the Seventh Pay Commission was implemented w.e.f. January 01, 2016 and the salaries were raised to the level of Seventh Pay Commission w.e.f. December 01, 2017. The Petitioner has also claimed an actual amount of Rs. 0.405 Crore on impact of Seventh Pay Commission arrear for FY 2020-21. Hence, considering the period from FY 2016-17 to FY



2020-21, the impact of Seventh Pay Commission in the employee expenses is from FY 2017-18. Hence, there is aberration in last 5 years actual expenses due to impact of Seventh Pay Commission for computation of the normative employee expenses.

In view of the above, the Commission does not find it prudent to approve the normative employee expenses for the Fourth Control Period based on the actual employee expenses for FY 2016-17 to FY 2020-21 as this period of the employee expenses include impact of revision in salaries as well as arrears due to the Seventh Pay Commission.

Regulation 103(2) of the UERC Tariff Regulations, 2021 stipulates as under:

*“Nothing in these Regulations shall bar the Commission from adopting in conformity with provisions of the Act, a procedure which is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of a matter or a class of matters, deems it just or expedient for deciding such matter or class of matters.”*

In view of the special circumstances in this case, in exercise of powers conferred by the above stated Regulation, the Commission finds it prudent to deviate from the methodology stipulated in the UERC Tariff Regulations, 2021 for approval of normative employee expenses for the Fourth Control Period from FY 2022-23 to FY 2024-25 to the extent of consideration of actual employee expenses for the preceding five years.

The Commission has considered the normative gross employee expenses (without the impact of Seventh Pay Commission) approved in the true up of FY 2020-21 as the opening gross employee expenses. This normative opening gross employee expenses have been adjusted for the Gn factor approved for FY 2021-22 and escalated with CPI Inflation of 6.00% to arrive at normative employee expenses for FY 2021-22. The gross employee expenses so arrived have been considered as the gross employee expenses (EMP<sub>n-1</sub>) for FY 2021-22. From FY 2022-23 onwards, the Commission has computed the normative employee expenses in accordance with the Regulation 48 (2) considering the Gn factor approved for the corresponding year and the CPI inflation of 6.00%.

The Commission, in the approval of Business Plan for the Fourth Control Period from FY 2022-23 to FY 2024-25 as discussed in Business Plan Chapter of this Order has approved the HR Plan. Based on the approved HR Plan, the Commission has computed the Gn factor as shown in the Table below:

**Table 5.21: Gn approved by the Commission**

Particulars	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Closing no. of employees	1662	1611	1613	1700	1773
Gn	0.00%	0.00%	0.06%	2.70%	2.15%

However, if the actual addition to number of employees is lower than the number of employee addition considered in this Order, the impact of the same shall be adjusted while carrying out the truing up and will not be considered as reduction in employee expenses on account of controllable factors.

With this approach, the normative employee expenses approved for the Fourth Control Period from FY 2022-23 to FY 2024-25 is as shown in the Table below:

**Table 5.22: Employee Expense approved by the Commission for 9 LHPs for the Fourth Control Period (Rs. Crore)**

Name of the Generating Stations	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Dhakrani	12.96	11.64	14.36	12.67	15.81	13.71
Dhalipur	12.82	11.76	14.21	12.80	15.65	13.86
Chibro	48.51	43.43	53.44	47.28	58.86	51.20
Khodri	24.31	21.45	26.92	23.35	29.66	25.28
Kulhal	9.89	9.05	10.96	9.85	12.08	10.66
Ramganga	33.38	29.99	36.99	32.65	40.75	35.35
Chilla	35.63	33.00	39.48	35.93	43.49	38.90
MB-I	29.06	26.22	32.21	28.54	35.47	30.90
Khatima	15.36	12.00	17.02	13.06	18.75	14.15
<b>Total</b>	<b>221.92</b>	<b>198.54</b>	<b>245.59</b>	<b>216.13</b>	<b>270.52</b>	<b>234.02</b>

### 5.3.7.2 R&M expenses

The UERC Tariff Regulations, 2021 specify that the R&M expenses for the Fourth Control Period shall be arrived at by multiplying the constant factor K with the opening GFA approved for the respective financial years of the Fourth Control Period.

The Commission has computed the percentage of actual R&M expenses upon actual opening GFA for each year of FY 2018-19 to FY 2020-21. Thereafter, the Commission has considered the average of such percentages as K factor for the Fourth Control Period as detailed in the Table below:

**Table 5.23: K Factor as considered by the Commission**

Generating Station	Average 3 yrs (FY 2018-19 to FY 2020-21)
Dhakrani	29%
Dhalipur	17%
Chibro	12%
Khodri	14%

**Table 5.23: K Factor as considered by the Commission**

Generating Station	Average 3 yrs (FY 2018-19 to FY 2020-21)
Kulhal	22%
Ramganga	9%
Chilla	10%
MB-I	5%
Khatima	3%

The Commission has considered the opening GFA for each year of the Fourth Control Period from FY 2022-23 to FY 2024-25. The Commission has considered the WPI inflation of 2.42% which is the average increase in the Wholesale Price Index (WPI) for FY 2018-19 to FY 2020-21. The Commission has computed R&M Expenses for the Fourth Control Period as per the methodology as stated above using the following formulae:

$$R\&M_n = K \times (GFA_{n-1}) \times (1 + WPI_{inflation})$$

Further, with regard to the constant K, the Regulations specify that for the projects whose Renovation and Modernization has been carried out, the R&M expenses for  $n^{th}$  year shall not exceed 4% of capital cost admitted by the Commission. Furthermore, the R&M expenses for the Plant proposed to be under RMU, the proportionate R&M for balance Units under operations have been allowed.

The Commission further observes that RMU works of Khatima LHP were completed in FY 2016-17. Further, with regard to Dhakrani, Dhalipur, Chilla and MB-I, the RMU works is projected to be carried out in Fourth Control Period.

With regard to Khatima, Regulation 48(2) of the UERC Tariff Regulations, 2021 states that the R&M expenses for the  $n^{th}$  year shall not exceed 4% of the capital cost admitted by the Commission. Considering that there is significant variation between the actual incurred expenses of Khatima LHP in FY 2020-21 from the approved expenses with 'K' factor as 3%, the Commission has considered the K factor as 4% in case of Khatima LHP for the Fourth Control Period, which is subject to revision during True Up based on the actual R&M expenses incurred during the year and prudence check.

Further, with regard to DRIP works, under DRIP – II Scheme, the Commission has considered R&M expenses as 3% of capex incurred in DRIP works in the Fourth Control Period for computing normative R&M expenses.

With regard to MB-I, in view of past R&M expenses, post RMU, R&M expenses for the Fourth

Control Period has been limited to 2.00% of GFA.

With regard to other Stations, wherein the RMU works shall be completed beyond FY 2021-22, the Commission on the provisional basis has considered R&M expenses based on the methodology provided in the aforesaid Regulations. However, the Commission shall determine the same during the Annual Performance Review/True Up and any gain or loss on account of such re-consideration shall not be carried out.

Based on above, the R&M expenses approved by the Commission for FY 2021-22 is as shown in the Table below:

**Table 5.24: R&M Expense approved by the Commission for 9 LHPs for the Fourth Control Period (Rs. Crore)**

Name of the Generating Stations	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Dhakrani	9.75	9.94	12.85	6.94	15.00	7.19
Dhalipur	16.01	6.06	23.08	7.33	29.60	5.74
Chibro	21.08	21.23	24.73	21.36	27.27	21.71
Khodri	11.23	15.53	13.28	15.59	14.09	15.77
Kulhal	12.52	8.00	15.41	8.17	18.57	8.49
Ramganga	9.88	8.11	10.58	8.11	12.37	8.11
Chilla	24.51	15.21	31.06	16.19	39.40	19.68
MB-I	13.63	6.55	17.44	8.04	18.71	8.23
Khatima	7.09	6.79	8.54	6.79	11.19	6.79
<b>Total</b>	<b>125.71</b>	<b>97.42</b>	<b>156.97</b>	<b>98.52</b>	<b>186.21</b>	<b>101.70</b>

### 5.3.7.3 A&G expenses

The Petitioner submitted that the A&G expenses for the Fourth Control Period from FY 2022-23 to FY 2024-25 has been proposed as per the UERC Tariff Regulations, 2021.

With regard to the expenses on account of implementation of ERP at UJVN Ltd., the Commission, in line with the approach adopted in Order dated April 26, 2021 has not considered the same in deriving the normative expenses, which shall be considered at the time of truing-up subject to prudence check.

Further, as discussed in Chapter 4, the Commission observed that the Petitioner has substantially reduced the projection of cost against the AMC of ERP implementation from Rs. 2.59 Crore (Jan 2021-Dec 2021) to Rs. 1.46 Crore (Jan 2022-Dec 2022) which will be further reduced to Rs. 0.96 Crore in Jan 2023-Dec, 2023. The Commission sought justification for it vide letter dated 11.02.2022 for such reduction in projection of its cost. In response the Petitioner submitted existing

agreement with M/s Accenture Solutions Ltd. has completed on December 2021. Based on retender, the Petitioner appointed M/s Highbar Technocrat Ltd. Mumbai wherein best possible efforts is being done to reduce the recurring expenditure on ERP system.

The UERC Tariff Regulations, 2021 stipulate the normative O&M expenses for the first year of the Control Period to be approved taking into account the actual O&M expenses of last five years till base year, i.e. from FY 2016-17 to FY 2020-21.

The actual A&G Expense in FY 2016-17 to FY 2018-19 are almost constant. Hence, there is aberration in past years actual expenses for computation of the normative employee expenses.

In view of the above, the Commission does not find it prudent to approve the normative A&G expenses for the Fourth Control Period based on the actual A&G expenses for FY 2016-17 to FY 2020-21.

Regulation 103 (2) of the UERC Tariff Regulations, 2021 stipulates as under:

*“Nothing in these Regulations shall bar the Commission from adopting in conformity with provisions of the Act, a procedure which is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of a matter or a class of matters, deems it just or expedient for deciding such matter or class of matters.”*

In view of the special circumstances in this case, in exercise of powers conferred by the above stated Regulation, the Commission finds it prudent to deviate from the methodology stipulated in the UERC Tariff Regulations, 2021 for approval of normative A&G expenses for the Fourth Control Period from FY 2022-23 to FY 2024-25 to the extent of consideration of actual employee expenses for the preceding five years.

In view of the above, the Commission computed the normative A&G expenses for the Fourth Control Period based on the average of actual A&G expenses from FY 2018-19 to FY 2020-21 after adjusting it for Petition filing fees, Insurance expenses, ERP expenses and security expenses. The average expenses for the three years have been considered as base expenses for the middle year i.e. FY 2019-20. The normative expenses thus arrived has then been escalated by WPI inflation true up for FY 2019-20 to FY 2021-22 to arrive at the normative expenses for FY 2022-23. The gross A&G expenses so arrived for FY 2022-23, have been considered for calculating the A&G expenses for Second and Third year of the Fourth Control Period considering the WPI inflation of 2.42%. The

Commission has then added the insurance expenses, ERP expenses, Petition filing fees, security expenses and has approved the A&G expenses for the Fourth Control Period.

The normative A&G expenses approved by the Commission for the Fourth Control Period are as shown in the Table below:

**Table 5.25: A&G Expenses approved by the Commission for 9 LHPs for the Fourth Control Period (Rs. Crore)**

Name of the Generating Stations	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Dhakrani	2.41	2.53	2.46	2.55	2.52	2.57
Dhalipur	2.63	2.44	2.69	2.46	2.75	2.48
Chibro	10.17	9.01	10.42	9.11	10.67	9.20
Khodri	6.25	5.86	6.40	5.91	6.55	5.97
Kulhal	2.39	2.27	2.44	2.28	2.50	2.30
Ramganga	7.31	6.22	7.48	6.28	7.66	6.34
Chilla	6.80	6.30	6.96	6.36	7.12	6.42
MB-I	4.78	4.28	4.89	4.32	5.00	4.36
Khatima	2.11	1.99	2.16	2.01	2.21	2.03
<b>Total</b>	<b>44.85</b>	<b>40.90</b>	<b>45.90</b>	<b>41.29</b>	<b>46.98</b>	<b>41.68</b>

#### 5.3.7.4 O&M expenses

Based on above discussions, the O&M expenses approved by the Commission for the Fourth Control Period is as shown in the Table below:

**Table 5.26: O&M Expenses approved for 9 LHP for the Fourth Control Period (Rs. Crore)**

Name of the Generating Stations	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Dhakrani	25.11	24.10	29.67	22.16	33.34	23.47
Dhalipur	31.46	20.26	39.98	22.59	48.00	22.09
Chibro	79.77	73.68	88.58	77.75	96.80	82.11
Khodri	41.79	42.84	46.61	44.86	50.30	47.02
Kulhal	24.80	19.31	28.81	20.30	33.15	21.45
Ramganga	50.57	44.32	55.05	47.03	60.77	49.80
Chilla	66.94	54.52	77.51	58.48	90.01	65.00
MB-I	47.47	37.06	54.54	40.91	59.18	43.49
Khatima	24.57	20.78	27.72	21.86	32.16	22.97
<b>Total</b>	<b>392.48</b>	<b>336.87</b>	<b>448.47</b>	<b>355.94</b>	<b>503.71</b>	<b>377.39</b>

## B. Maneri Bhali-II

The Commission has adopted the same approach as discussed above in case of 9 LHPs. However, as the actual k factor is less than 1 % for MB-II, Commission has restricted K factor for DRIP works as approved for normal add capitalization works and has, accordingly, approved the O&M

expenses for MB-II for the Fourth Control Period as shown below:

**Table 5.27: O&M Expenses approved by the Commission for MB-II for the Fourth Control Period from FY 2022-23 to FY 2024-25 (Rs. Crore)**

Particulars	FY 2022-23		FY 2023-24		FY 2024-25	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Employee Expenses	28.74	30.11	31.85	32.78	35.08	35.49
R&M Expenses	25.39	21.37	25.97	21.56	26.50	21.76
A&G Expenses	11.39	12.36	11.66	12.47	11.94	12.59
<b>Total</b>	<b>65.52</b>	<b>63.84</b>	<b>69.48</b>	<b>66.81</b>	<b>73.52</b>	<b>69.84</b>

### 5.3.8 Interest on Working Capital

#### A. Old Nine Generating Stations

The Petitioner submitted that the interest on working capital for the Fourth Control Period, i.e. FY 2022-23 to FY 2024-25 has been proposed in accordance with the Regulation 33 of UERC Tariff Regulations, 2021.

Regulation 33 of UERC Tariff Regulations, 2021 specifies as follows:

*“Rate of interest on working capital shall be on normative basis and shall be equal to the weighted average of ‘one year Marginal Cost of Funds based Lending Rate (MCLR)’ as declared by the State Bank of India from time to time for the financial year in which the application for determination of tariff is made plus 350 basis points”.*

...

- b) In case of hydro power generating stations and transmission system and SLDC, the working capital shall cover:
 
  - (i) Operation and maintenance expenses for one month;*
  - (ii) Maintenance spares @ 15% of operation and maintenance expenses; and*
  - (iii) Receivables equivalent to two months of the annual fixed charges.”**

The Petitioner submitted that it has considered the rate of interest on working capital, i.e. prevailing weighted average of ‘One year marginal Cost of funds based lending rate (MCLR) as declared by the State Bank of India from time to time for the financial year in which the application for determination of tariff is made, i.e. in accordance with the Regulations.

The Petitioner has submitted documentary proof towards rate of interest on working capital

considered, i.e. 7.00% as the date in which the application for determination of tariff is made plus 350 basis points which equals rate of interest on working capital of 10.50%.

The Commission has determined the interest on working capital for the Fourth Control Period from FY 2022-23 to FY 2024-25, i.e. in accordance with the aforesaid Regulations and the same is as discussed below.

#### 5.3.8.1 One Month O&M Expenses

One month O&M expenses has been considered by the Commission based on the approved annual O&M expenses for the Fourth Control Period, i.e. FY 2022-23 to FY 2024-25, i.e. in accordance with the UERC Tariff Regulations, 2021.

#### 5.3.8.2 Maintenance Spares

The Commission has considered the maintenance spares as 15% of the approved annual O&M expenses in accordance with UERC Tariff Regulations, 2021 for the Fourth Control Period, i.e. for FY 2022-23, FY 2023-24 and FY 2024-25.

#### 5.3.8.3 Receivables

The Commission has approved the receivables for two months based on the approved ARR for FY 2022-23, FY 2023-24 and FY 2024-25, i.e. in accordance with the UERC Tariff Regulations, 2021.

Based on the above, the Commission computed total working capital requirement of the Petitioner for FY 2022-23, FY 2023-24 and FY 2024-25. Further, the Commission has considered the rate of interest on working capital as 10.50%, i.e. the prevailing weighted average of 'One year marginal Cost of funds based lending rate (MCLR)' as declared by the State Bank of India from time to time for the financial year in which the application for determination of tariff is made, i.e. 7.00% plus 350 basis points.

Accordingly, the interest on working capital for the Fourth Control Period, i.e. FY 2022-23, FY 2023-24 and FY 2024-25 is as shown in the Table below:

**Table 5.28: Interest on Working Capital for 9 LHPs for FY 2022-23 (Rs. Crore)**

Generating Station	1-month O&M Expenses	Maintenance Spares@15% of O&M	2 months Receivables	Total Working Capital	Interest on Working Capital	
					Claimed	Approved
Dhakrani	2.01	3.62	5.09	10.71	1.25	1.12
Dhalipur	1.69	3.04	5.61	10.34	1.65	1.09



**Table 5.28: Interest on Working Capital for 9 LHPs for FY 2022-23 (Rs. Crore)**

Generating Station	1-month O&M Expenses	Maintenance Spares@15% of O&M	2 months Receivables	Total Working Capital	Interest on Working Capital	
					Claimed	Approved
Chibro	6.14	11.05	16.10	33.29	3.83	3.50
Khodri	3.57	6.43	8.99	18.99	2.00	1.99
Kulhal	1.61	2.90	4.54	9.05	1.23	0.95
Ramganga	3.69	6.65	9.18	19.52	2.40	2.05
Chilla	4.54	8.18	12.82	25.54	3.35	2.68
MB-I	3.09	5.56	12.64	21.29	2.85	2.24
Khatima	1.73	3.12	7.53	12.38	1.51	1.30
<b>Total</b>	<b>28.07</b>	<b>50.53</b>	<b>82.51</b>	<b>161.11</b>	<b>20.07</b>	<b>16.92</b>

**Table 5.29: Interest on Working Capital for FY 2023-24 (Rs. Crore)**

Generating Station	1-month O&M Expenses	Maintenance Spares@15% of O&M	2 months Receivables	Total Working Capital	Interest on Working Capital	
					Claimed	Approved
Dhakrani	1.85	3.32	4.82	9.99	1.50	1.05
Dhalipur	1.88	3.39	6.87	12.14	2.14	1.27
Chibro	6.48	11.66	16.82	34.96	4.29	3.67
Khodri	3.74	6.73	9.35	19.82	2.26	2.08
Kulhal	1.69	3.05	4.82	9.55	1.44	1.00
Ramganga	3.92	7.06	9.61	20.59	2.62	2.16
Chilla	4.87	8.77	14.22	27.86	4.02	2.93
MB-I	3.41	6.14	14.70	24.25	3.33	2.55
Khatima	1.82	3.28	7.57	12.67	1.76	1.33
<b>Total</b>	<b>29.66</b>	<b>53.39</b>	<b>88.77</b>	<b>171.83</b>	<b>23.37</b>	<b>18.04</b>

**Table 5.30: Interest on Working Capital for 9 LHPs for FY 2024-25 (Rs. Crore)**

Generating Station	1-month O&M Expenses	Maintenance Spares@15% of O&M	2 months Receivables	Total Working Capital	Interest on Working Capital	
					Claimed	Approved
Dhakrani	1.96	3.52	5.21	10.69	1.73	1.12
Dhalipur	1.84	3.31	7.90	13.05	2.57	1.37
Chibro	6.84	12.32	17.77	36.93	4.68	3.88
Khodri	3.92	7.05	9.84	20.81	2.43	2.18
Kulhal	1.79	3.22	5.24	10.25	1.66	1.08
Ramganga	4.15	7.47	10.05	21.67	2.92	2.28
Chilla	5.42	9.75	18.17	33.34	4.75	3.50
MB-I	3.62	6.52	15.16	25.30	3.65	2.66
Khatima	1.91	3.44	7.61	12.97	2.07	1.36
<b>Total</b>	<b>31.45</b>	<b>56.61</b>	<b>96.95</b>	<b>185.01</b>	<b>26.47</b>	<b>19.43</b>

## B. Maneri Bhali-II

As regards the interest on working capital for MB-II, the Commission has computed the same based on the Regulation 33 of the UERC Tariff Regulations, 2021 and considering the prevailing

weighted average of 'One year marginal Cost of funds based lending rate (MCLR)' as declared by the State Bank of India from time to time for the financial year in which the application for determination of tariff is made, i.e. 7.00% plus 350 basis points, which equals 10.50%. The summary of the interest on working capital for MB-II for the Fourth Control Period, i.e. FY 2022-23 to FY 2024-25 is shown in the Table below:

**Table 5.31: Interest on Working Capital for MB-II for FY 2022-23 (Rs. Crore)**

Generating Station	1 month O&M Expenses	Maintenance Spares@15% of O&M	2 months Receivables	Total Working Capital	Interest on Working Capital	
					Claimed	Approved
MB-II	5.32	9.58	35.71	50.61	5.83	5.31

**Table 5.32: Interest on Working Capital for MB-II for FY 2023-24 (Rs. Crore)**

Generating Station	1 month O&M Expenses	Maintenance Spares@15% of O&M	2 months Receivables	Total Working Capital	Interest on Working Capital	
					Claimed	Approved
MB-II	5.57	10.02	35.51	51.10	6.01	5.37

**Table 5.33: Interest on Working Capital for MB-II for FY 2024-25 (Rs. Crore)**

Generating Station	1 month O&M Expenses	Maintenance Spares@15% of O&M	2 months Receivables	Total Working Capital	Interest on Working Capital	
					Claimed	Approved
MB-II	5.82	10.48	35.45	51.75	6.22	5.43

### 5.3.9 Non-Tariff Income

#### A. Old Nine Generating Station

Regulation 46 of UERC Tariff Regulations, 2021 specifies as follows:

*"46. Non-Tariff Income*

*The amount of non-tariff income relating to the Generation Business as approved by the Commission shall be deducted from the Annual Fixed Charges in determining the Net Annual Fixed Charges of the Generating Company.*

*Provided that the Generating Company shall submit full details of its forecast of non-tariff income to the Commission in such form as may be stipulated by the Commission from time to time.*

*The indicative list of various heads to be considered for non-tariff income shall be as under;*

*a) Income from rent of land or buildings;*

- b) Income from sale of scrap;
- c) Income from statutory investments;
- d) Interest on delayed or deferred payment on bills;
- e) Interest on advances to suppliers/contractors;
- f) Rental from staff quarters;
- g) Rental from contractors;
- h) Income from hire charges from contractors and others;
- i) Income from advertisements, etc.;
- j) Any other non- tariff income.

*Provided that the interest earned from investments made out of Return on Equity corresponding to the regulated business of the Generating Company shall not be included in Non-Tariff Income."*

The Petitioner has proposed Non-Tariff Income of Rs. 4.47 Crore for each year of the Fourth Control Period, i.e. FY 2022-23 to FY 2024-25. The Commission provisionally accepts the same. The same shall, however, be trued up based on the actual audited accounts for the respective year.

**Table 5.34: Non-Tariff Income for 9 LHPs for Fourth Control Period (Rs. Crore)**

Name of the Generating Stations	FY 2022-23	FY 2023-24	FY 2024-25
Dhakrani	0.42	0.42	0.42
Dhalipur	0.85	0.85	0.85
Chibro	1.11	1.11	1.11
Khodri	0.47	0.47	0.47
Kulhal	0.12	0.12	0.12
Ramganga	0.37	0.37	0.37
Chilla	0.70	0.70	0.70
MB-I	0.32	0.32	0.32
Khatima	0.10	0.10	0.10
<b>Total</b>	<b>4.47</b>	<b>4.47</b>	<b>4.47</b>

## **B. Maneri Bhali-II**

The Petitioner has proposed Non-Tariff Income of Rs. 0.73 Crore for each year of the Fourth Control Period, i.e. FY 2022-23 to FY 2024-25. The Commission provisionally accepts the same. The same shall, however, be trued up based on the actual audited accounts for the respective year.

**Table 5.35: Non-Tariff Income for MB-II for Fourth Control Period (Rs. Crore)**

Name of the Generating Station	FY 2022-23	FY 2023-24	FY 2024-25
MB-II	0.73	0.73	0.73

**5.3.10 Annual Fixed Charges, Capacity Charge and Energy Charge Rate (ECR) for the Fourth Control Period, i.e. FY 2022-23 to FY 2024-25**

**A. Old nine Generating Stations**

Based on the above analysis for all the heads of expenses of AFC, the Commission has approved the Annual Fixed Charges (AFC) of UJVN Ltd. for Fourth Control Period from FY 2022-23 to FY 2024-25 attributable to its two beneficiaries.

The Commission has allocated the AFC among the two beneficiaries of the Petitioner, viz. UPCL and HPSEB, based on their share in Dhakrani, Dhalipur, Chibro, Khodri and Kulhal and 100% on UPCL for other Plants. Further, as discussed above, the Commission has adjusted the entire Non-Tariff Income in the AFC of UPCL.

Regulation 50 of UERC Tariff Regulations, 2021 specifies as follows:

*"50. Computation and Payment of Capacity Charges and Energy Charges for Hydro Generating Stations*

- (1) *The Annual Fixed Charges of Hydro Generating Station shall be computed on annual basis, based on norms specified under these Regulations, and recovered on monthly basis under capacity charge (inclusive of incentive) and Energy Charge, which shall be payable by the beneficiaries in proportion to their respective percentage share/allocation in the saleable capacity of the generating station, i.e. in the capacity excluding the free power to the home State.*
- (2) *The capacity charge (inclusive of incentive) payable to a hydro generating station for a calendar month shall be:*

$$AFC \times 0.5 \times NDM / NDY \times (PAFM / NAPAF) \text{ (in Rupees)}$$

*Where,*

*AFC = Annual fixed cost specified for the year, in Rupees.*

*NAPAF = Normative Plant availability factor in percentage*

NDM = Number of days in the month

NDY = Number of days in the year

PAFM = Plant availability factor achieved during the month, in Percentage

- (3) The PAFM shall be computed in accordance with the following formula:

$$PAFM = 10000 \times \sum_{i=1}^N DC_i / \{N \times IC \times (100 - Aux)\} \%$$

Where,

AUX = Normative auxiliary energy consumption in percentage

DC<sub>i</sub> = Declared capacity (in ex-bus MW) for the i<sup>th</sup> day of the month which the station can deliver for at least three (3) hours, as certified by the Uttarakhand State Load Despatch Centre after the day is over.

IC = Installed capacity (in MW) of the complete generating station

N = Number of days in the month

- (4) The Energy Charge shall be payable by every beneficiary for the total energy supplied to the beneficiary, during the calendar month, on ex-power Plant basis, at the computed Energy Charge rate. Total Energy Charge payable to the Generating Company for a month shall be:

$$(\text{Energy Charge Rate in Rs. / kWh}) \times \{\text{Energy supplied (ex-bus)}\} \text{ for the month in kWh} \times (100 - FEHS) / 100$$

- (5) Energy Charge Rate (ECR) in Rupees per kWh on ex-power Plant basis, for a Hydro Generating Station, shall be determined up to three decimal places based on the following formula, subject to the provisions of sub-Regulation (7):

$$ECR = AFC \times 0.5 \times 10 / \{DE \times (100 - AUX) \times (100 - FEHS)\}$$

Where,

DE = Annual Design Energy specified for the hydro generating station, in MWh,.

FEHS = Free Energy for home State, in percent, as applicable"

In accordance with the above Regulations, the Annual Fixed Charge (AFC), Capacity Charges

and Energy Charge Rate for the Fourth Control Period, i.e. FY 2022-23 to FY 2024-25 for 9 LHPs as approved by the Commission is shown in the Table below:

**Table 5.36: Approved AFC of 9 LHPs of UJVN Ltd. for FY 2022-23 (Rs. Crore)**

Generating Station	Depreciation	Interest on Loan	Interest on working Capital	O&M Expenses	RoE	Gross Annual Fixed Cost	Gross AFC (UPCL)	Non-Tariff Income	Net AFC (UPCL)	Gross/Net AFC (HPSEB)
Dhakrani	1.82	1.80	1.12	24.10	2.09	30.95	23.21	0.42	<b>22.79</b>	7.74
Dhalipur	3.78	5.11	1.09	20.26	4.30	34.54	25.91	0.85	<b>25.05</b>	8.64
Chibro	6.01	4.89	3.50	73.68	9.64	97.71	73.29	1.11	<b>72.17</b>	24.43
Khodri	2.33	1.40	1.99	42.84	5.88	54.44	40.83	0.47	<b>40.36</b>	13.61
Kulhal	2.18	2.41	0.95	19.31	2.51	27.37	21.90	0.12	<b>21.78</b>	5.47
Ramganga	2.61	1.68	2.05	44.32	4.80	55.46	55.46	0.37	<b>55.08</b>	0.00
Chilla	4.93	4.74	2.68	54.52	10.77	77.64	77.64	0.70	<b>76.94</b>	0.00
MB-I	10.21	11.20	2.24	37.06	15.46	76.16	76.16	0.32	<b>75.85</b>	0.00
Khatima	8.48	6.92	1.30	20.78	7.78	45.26	45.26	0.10	<b>45.17</b>	0.00
<b>Total</b>	<b>42.36</b>	<b>40.16</b>	<b>16.92</b>	<b>336.87</b>	<b>63.24</b>	<b>499.54</b>	<b>439.65</b>	<b>4.47</b>	<b>435.19</b>	<b>59.89</b>

**Table 5.37: Approved AFC of 9 LHPs of UJVN Ltd. for FY 2023-24 (Rs. Crore)**

Generating Station	Depreciation	Interest on Loan	Interest on working Capital	O&M Expenses	RoE	Gross Annual Fixed Cost	Gross AFC (UPCL)	Non-Tariff Income	Net AFC (UPCL)	Gross/Net AFC (HPSEB)
Dhakrani	1.99	1.90	1.05	22.16	2.21	29.31	21.98	0.42	<b>21.57</b>	7.33
Dhalipur	5.85	6.14	1.27	22.59	6.19	42.05	31.54	0.85	<b>30.68</b>	10.51
Chibro	6.17	4.67	3.67	77.75	9.79	102.05	76.54	1.11	<b>75.42</b>	25.51
Khodri	2.36	1.35	2.08	44.86	5.95	56.60	42.45	0.47	<b>41.98</b>	14.15
Kulhal	2.43	2.59	1.00	20.30	2.69	29.01	23.21	0.12	<b>23.09</b>	5.80
Ramganga	2.59	1.47	2.16	47.03	4.80	58.05	58.05	0.37	<b>57.68</b>	0.00
Chilla	6.41	6.40	2.93	58.48	11.78	86.00	86.00	0.70	<b>85.30</b>	0.00
MB-I	13.48	12.53	2.55	40.91	19.07	88.53	88.53	0.32	<b>88.21</b>	0.00
Khatima	8.47	6.05	1.33	21.86	7.78	45.50	45.50	0.10	<b>45.41</b>	0.00
<b>Total</b>	<b>49.75</b>	<b>43.11</b>	<b>18.04</b>	<b>355.94</b>	<b>70.25</b>	<b>537.10</b>	<b>473.80</b>	<b>4.47</b>	<b>469.33</b>	<b>63.30</b>

**Table 5.38: Approved AFC of 9 LHPs of UJVN Ltd. for FY 2024-25 (Rs. Crore)**

Generating Station	Depreciation	Interest on Loan	Interest on working Capital	O&M Expenses	RoE	Gross Annual Fixed Cost	Gross AFC (UPCL)	Non-Tariff Income	Net AFC (UPCL)	Gross/Net AFC (HPSEB)
Dhakrani	2.37	2.25	1.12	23.47	2.46	31.69	23.76	0.42	<b>23.35</b>	7.92
Dhalipur	8.14	8.33	1.37	22.09	8.33	48.26	36.19	0.85	<b>35.34</b>	12.06
Chibro	6.66	4.91	3.88	82.11	10.17	107.73	80.80	1.11	<b>79.68</b>	26.93
Khodri	2.63	1.53	2.18	47.02	6.14	59.50	44.63	0.47	<b>44.15</b>	14.88
Kulhal	2.94	3.07	1.08	21.45	3.02	31.56	25.25	0.12	<b>25.13</b>	6.31
Ramganga	2.56	1.26	2.28	49.80	4.80	60.69	60.69	0.37	<b>60.32</b>	0.00
Chilla	11.98	12.51	3.50	65.00	16.72	109.72	109.72	0.70	<b>109.02</b>	0.00

**Table 5.38: Approved AFC of 9 LHPs of UJVN Ltd. for FY 2024-25 (Rs. Crore)**

Generating Station	Depreciation	Interest on Loan	Interest on working Capital	O&M Expenses	RoE	Gross Annual Fixed Cost	Gross AFC (UPCL)	Non-Tariff Income	Net AFC (UPCL)	Gross/Net AFC (HPSEB)
MB-I	13.70	12.03	2.66	43.49	19.38	91.25	91.25	0.32	<b>90.94</b>	0.00
Khatima	8.47	5.19	1.36	22.97	7.78	45.77	45.77	0.10	<b>45.67</b>	0.00
<b>Total</b>	<b>59.46</b>	<b>51.09</b>	<b>19.43</b>	<b>377.39</b>	<b>78.81</b>	<b>586.17</b>	<b>518.07</b>	<b>4.47</b>	<b>513.60</b>	<b>68.11</b>

The summary of Capacity Charge and Energy Charge Rate (ECR) for 9 LHPs for the Fourth Control Period for FY 2022-23 to FY 2024-25 is as given in the Table below:

**Table 5.39: Approved Capacity Charge and Energy Charge Rate for 9 LHPs for FY 2022-23**

Generating Station	Net AFC (UPCL) (Rs. Cr.)	Capacity Charge (UPCL) (Rs. Cr.)	Saleable Primary Energy (UPCL) (MU)	Energy Charge Rate (UPCL) (Rs. /kWh)	Gross/Net AFC (HPSEB) (Rs. Cr.)	Capacity Charge (HPSEB) (Rs. Cr.)	Saleable Primary Energy (HPSEB)(MU)	Energy Charge Rate (HPSEB) (Rs. /kWh)
Dhakrani	22.79	11.40	112.34	1.014	7.74	3.87	37.45	1.033
Dhalipur	25.05	12.53	136.11	0.920	8.64	4.32	45.37	0.952
Chibro	72.17	36.09	539.53	0.669	24.43	12.21	179.84	0.679
Khodri	40.36	20.18	249.01	0.810	13.61	6.81	83.00	0.820
Kulhal	21.78	10.89	118.30	0.920	5.47	2.74	29.57	0.926
Ramganga	55.08	27.54	307.89	0.895	0.00	0.00	0.00	0.000
Chilla	76.94	38.47	552.04	0.697	0.00	0.00	0.00	0.000
MB-I	75.85	37.92	473.22	0.801	0.00	0.00	0.00	0.000
Khatima	45.17	22.58	233.23	0.968	0.00	0.00	0.00	0.000
<b>Total</b>	<b>435.19</b>	<b>217.59</b>	<b>2721.67</b>	<b>0.799</b>	<b>59.89</b>	<b>29.94</b>	<b>375.24</b>	<b>0.798</b>

**Table 5.40: Approved Capacity Charge and Energy Charge Rate for 9 LHPs for FY 2023-24**

Generating Station	Net AFC (UPCL) (Rs. Cr.)	Capacity Charge (UPCL) (Rs. Cr.)	Saleable Primary Energy (UPCL) (MU)	Energy Charge Rate (UPCL) (Rs. /kWh)	Gross/Net AFC (HPSEB) (Rs. Cr.)	Capacity Charge (HPSEB) (Rs. Cr.)	Saleable Primary Energy (HPSEB)(MU)	Energy Charge Rate (HPSEB) (Rs. /kWh)
Dhakrani	21.57	10.78	112.34	0.960	7.33	3.66	37.45	0.978
Dhalipur	30.68	15.34	136.11	1.127	10.51	5.26	45.37	1.159
Chibro	75.42	37.71	539.53	0.699	25.51	12.76	179.84	0.709
Khodri	41.98	20.99	249.01	0.843	14.15	7.08	83.00	0.852
Kulhal	23.09	11.54	118.30	0.976	5.80	2.90	29.57	0.981
Ramganga	57.68	28.84	307.89	0.937	0.00	0.00	0.00	0.000
Chilla	85.30	42.65	552.04	0.773	0.00	0.00	0.00	0.000
MB-I	88.21	44.10	473.22	0.932	0.00	0.00	0.00	0.000
Khatima	45.41	22.70	233.23	0.973	0.00	0.00	0.00	0.000
<b>Total</b>	<b>469.33</b>	<b>234.67</b>	<b>2721.67</b>	<b>0.862</b>	<b>63.30</b>	<b>31.65</b>	<b>375.24</b>	<b>0.844</b>

**Table 5.41: Approved Capacity Charge and Energy Charge Rate for 9 LHPs for FY 2024-25**

Generating Station	Net AFC (UPCL) (Rs. Cr.)	Capacity Charge (UPCL) (Rs. Cr.)	Saleable Primary Energy (UPCL) (MU)	Energy Charge Rate (UPCL) (Rs. /kWh)	Gross/Net AFC (HPSEB) (Rs. Cr.)	Capacity Charge (HPSEB) (Rs. Cr.)	Saleable Primary Energy (HPSEB)(MU)	Energy Charge Rate (HPSEB) (Rs. /kWh)
Dhakrani	23.35	11.67	112.34	1.039	7.92	3.96	37.45	1.058
Dhalipur	35.34	17.67	136.11	1.298	12.06	6.03	45.37	1.330
Chibro	79.68	39.84	539.53	0.738	26.93	13.47	179.84	0.749
Khodri	44.15	22.08	249.01	0.887	14.88	7.44	83.00	0.896
Kulhal	25.13	12.56	118.30	1.062	6.31	3.16	29.57	1.067
Ramganga	60.32	30.16	307.89	0.980	0.00	0.00	0.00	0.000
Chilla	109.02	54.51	552.04	0.987	0.00	0.00	0.00	0.000
MB-I	90.94	45.47	473.22	0.961	0.00	0.00	0.00	0.000
Khatima	45.67	22.84	233.23	0.979	0.00	0.00	0.00	0.000
<b>Total</b>	<b>513.60</b>	<b>256.80</b>	<b>2721.67</b>	<b>0.944</b>	<b>68.11</b>	<b>34.05</b>	<b>375.24</b>	<b>0.908</b>

In accordance with the provisions of the Regulations, the secondary energy rate shall be equal to the rate derived based on the original design energy and shall be applicable when the Saleable Primary Energy exceeds the Original Design Energy. In case the rate exceeds Rs. 0.90/kWh, the secondary energy rate shall be equal to Rs. 0.90/kWh. The Petitioner shall not be entitled for any ECR recovery for energy generation above Revised Saleable Design Energy of respective HEPs and up to original Saleable Design Energy.

#### B. Maneri Bhali-II

Based on the analysis of all the heads of expenses of AFC, the Commission has approved the Annual Fixed Charges (AFC) for MB-II for the Fourth Control Period, i.e. FY 2022-23 to FY 2024-25. The Commission, to arrive at the Net AFC for MB-II, has adjusted the Non-Tariff Income from the gross AFC of MB-II. The summary of Annual Fixed Charge, Capacity Charge and Energy Charge rate for MB-II for the Fourth Control Period is given in the Table below:

**Table 5.42: Approved AFC, Capacity Charge and Energy Charge Rate for MB-II for Fourth Control Period**

Year	Depreciation	Interest on Loan (Rs. Cr.)	Interest on working Capital (Rs. Cr.)	O&M Expenses Rs. Cr.)	RoE (Rs. Cr.)	Gross Annual Fixed Cost (Rs. Cr.)	Non-Tariff Income (Rs. Cr.)	Net AFC (Rs. Cr.)	Capacity Charge (Rs. Cr.)	Saleable Primary Energy (MU)	Energy Charge Rate (Rs./kWh)
FY 2022-23	46.65	46.55	5.31	63.84	52.67	215.02	0.73	214.29	107.14	1278.09	0.84
FY 2023-24	46.52	41.77	5.37	66.81	53.31	213.78	0.73	213.05	106.53	1278.09	0.83
FY 2024-25	47.19	36.98	5.43	69.84	54.01	213.45	0.73	212.72	106.36	1278.09	0.83



In accordance with the provisions of the Regulations, the secondary energy rate shall be equal to the rate derived based on the original design energy and shall be applicable when the Saleable Primary Energy exceeds the Original Design Energy. In case the rate exceeds Rs. 0.90/kWh, the secondary energy rate shall be equal to Rs. 0.90/kWh. The Petitioner shall not be entitled for any ECR recovery for energy generation above Revised Saleable Design Energy of 1278.09 MU and up to original Saleable Design Energy of 1544.44 MU.

## 6 Commission's Directives

### 6.1 Compliance to the Directives Issued in Order dated 05.04.2010.

#### 6.1.1 Transfer Scheme

The Commission in its Tariff Order dated 05.04.2010 and in its subsequent Orders gave suitable directions to expedite finalisation of the Transfer Scheme. In compliance, the Petitioner in its APR Petition for FY 2014-15, submitted the initiatives taken by it to finalize the Transfer Scheme. Accordingly, the Commission in its APR Order dated 10.04.2014 had directed the Petitioner as under:

*"The Commission directs UJVN Ltd. that till the time transfer scheme is finalised it should submit the quarterly progress report to the Commission"*

In this regard, the Commission in its Tariff Order dated April 26, 2021, considering the submissions of the Petitioner during the Tariff proceedings for FY 2021-22 had directed the Petitioner to closely follow up the pending issues and submit quarterly status report to the Commission. The Commission further directed that there has been an inordinate delay in the finalization of the Transfer Scheme, which is attributable to the Petitioner, hence, any consequential claim arising due to finalization of the Transfer Scheme shall be considered on merits by the Commission without any carrying cost on the same.

In compliance to the above, UJVN Ltd., vide its letter dated November 01, 2021 under quarterly progress report on Transfer Scheme submitted that a meeting between Chief Secretaries of Uttarakhand and Uttar Pradesh was held on 17.08.2019 at Dehradun, wherein following was discussed:

#### *"GPF Trust Liability*

*During the meeting, both the states agreed to the principal amount of GPF payable by UPPCL to UPCL/ UJVNL for Rs. 162.14 crore, which includes Rs. 42.64 crore towards principal amount of GPF recoverable by UJVNL. It was further agreed that UPPCL shall pay Rs. 1.56 crore (Net) to UPCL after adjustment of Rs. 160.58 crore for amount payable by UPCL to UPPCL for revenue dues. The matter of Interest on GPF recoverable by UJVNL is not settled. UJVNL has received Rs. 12.56 Crore from UPCL and the balance of Rs. 30.08 Crore towards opening balance of GPF is recoverable from UPCL.*

*Regular follow up with UPCL is being made by UJVNL in this regard.*

#### *LIC Loan Liabilities*

*That the matter of LIC loan liability shall be referred for reconsideration by Uttarakhand State to Government of India. In this regard, a letter has already been sent by Hon'ble Chief Minister of Uttarakhand to Government of India vide Letter no. 693/1/2021-04(03)/2003 dated 04.10.2021 and Letter No. 437/1/2019-04(03)/20/2003 dated 01.04.2019. Necessary adjustments of LIC loan has already been made by UJVNL in its books of accounts during FY 2018-19".*

Subsequently, the Petitioner, in the Petitions submitted that it has made repeated follow-ups with UJVNL in order to determine the technical details required for determining the GFA. However, in spite of the repeated follow-ups, the Petitioner has received limited technical details which is insufficient to determine the gross fixed assets.

The Commission has noted the submissions of the Petitioner and **directs the Petitioner to closely follow up the pending issues and submit quarterly status report to the Commission. The Commission further directs that there has been an inordinate delay in the finalization of the Transfer Scheme, which is attributable to the Petitioner, hence, any consequential claim arising due to finalization of the Transfer Scheme shall be considered on merits by the Commission without any carrying cost on the same.**

## **6.2 Compliance to the Directives Issued in MYT Order dated 06.05.2013**

### **6.2.1 Design Energy**

With respect to the Design Energy of 9 LHPs, the Commission in its MYT Order dated 06.05.2013 and its subsequent Orders directed the Petitioner to expedite the process of arranging the Detailed Project Report for each of its hydro generating stations and submit the same to the Commission. Further, considering that there is no progress in the actual status of the same, the Commission in its Order dated April 26, 2021 again directed the Petitioner to nominate/depute senior officers to pursue the above matter personally with appropriate authorities to arrange the DPR for each of its 9 Large Hydro Generating Stations along with the next Tariff Petition.

In compliance to the same, UJVNL Ltd. submitted that efforts are being made to trace out the Original DPRs of old LHPs of UJVNL Ltd. However, no DPR except Chibro and Khodri could be found, which have already been submitted to the Commission. In case the DPR of any of the other Plants

becomes available the same shall be submitted with the Commission.

The Commission has noted the submissions of the Petitioner, however, it is of the view that the Petitioner has made no progress from past many years. Therefore, **the Commission again directs the Petitioner to nominate/depute senior officers to pursue the above matter personally with appropriate authorities to arrange the DPR for each of its 9 Large Hydro Generating Stations along with the next Tariff Petition.**

### **6.3 Directives specifically issued in Meeting dated 04.09.2013**

#### **6.3.1 *Status of upcoming projects***

The Commission in its previous Tariff Orders had been directing the Petitioner to submit quarterly progress report of the upcoming projects, without fail.

In compliance to the above, the Petitioner has submitted the quarterly progress report from time to time. **The Petitioner is directed to continue submitting the quarterly progress report on status of all upcoming projects without fail.**

#### **6.3.2 *Utilisation of Expenses approved by the Commission***

As per directions issued by the Commission in the previous Tariff Orders, UJVN Ltd. has been submitting the Annual Budget after approval from Audit Committee/BoD for the ensuing year for each Plant. **The Commission directs the Petitioner to continue submitting the annual budget for future financial years by 31<sup>st</sup> May of the respective financial year.**

### **6.4 Compliance to the Directives Issued in Tariff Order dated 29.03.2017**

#### **6.4.1 *Financial Relief towards restoration of damage caused due to Natural Calamity***

The Commission in its Tariff Order dated 29.03.2017 had considered the funding of additional capitalisation of around Rs. 40.37 Crore as grant as the same was used to restore the damage caused due to natural calamity, which occurred in FY 2013-14 and directed the Petitioner to pursue the matter with the GoU and submit the quarterly status report to the Commission.

In this regard, the Petitioner during the True up proceedings for FY 2016-17 submitted that it had received Rs. 125.52 Crore on account of disaster relief for MB-II and the utilisation certificates for Rs. 67.82 Crore had been given to Government of Uttarakhand.

On examination of the above submissions, the Commission in its Order dated 21.03.2018 directed the Petitioner to submit the details of financial year-wise expenditures made against the grant amount received from GoU/GoI for respective works at the time of filing of True Up of FY 2017-18 and FY 2018-19.

In compliance to the above direction, the Petitioner during the True up proceedings for FY 2018-19 submitted the details of Financial year-wise expenditure made against the grant received from GoU/GoI for respective works. The Commission took note of the same and directed the Petitioner to submit the details of financial year-wise expenditures made against the grant amount received from GoU/GoI for respective works at the time of filing of True Up of FY 2019-20.

In compliance to the same, the Petitioner, vide its submission dated December 24, 2020 submitted that all the works amounting to Rs. 31.95 Crore had been completed in MB-I and utilization certificate for the same was already submitted to GoU. For MB-II, UJVN Ltd. submitted that works amounting to Rs. 122.93 Crore had been completed out of total grant amount of Rs. 125.52 Crore and remaining works of Rs. 2.59 Crore would be completed by March, 2021. UJVN Ltd. further submitted that utilization certificate of Rs. 67.82 Crore was submitted to GoU and the utilization certificate of balance amount would be submitted in March 2021. In view of the submissions made, the Commission directed the Petitioner to complete the rest of the works and submit the details of financial year-wise expenditures made against the grant amount received from GoU/GoI for respective works at the time of filing of True Up of FY 2020-21.

The Commission also during the proceedings of true-up of FY 2019-20 with regard to works of Rs. 125.52 Crore for which grant was received from GoI through GoU under disaster funding during 2013, observed that works amounting to Rs. 122.93 Crore had been completed out of total grant amount of Rs. 125.52 Crore and remaining works of Rs. 2.59 Crore were to be completed by March, 2021. UJVN Ltd. further, submitted that utilization certificate of Rs. 67.82 Crore was submitted to GoU and the utilization certificate of balance amount shall be submitted in March 2021. The Commission has noted the submissions of the Petitioner and accordingly directed the Petitioner to complete the remaining works and submit copy of utilization certificate along with the next Tariff filing.

In compliance to the above, the Petitioner vide its submission dated November 22, 2021 submitted the details of financial year wise expenditures made against the grant amount received

from GoU/GoI for respective works. The Petitioner also submitted that for MB-II works amounting to Rs. 125.52 Crore have been completed. However, the Petitioner didn't submit the utilization certificate in the instant Petition. Therefore, the Commission **directs the Petitioner to submit the copy of utilization certificate with the next Tariff filing.**

#### 6.4.2 RMU works of Khatima LHP

The Commission in its investment approval dated 17.05.2015 had given in-principle approval of Rs. 256 Crore towards RMU works subject to prudence check. In this regard, the Commission in its Tariff Order dated 29.03.2017 had directed the Petitioner to submit the audited RMU expenses as on date of completion of RMU works along with details of de-capitalisation in respect of the same as soon as the same is available including quantity. Further, the Petitioner was also directed to submit the details of scrap available on de-capitalisation of old Plant and machinery and expected time frame in which same would be disposed.

Accordingly, during the True up proceedings for FY 2016-17, the Petitioner complied to the directive of submission of details of scrap available on de-capitalisation. However, with regard to completion of entire scope of works of Khatima RMU, the Commission in its Tariff Order dated 21.03.2018 directed the Petitioner to complete all the works covered under RMU of Khatima LHP latest by the cut-off date, i.e. 31.03.2019, beyond which no expense (including IDC) in this regard would be allowed.

In compliance to this, the Petitioner during the True Up proceeding of FY 2017-18 submitted that it is making its all efforts to comply with the above directive of the Commission.

The Commission in its MYT Order dated 27.02.2019 again directed the Petitioner to complete all the works covered under RMU of Khatima LHP latest by the cut-off date, i.e. 31.03.2019, beyond which no expense (including IDC) in this regard would be allowed.

In compliance to the same, the Petitioner during the proceedings for true up of FY 2018-19 submitted that works covered under RMU, viz., Refurbishment of pole fencing around switch yard at Sharda Power Plant, Renovation works at 132 kV and 33 kV switchyard, and Installation of diffuser valves after manufacturing as per new design had not been completed and also submitted justification for the same. The Commission noted the submissions and considering that the works are related to safety of the Plant, it had directed the Petitioner to complete the said works as soon as

possible and cautioned that any occurrence of damage to safety of the Khatima LHP in future due to delay in execution of the works shall solely be attributable to UJVN Ltd.

In compliance to the above directive, the Petitioner submitted that RMU of machines had already completed in 2016, however, some civil works related to upstream and downstream were pending, which pertained to UPID and submitted that the efforts were made in the past to complete the said civil works through UPID. The Petitioner further submitted that UPID in meeting dated June 28, 2018 agreed to submit their estimates in this regard and communication to obtain the estimates and finalize the work was going on. Further, the Petitioner vide its letter dated February 18, 2021 submitted copies of recent communication held between August, 2019 and February, 2020 with UPID to discuss regarding the works to be carried out by UPID.

The Commission took note of the submissions of the Petitioner and further directed the Petitioner vide its Order dated April 26, 2021 to complete all the works covered under RMU of Khatima as soon as possible by making its best possible efforts and with regard to the pending works related to the safety of the Plant, the Commission again cautions that any occurrence of damage in future due to delay in execution of the works shall solely be attributable to UJVN Ltd.

In compliance to the above directives, the Petitioner vide instant Petition reiterated that the RMU of machines of Khatima has already been completed in 2016. However, the Civil work related to upstream and downstream is remaining. The upstream and downstream civil structure pertains to UPID. The Petitioner submitted that efforts had been made in past to get the works completed through UPID. UPID has to agree to submit their estimates, copy of order, fund utilization certificate etc. for which correspondence with UPID is going on to finalize the procedure to execute the work.

In this regard, the Commission vide letter dated December 23, 2021 directed the Petitioner to submit the latest documentary evidence of communication made with UPID. The Petitioner vide letter dated January 12, 2022 submitted the latest correspondence with UPID dated December 30, 2021 stating that General Manager (Ramganga & Sharda Valley), Executive Engineer, Head works department, official of UJVN Ltd. and UP Irrigation Department visited Sharda Main Canal, Bypass Channel, Scrap Channel etc. and certain observations have been made in the meeting dated December 16, 2021 and the discussions on the works are yet to be carried out.

The Commission has noted the submissions of the Petitioner and again **directs the Petitioner**

to complete all the works covered under RMU of Khatima as soon as possible by making its best possible efforts and with regard to the pending works related to the safety of the Plant, the Commission again cautions that any occurrence of damage in future due to delay in execution of the works shall solely be attributable to UJVN Ltd.

#### 6.4.3 *Non-Tariff Income*

The Commission in its Tariff Order dated 29.03.2017 observed that most of the 9 LHPs are under RMU, which involves replacement of old and obsolete equipment, which would be eventually disposed of, as it gets de-capitalised. In this regard, the Commission in its Tariff Order dated 29.03.2017 had directed the Petitioner to maintain proper accounting with regard to disposal of such assets including sale of scrap and submit the same separately along with subsequent tariff filings.

The Commission, during the previous True up proceedings observed that the Petitioner complied with the direction and submitted the details of the same. Further, the Commission had been directing the Petitioner to maintain proper accounting with regard to disposal of such assets including sale of scrap and submit the same separately along with subsequent tariff filings.

In compliance to the above, the Petitioner vide Petition submitted that the information will be submitted during the scrutiny of the Petition. The Commission vide letter dated December 23, 2021 directed the Petitioner to submit the same. The Petitioner again vide letter dated January 12, 2022 submitted that it will be submitted in due course of time. Further, vide letter dated January 22, 2022, the Commission observed that the Petitioner submitted the details of scrap for Dhakrani, Kulhal, Tiloth, MB-I, MB-II Civil and Head Office. For other Plants and Units, the Petitioner submitted that information may be considered as nil.

The Commission took note of the same and **further directed the Petitioner to maintain proper accounting with regard to disposal of such assets including sale of scrap and submit the same separately along with subsequent tariff filings.**

### 6.5 **Compliance to the Directives Issued in Tariff Order dated 21.03.2018**

#### 6.5.1 *Balance Capital Works of MB-II HEP*

The Commission in its Tariff Order dated 05.04.2016 had allowed expenses of Rs. 211.72 Crore for balance capital works of MB-II, however, the Petitioner in its Tariff Petition for FY 2017-18 had



revised the projection to Rs. 238.62 Crore to be incurred till FY 2018-19. The Petitioner in its Tariff Petition for FY 2019-20 had again revised the projection to Rs. 252.07 Crore till FY 2018-19. The Commission observed that the Petitioner had incurred Rs. 217.05 Crore (i.e. Rs. 190.06 Crore up to 31.03.2016 + Rs. 26.99 Crore in FY 2016-17) up to FY 2016-17 and was projecting to incur total Rs. 252.07 Crore by FY 2018-19 against balance capital works of MB-II HEP.

Accordingly, the Commission in its Tariff Order dated 27.02.2019 directed the Petitioner to complete all the works covered in the Petition of balance capital works of MB-II HEP latest by 31.03.2019, beyond which no expense (including IDC) in this regard would be allowed. Further, UJVN Ltd. was directed to complete the remaining works of Rs. 57.70 Crore for which it had received grant from GoI through GoU under disaster funding during 2013 and had directed to submit the copy of utilisation certificate along with the next Tariff filing.

In compliance to the above, the Petitioner during the true up proceedings for FY 2018-19 and FY 2019-20, submitted its justification for non-completion of the balance capital works of MB-II. The Commission observed that the pending works except testing of surge shaft gate are uncontrollable in nature as the same were pending before various Courts. With regard to the works pertaining to testing of surge shaft gate, the Commission observed that the works are very important with respect to safety of the Plant and delaying of such works may be catastrophic from Plant safety perspective. Accordingly, the Commission directed the Petitioner to complete the said works as soon as possible and cautioned that any occurrence of damage to safety of the MB-II in future due to delay in execution of the testing of surge shaft gate shall solely be attributable to UJVN Ltd.

With regard to the status of other pending works of Balance capital works of MB-II HEP apart from testing of surge shaft gate, as discussed in Chapter 4, the Petitioner vide its submission dated February 25, 2022, submitted the detailed status of the pending works.

Commission observed that the submission of the Petitioner is reiteration of its earlier submission made against the replies of the directive of previous Tariff proceeding. Therefore, the Commission **again directs the Petitioner to complete the said works as soon as possible and cautions that any occurrence of damage to safety of the MB-II in future due to delay in execution of the testing of surge shaft gate shall solely be attributable to UJVN Ltd. However, the Commission shall approve the additional capitalisation subject to prudence check during the truing up of the same.**

## 6.6 Compliance to the Directives Issued in Tariff Order dated 18.04.2020

### 6.6.1 Insurance Claim of Chilla HEP due to flooding event in July 13, 2018

The Commission during the true up proceedings for FY 2018-19 observed that the Petitioner had taken insurance for breakdown cover for Chilla HEP and the claim recovery was under progress with the expected claim of around Rs. 25.00 Crore. Accordingly, the Commission before allowing any expenditure on account of restoration of Chilla HEP, vide its Order dated April, 18, 2020, directed the Petitioner to submit the details of final Insurance claim received in the next Tariff proceedings.

In compliance to the above, the Commission observed that the Petitioner during the true-up proceedings for FY 2019-20 had claimed an amount of Rs. 32.77 Crore under two categories, viz., generation loss of Rs. 12.13 Crore and material damage of Rs. 20.64 Crore and the Insurance Company is currently looking in to the claim against the material damage claim and after that, the generation loss component shall be considered. The Petitioner submitted that the claim on material damage was being processed and was at final stages of discussion and the claim on account of generation loss was at initial stages of scrutiny. Considering the present status that the claim on account of generation loss is yet to be finalized, the Commission has not allowed any relaxation with regard to NAPAF or O&M expenses. Accordingly, the Commission had directed the Petitioner to expedite the claim process and submit the details of final Insurance claim received during the next tariff proceedings.

During the True-up proceeding for FY 2020-21, the Commission vide letter dated December 23, 2021 again directed the Petitioner to submit the current status of Insurance claim of Chilla HEP due to flooding event in July 13, 2018. The Petitioner vide its reply dated January 12, 2022 submitted as below:

*“Chilla Power House was damaged on 13.07.2018. The Power house was covered under the insurance policy of M/s Oriental Insurance Company. The insurance company along with the surveyor visited the Chilla Power House on 01.08.2018. Insurance claim amounting to Rs. 32.77 Crore submitted to Insurance company. In this regard, it is to bring to notice that due to incident of 13.07.2018 claim of Rs. 32.77 Crore were submitted along with the supporting documents. On the above claims, net assessed loss of Rs. 10.63 Crore has only been assessed by the surveyor which are merely 32.43% of loss, which has been assessed by UJVNL.*

*M/s Oriental Insurance company credited Rs. 4.96 Crore on 07.12.2021 against Rs. 10.63 Crore. Whereas Rs. 5.66 Crore shall be credited after settlement of scrap value. Tender of scrap/salvage was floated, tender was allotted to the M/s Global India Corporation at Rs. 1.25 Crore but M/s Global India Corporation requested that the firm wants 90 days' time for submission of amount. The firm was not able to submit the amount in this regards, Rs. 3 Lakhs was forfeit. In the above context remaining insurance claim shall be settle down after finalization of the salvage tender. Salvage tender shall be published on 10.01.2022".*

In view of the above, considering the fact that only Rs. 10.63 Crore of loss has been assessed by the surveyor against the claim of Rs. 32.77 Crore which is merely 32.43% of the claimed loss, therefore pending its finalization, the Commission **again directs the Petitioner to expedite the claim process and submit the details of final Insurance claim received in the next tariff proceedings.**

#### **6.6.2 Impact of NGT Order dated August 9, 2017 on Design Energy**

The Commission, while approving AFC for FY 2020-21 had provisionally approved downward revision of Design Energy of 9 LHPs by 194.02 MU for sole purpose of recovery of energy charges. In this regard, the Commission directed the Petitioner to maintain separate discharge data of rivers as well as the data of mandatory discharges being released in compliance to NGT Order and any other data to substantiate the impact. Further, the Petitioner should submit the data at the time of truing-up of FY 2020-21 and, thereafter, appropriate view would be taken by the Commission in this regard after carrying out due prudence check.

In compliance to the above, the Petitioner submitted that the Order of NGT has already been implemented in compliance of directives of GoU. Minimum 15% of e-flow is being released from all the Dams and Barrages. In Ganga valley projects, e-flow is being released at 20%, 25% and 30% in dry, lean and monsoon season, respectively. Release of e-flow is being monitored by CWC directly. The Petitioner further submitted that separate discharge data of the rivers as well as mandatory discharge are being maintained as per the directives of the Commission and the same is being submitted along with the Petitions. The Petitioner submitted the actual impact of NGT/NMCG Order for the months from April, 2020 to October 2020 as 259.40 MU.

The Commission took note of the above submission and directed the Petitioner to submit the information at the time of true up for FY 2020-21.

The Commission as discussed in Chapter 4 of this Order observed that the consolidated actual gross generation is higher than the design energy approved in the MYT Order. It was further observed that as Dhalipur and MB-I were under RMU, the generation from the said LHPs are lower than the design energy. It was further observed that the actual data do not compel as of now to further relaxation in the design energy for recovery of energy charges as proposed by the Petitioner for FY 2020-21.

The Commission is of the view that the norms specified through Regulations cannot be subject to frequent reviews unless there are compelling reasons to do so. Therefore, the Commission had not considered it appropriate in re-working the impact of NGT/NMGC Orders for FY 2020-21. However, the relaxation as provisionally approved for FY 2020-21 in the Tariff Order dated 18.04.2020 shall remain final for the purpose of true-up of FY 2020-21

The Commission during the proceedings of ARR for FY 2021-22, observed that the Petitioner had requested for downward revision of Original Design Energy to the extent as approved by the Commission in Order dated April 18, 2020. In this regard, the Commission observed that the impact of implementation of NGT/NMCG Order on Design Energy for FY 2021-22 cannot be precisely ascertained at this stage. However, in order to ensure that the Petitioner is not financially prejudiced on account of under recovery of energy charges, the Commission provisionally approved downward revision of Design Energy of 9 LHPs by 194.02 MU as considered by the Commission in Order dated April 18, 2020 for the sole purpose of recovery of energy charges.

The Commission further **directs the Petitioner to maintain separate discharge data of rivers as well as the data of mandatory discharges being released in compliance to NGT/NMCG Order and any other data to substantiate the impact.**

**Further, the Petitioner shall submit the data at the time of truing-up of FY 2021-22 and also for subsequent years, thereafter, appropriate view will be taken by the Commission in this regard after carrying out due prudence check.**

## **6.7 Compliance to the Directives Issued in Tariff Order dated 26.04.2021**

### **6.7.1 Delay in completion of RMU works**

The Commission during the proceedings of the ARR for FY 2021-22 had observed that the status of the RMU works were undergoing in variation with the schedule proposed during the MYT proceedings for Third Control Period with significant delay. In this regard, the Commission directed the Petitioner to ensure the completion of RMU works without any further delay as the generation loss as well as revenue loss occur on account of the same. Further with regard to the reasons for delay, the Commission would be considering the same during the prudence check at the time of truing up of the respective expenditures.

In compliance to the above, the Petitioner submitted that the delay in completion of RMU works was due to outbreak of Corona Virus (COVID-19) and Govt. of India (GOI)/State Govt had imposed a complete lock down during wave -I & wave-II of Covid-19. Despite UJVN Ltd. is making the best efforts to complete the RMU works of Power Plants in time.

The Commission has taken note of the submission made by the Petitioner and **the Commission directs the Petitioner to ensure that the RMU works are to be completed without any further delay thereby reducing the generation and revenue loss on account of the same.**

### **6.7.2 Expenditure proposed for implementation of recommendations made by Expert Consultant in case of MB-II**

The Commission during the proceedings of the ARR for FY 2021-22 had observed that the Petitioner, for implementation of recommendations made by Expert Consultant in case of MB-II, had proposed a significant expenditure and also submitted cost benefit analysis for the same. In this regard, the Commission was of the view that the submissions made by the Petitioner have to be examined with due care and, accordingly, directed the Petitioner to approach the Commission through a separate application before implementing the recommendations suggested by the Expert Consultant.

In compliance to the above, the Petitioner submitted that the Commission has directed UJVN Ltd. to approach the Commission through a separate application for implementing the recommendations suggested by Expert Consultants in respect to MB-II project, which includes the arrangement of better inventories for replacement of damaged components instead of in-situ

repairing to reduce the time required for annual maintenance of machines for the improvement of energy potential and NAPAF. In this regard the Petitioner submitted that a DPR will be submitted to the Commission at the earliest.

The Commission has taken note of the submission made by the Petitioner.

## 6.8 New Directives

### 6.8.1 *Solar Energy Business*

As discussed in Chapter 3 of this Order, the Petitioner is planning to add 111.75 MW of Solar Power Plants in ensuing years and as per the implementation schedule submitted by the Petitioner mostly addition would be in the Fourth Control Period. In this regard, UJVN Ltd., is cautioned to take extreme care with regard to BOO/BOOT Schemes and it should safeguard its commercial interests. **UJVN Ltd., is directed to ensure that expenses incurred on account of Solar power evacuation should be borne by the developer and any financial implication on account of solar power Plants should not be included in its ARR of respective HEPs.**

### 6.8.2 *Auxiliary Energy Consumption*

As discussed in Chapter 3 of this Order, the Commission vide TVS directed the Petitioner to comply with the Regulation 3(8) of the UERC Tariff Regulations, 2021 and record Auxiliary Energy Consumption separately for Sewage Treatment Plants (STPs) for its 10 LHPs/Dams/Barrages. UJVN Ltd. vide its reply dated 31.01.2022, UJVN Ltd. has submitted that the necessary arrangement for recording it separately will be done. The Commission has taken note of the submission and directs UJVN Ltd. to submit the actual figures of Auxiliary consumption in line with the aforesaid regulation during truing up of respective financial years, i.e. for FY 2022-23 to FY 2024-25.

Besides above, during scrutiny of submissions against instant Petitions, it has been observed that either Auxiliary Energy Consumption of Dams/Barrages are not being included in Auxiliary Energy Consumption of the respective HEPs or the same are not being apportioned amongst the HEPs as per apportionment philosophy/methodology. **Therefore, UJVN Ltd. is directed to ensure correct energy accounting of the Auxiliary Energy Consumption at its Dams/Barrages and their apportionment amongst respective HEPs as per apportionment philosophy/methodology.**

### 6.8.3 *Release of SOR*

As discussed in Chapter-4 of this Order, the Commission vide its letter dated February 16,

2022 directed the Petitioner to ensure the timely release of SOR of ensuing year, positively by 1st April of the ensuing year and the approved SOR to be uploaded in its websites for ready reference of all Units. The Petitioner vide its reply dated February 26, 2022 submitted that it shall take necessary steps in order to release the SOR within time line and publishing it in the website. **Therefore, the Commission directs the Petitioner to release its SOR for FY 2022-23 positively by 30.04.2022 and uploading of the same on its website. Further, SOR for the subsequent FY be released and uploaded prior to commencement of the respective FY.**

#### **6.8.4 Decapitalization Policy**

As discussed in Chapter 4 of this Order, the Commission vide TVS sought details of assets de-capitalised and the reasons for de-capitalisation of the assets.

The Petitioner submitted the details of De-cap of Rs. 14.74 Crore for MB-II LHP including the original value of asset (Rs. 14.74 Crore), value of asset damaged (Rs. 14.74 Crore), total depreciation recovered till the date of de-capitalization (for the damaged asset is Rs. 5.92 Crore) and value of insurance claim recovered (Rs. 14.57 Crore). The Petitioner also submitted that out of Rs. 14.74 Crore of decapitalized assets, Rs. 13.92 Crore were capitalized as on COD (15.03.2008) and Rs. 0.82 Crore was capitalized in FY 2010-11.

The Commission has gone through the submissions of the Petitioner and has taken serious note of delayed de-capitalisation of assets. It is observed that the assets were not in use since FY 2013-14 and due to delayed de-capitalisation, the Petitioner was recovering tariff on the assets that were not in service since FY 2013-14. Further, the Petitioner has carried out restoration works associated with such de-capitalisation in FY 2017-18 and such works were also being serviced through tariff. In view of recovery of tariff on such de-capitalised assets, the Commission has separately computed excess tariff recovered since the assets were not in service. As this is the first such instance, the Commission has not recovered such amounts with carrying cost, however the Commission cautions the Petitioner that in future any such adjustment shall entail carrying cost.

**The Commission directs the Petitioner that as a matter of de-capitalisation policy, the Petitioner should carry out de-capitalisation in the same year in which the asset is taken out from its useful service.**

### 6.8.5 *Booking under right Asset head*

As discussed in Chapter 4 of this Order, it is observed that for Construction of New Borewell has been booked under Major Civil work head at Khatima HEP. The Petitioner vide its reply dated February 25, 2022 requested the Commission to treat the same under Plant & Machinery head. The Commission has considered the Construction of New Borewell expense of Rs. 11.09 Lakh under the Plant & Machinery head.

Further, as discussed in Chapter 4 of this Order, the Commission, while scrutinizing the Additional Capitalization and R&M expenses of cost centres observed that ABT meters are being treated differently in different cost centers/Plants. For instance Chibro is claiming Rs.1.88 Lakh against Installation Charges of ABT Meters under R &M Expense whereas Chilla/Dhakrani/Dhalipur/Kulhal are claiming expenses under Additional Capitalization. In this regard, the Commission vide its letter dated February 16, 2022 sought a brief writeup on this booking issue. In response to the above, the Petitioner vide its reply dated February 26, 2022 submitted that Procurement/Expenditure in UJVN Ltd. is broadly categorized as under:

- O&M supplies.
- O&M Service.
- O&M works.
- Capital supply (Procurement of readymade assets).
- Capital works (SITC/Construction of assets).

The Petitioner also submitted that the process of procurement of Goods & Services/Works is implemented through SAP. Asset accounting in SAP is done asset wise instead of traditional accounting i.e. General Ledger (GLs) head wise. Accordingly, the asset code in SAP is created well before creation of Purchase Requisition.

In this regard, the Commission suggests that some checks & balances in the ERP/SAP system be implemented in order to have uniform treatment for same type of material/nature of work all across the different cost centres.



**Therefore, the Petitioner is directed to ensure booking of items appropriately under relevant head and any expenditure incurred on account of repetition of such instances in future shall be liable for disallowance.**

**6.8.6 *Proposed/Planned Additional capitalization Works***

As discussed in Chapter 4 of this Order, the Commission directs that any Plant specific works planned/proposed under add cap shall be carried out under a consolidated DPR duly approved by the Commission and should be completed within the approved timelines. So as to avoid any burden of IDC and price variations. In case, it is found that there has been inordinate delay in execution of the works, the Commission may take appropriate view in the next tariff proceedings.

**Further, with regard to the additional capitalization pertaining to Civil Works, the Commission directs the Petitioner to give priority to those Civil Works which directly/genuinely influence the generation of the Plant or are essentially required for safety of the Plants keeping in view of the budget provision.**

**6.8.7 *Security Expense under head of Administrative and General Expenses***

As discussed in Chapter 4 of this Order, Security expenses has been allowed by the Commission on actual basis for FY 2020-21. Hence, **the Petitioner is directed to furnish cost centre wise details of security expenses in future tariff/true-up filings.**


**The AFC of the Fourth Control Period shall be recoverable in accordance with the mechanism specified in UERC Tariff Regulations, 2021. The Tariffs approved in this Order shall be applicable from 01.04.2022 and shall continue to apply till further Orders of the Commission.**

**(M.K. Jain)  
Member (Technical)**

**(D.P. Gairola)  
Member (Law)/Chairman (I/c)**

## 7 Annexures

### 7.1 Annexure-1: Public notice on MYT Petition for FY 2022-23 to FY 2024-25


**UJVN LTD.**  
 HO "UJJWAL", Maharani Bagh, GMS Road, Dehradun-248006  
 CIN No. U40101UR2001SGC025866  
 Website: www.ujvn.com

Letter No. 1020 **Public Notice** Dated : 22.12.2021

Inviting Comments on Petitions filed by UJVN Limited before the Hon'ble Uttarakhand Electricity Regulatory Commission for Truing up of FY 2020-21, APR of FY 2021-22 and Determination of Multi Year Tariff for its 10 Large Hydro Generating Stations for FY 2022-23 to FY 2024-25.

**Salient Points of the ARR/Tariff Petition**

1. UJVN Ltd., a Government owned generating company, has filed the Petitions for the determination of Multi Year Tariff for the Fourth Control Period from FY 2022-23 to FY 2024-25 & Annual Performance Review of FY 2021-22 for its 10 Large Hydro Generating Stations before the Hon'ble Uttarakhand Electricity Regulatory Commission. Through the above Petitions, UJVN Ltd. has also proposed Truing up of its expenses for FY 2020-21 for its 9 old Hydro Generating Stations & Maneri Bhali-II HEP. The salient features of the Tariff Petitions filed by UJVN Ltd. for its 10 Large Hydro Generating Stations are given in the Table below:

AFC (Rs. Crore)							
	FY 2020-21 (True-up)		FY 2021-22 (APR)		FY 2022-23	FY 2023-24	FY 2024-25
Station	Approved (T.O. dt. 18.04.2020)	Claimed	Approved (T.O. dt. 26.04.2021)	Revised Estimated by UJVN Ltd.	Proposed by UJVN Ltd.	Proposed by UJVN Ltd.	Proposed by UJVN Ltd.
Dhakrani	27.92	29.19	32.07	30.85	35.7	43.98	52.01
Dhalipur	38.43	34.26	32.79	33.73	49.5	65.68	78.69
Chibro	85.94	84.31	89.93	96.05	106.32	120.15	131
Khodri	47.45	49.16	49.53	51.02	55.07	63.19	68.08
Kulhal	21.19	24.7	25.39	34.87	35.31	41.94	48.46
Ramganga	56.80	55.12	58.05	59.19	66.06	72.49	81.48
Chilla	68.66	74.7	77.35	85.68	97.2	120.53	144.88
MB-I	60.48	57.15	59.67	77.12	96.2	113.65	125.14
Khatima	42.87	47.37	44.78	50.67	51.6	61.78	73.41
MB-II	215.41	244.89	209.55	239.65	240.85	245.37	251.82
<b>Total</b>	<b>665.15</b>	<b>700.85</b>	<b>679.11</b>	<b>758.83</b>	<b>833.81</b>	<b>948.76</b>	<b>1054.97</b>

2. UJVN Ltd. has computed Gap of Rs. 44.73 Crore (excluding the gap of HPSEB and impact of carrying cost) by working out the difference of AFC claimed now vis-à-vis actual revenue collected in FY 2020-21.

3. UJVN Ltd. has proposed an increase of about 22.78% for FY 2022-23 (with respect to approved AFC for FY 2021-22). In case the entire claim of UJVN Ltd. is accepted by the Commission, an additional hike of around 1.73% in consumer tariff shall be required over and above the hike proposed by UPCL.


4. Detailed proposals as submitted by UJVN Ltd. can be seen free of cost on any working day in the Hon'ble Commission's office or at the office of UJVN Ltd., "UJJWAL", Maharani Bagh, GMS Road, Dehradun. Relevant extracts can also be obtained from the above-mentioned office of UJVN Ltd.

5. The proposals filed by UJVN Ltd. are also available at the website of the Hon'ble Commission ([www.uerc.gov.in](http://www.uerc.gov.in)) and at the UJVN Ltd.'s website ([www.ujvn.com](http://www.ujvn.com)).

6. Objections/suggestions are invited from the consumers and other stakeholders on the above proposals. These may be sent to the Secretary, Uttarakhand Electricity Regulatory Commission, either in person, or by post at 'VidyutNiyamak Bhawan', Near I.S.B.T., P.O. Majra, Dehradun-248171 or through e-mail to [secy.uerc@gov.in](mailto:secy.uerc@gov.in) as a statement of objections or comments with copies of the documents and evidence in support thereof so as to reach the Secretary by 31.01.2022.

**"Avoid Wasteful use of Electricity"**

7.2 Annexure-2: Public notice on Business Plan for FY 2022-23 to FY 2024-25



**UJVNL Limited**  
(An Uttarakhand Govt. Enterprises)  
H.O. "UJJWAL" Maharani Bagh, G.M.S. Road, Dehradun.-248006  
Telephone-0135-2763808 Fax 0135-2763508  
CIN No. U40101UR2001SGC025866 Website: www.ujvnl.com

**RO. No. 1025****Public Notice****Date: 23.12.2021**

Inviting Comments on Petition filed by UJVNL Limited for approval of the Business Plan for FY 2022-23 to FY 2024-25 (Fourth Control Period).

1. UJVNL Ltd., a Government owned generating company, has filed its Petition before the Hon'ble Uttarakhand Electricity Regulatory Commission (UERC) for approval of the Business Plan for FY 2022-23 to FY 2024-25 giving details of the activities proposed to be carried out by it during Fourth Control Period.
2. Detailed proposals as submitted by UJVNL Ltd. can be seen free of cost on any working day at the Commission's office or at the office of UJVNL Ltd., "UJJWAL", Maharani Bagh, GMS Road, Dehradun". Relevant extracts can also be obtained from the above-mentioned office of UJVNL Ltd.
3. The proposals filed by UJVNL Ltd. are also available at the website of the Hon'ble Commission ([www.uerc.gov.in](http://www.uerc.gov.in)) and at the UJVNL Ltd.'s website ([www.ujvnl.com](http://www.ujvnl.com)).
4. Responses/suggestions, if any are sought from all consumers and other stakeholders on the above proposals. Responses may be sent to the Secretary, Uttarakhand Electricity Regulatory Commission, either in person, or by post at 'Vidyut Niyamak Bhawan', Near I.S.B.T., P.O. Majra, Dehradun-248171 or through e-mail to [secy.uerc@gov.in](mailto:secy.uerc@gov.in) as a statement of objections or comments with copies of the documents and evidence in support thereof so as to reach the Secretary by **31.01.2022**.

**"Avoid wasteful use of Electricity"**

**7.3 Annexure-3: List of Respondents**

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Pankaj Gupta	President	Industries Association of Uttarakhand	Mohabewala Industrial Area, Dehradun- 248110
2.	Shri S.D Siddiqui	-	Galwalia Ispat Udhyog (P) Ltd.	Kashipur
3.	Shri B.P Maithani	President	RTI Club	Dehradun
4.	Sh. Vijay Singh Verma	-	-	Village Delna, P.O Jhabrera , Hardwar – 247665
5.	Shri S.K Agarwal	-	-	Chamber No. 40, South Block, Civil Court Compound, Dehradun
6.	Shri Sunil Gupta	Journalist	-	16-Chakrata Road, Dehradun

**7.4 Annexure-4: List of Participants in Public Hearings****List of Participants in Hearing at Ranikhet on 26.02.2022**

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Amar Singh Areda	-	-	Sadar Bazar, Vaani Photostat Shop, Ranikhet, Uttarakhand
2.	Sh. Harish Kumar	-	-	Hotel Ranikhet Grant, Ranikhet, Uttarakhand
3.	Sh. Rakesh Verma	-	-	Office of SDE (Rural), Bharat Sanchar Nigam Ltd. (BSNL), Almora, Uttarakhand
4.	Sh. Manish Chaudhary	-	-	511, Sadar Bazar, Ranikhet, Uttarakhand
5.	Sh. Mohan Negi	-	-	Subhash Chowk, Ranikhet, Uttarakhand
6.	Sh. Nikhil Kumar	-	-	Bhatt Photostat Shop, Gandhi Chowk, Ranikhet, Uttarakhand
7.	Sh. Rohit Sharma	-	-	Village-Badhan Chiliananula, Ranikhet, Uttarakhand
8.	Sh. Ajay Kumar Bablu	-	-	825, Gandhi Chowk, Ranikhet, Uttarakhand

**List of Participants in Hearing at Rudrapur on 27.02.2022**

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Balkar Singh Fauzi	-	-	Village-Raipur Khurd, P.O.-Kashipur, Distt. Udham Singh Nagar
2.	Sh. Rajiv Bhatnagar	-	-	D-1/4, Flat No. 61, Metropolis City, IIE, SIDCUL, Pantnagar, Rudrapur, Distt. Udham Singh Nagar
3.	Sh. Kalyan	-	-	Village-Ghardei, P.O.-Mahuakhera,

Sl. No.	Name	Designation	Organization	Address
	Singh			Kashipur, Distt. Udham Singh Nagar
4.	Sh. Arunesh Kumar Singh	-	-	Phalsunga, P.O.-Transit Camp, Rudrapur, Distt. Udham Singh Nagar
5.	Sh. Vikas Jindal	President	M/s Kumaon Garhwal Chamber of Commerce & Industry Uttarakhand	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt. Udham Singh Nagar
6.	Sh. Shakeel A. Siddiqui	Legal Consultant	M/s Galwalia Ispat Udyog Pvt. Ltd.	Narain Nagar Industrial Estate, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar
7.	Sh. R.K. Singh	Head (CPED and Construction & E)	M/s Tata Motors Ltd.	Plot No.-1, Sector-11, Integrated Industrial Estate, SIDCUL, Pantnagar-263153, Distt. Udham Singh Nagar.
8.	Sh. Ashok Bansal	Managing Director	M/s Rudrapur Solvents Pvt. Ltd.	7 <sup>th</sup> KM Stone, Rudrapur-Kichha Road, V.P.O. Lalpur-263148, Distt. Udham Singh Nagar
9.	Sh. Deepak Saini	-	M/s SRF Ltd.	Plot No. 12, Ramnagar Road, Kashipur, Distt. Udham Singh Nagar
10.	Sh. Jagdeesh Singh	-	-	Village-Dharampur, P.O. Chattarpur, Distt. Udham Singh Nagar
11.	Sh. Keshav Sharma	-	-	Village-Fauzi Matkota, Rudrapur, Distt. Udham Singh Nagar
12.	Sh. Prabhu Singh	-	-	Verma Line, Ward No. 3, Tanakpur, Champawat
13.	Sh. Umesh Sharma	Chairman (Power Cell)	SIDCUL Entrepreneur Welfare Society	Plot No. 1, Sector-9, IIE, SIDCUL, Pantnagar Industrial Area, Rudrapur, Distt. Udham Singh Nagar-263153
14.	Sh. Deepak Kumar	-	M/s Nestle India Ltd.	Plot No. 1A, Sector-1, Pantnagar, SIDCUL Industrial Area Road, Distt. Udham Singh Nagar-263153
15.	Sh. Sukha Singh Virk	-	-	Village & P.O. Chattarpur, Rudrapur, Distt. Udham Singh Nagar
16.	Sh. Sanjeev Kumar	Sr. General Manager (HR)	M/s Surya Roshni Ltd.	7th KM Stone, Moradabad Road, Kashipur, Distt. Udham Singh Nagar
17.	Sh. Praveen Singh	-	M/s Sanjay Technoplast Pvt. Ltd.	Pant Nagar Plant : Khata No. 182, Khasra No. 301 Min., Village-Fulsunga, Tehsil-Kichha, Rudrapur-263153, Distt. Udham Singh Nagar
18.	Sh. Ram Kumar Agarwal	-	M/s Umashakti Steels Pvt. Ltd.	Village-Vikrampur, Post Off.-Bazpur-262401, Distt. Udham Singh Nagar

Sl. No.	Name	Designation	Organization	Address
19.	Sh. Sanjay Kumar Adhlakha	Director	M/s Ambashakti Glass India Pvt. Ltd.	Plot No. 41, Sector 3, IIE, Pantnagar, Rudrapur-263153, Distt. Udham Singh Nagar
20.	Sh. Teeka Singh Saini	Block President	Bhartiya Kisan Union	Office-33, Katoratal, Kashipur, Distt. Udham Singh Nagar
21.	Sh. Sheetal Singh	-	-	Village-Jagatpur Patti, Kashipur, Distt. Udham Singh Nagar
22.	Sh. Dakshin Singh Deol	-	-	Village-Bharatpur, Kashipur, Distt. Udham Singh Nagar
23.	Sh. Jaagir Singh	-	-	Village-Bharatpur, Kashipur, Distt. Udham Singh Nagar
24.	Sh. Rajeev Gupta	-	M/s Kashi Vishwanath Steels Pvt. Ltd.	Narain Nagar Industrial Estate, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar
25.	Sh. Prem Narayan Singh	General Manager	M/s Shree Ambuja Castings (P) Ltd.	Village-Vikrampur, Industrial Estate, Ramraj Road, Bazpur-262401, Distt. Udham Singh Nagar
26.	Sh. Rajeev Jindal	Director	M/s Uttarakhand Ispat (P) Ltd.	Plot No. D-1 to D-8, Pipalia Industrial Area, Gram-Jagannathpur, Bazpur, Distt. Udham Singh Nagar
27.	Sh. Chandresh Agarwal	Dy. General Manager (Electricals)	M/s India Glycols Ltd.	A-1, Industrial Area, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar.

**List of Participants in Hearing at Dehradun on 02.03.2022**

Sl. No.	Name	Designation	Organization	Address
1.	Sh. B.P. Maithani	President	RTI Club	"Roopsadan", 58-Salangaon, Bhagwantpur, Dehradun-248009
2.	Sh. Yagya Bhushan Sharma	Secretary	RTI Club (Uttarakhand)	827/1, Sirmour Marg, Kaulagarh Road, Dehradun
3.	Sh. S.K. Singh	-	-	Dashmesh Vihar, Raipur Road, Dehradun
4.	Sh. Kawaljeet Singh	-	-	Dashmesh Vihar, Raipur Road, Dehradun
5.	Sh. Vijay Singh Verma	-	-	Village-Delna, P.O. Jhabrera, Roorkee-247665, Haridwar
6.	Sh. Shailendra Semwal	-	-	Mohkampur, Dehradun
7.	Sh. Veeru Bisht	-	-	Mohanpur, Post Off.-Premnagar, Dehradun-248007
8.	Sh. Vishwa Mitra	-	-	36, Panchsheel Park, Chakrata Road, Dehradun-248006
9.	Sh. D.S. Rawat	-	-	Village-Odda, P.O.-Khandusain, Pauri Garhwal-246001

Sl. No.	Name	Designation	Organization	Address
10.	Sh. Rajendra Chaudhary	General Secretary	Uttarakhand PCC	423/35, Civil Lines, Roorkee, Haridwar
11.	Sh. V.S. Bhatnagar	-	-	98/3, Near Hilton School, Bell Road, Clement Town, Dehradun
12.	Sh. Sunil Kumar Gupta	Editor	Teesri Aankh ka Tehalka	16, Chakrata Road (Tiptop Gali), Dehradun-248001
13.	Sh. Kavindra Singh Bisht	-	-	1148, Indira Nagar Colony, Seemadwar, Dehradun
14.	Sh. K.S. Pundir	-	-	House No. 2, Shantikunj, Lane No. 1-A, Lower Nathanpur, Dehradun
15.	Sh. S.P. Nautiyal	-	-	Lower Nehrugram, Dehradun
16.	Sh. S.K. Agrawal	Advocate	-	Chamber No. 40, South Block, Civil Court Compound, Dehradun
17.	Sh. Manvendra Singh	-	-	Sewla Khurd, Dehradun
18.	Sh. Surya Prakash	-	-	271/153, Dharampur, Araghar, One-way Haridwar Road, Dehradun
19.	Sh. Brijendra Mohan Joshi	-	-	46-C, Pathribagh, Dehradun
20.	Sh. Satya Prakash Chauhan	-	-	Bhagirathipuram, Tea Estate, Banjarawala, Dehradun
21.	Sh. Kishor Singh Rawat			Jwalpa Enclave, Near Jwalpa Mandir, Mohkampur, Dehradun
22.	Sh. Pankaj Gupta	President	M/s Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun
23.	Sh. Rajiv Agarwal	Sr. Vice-President	M/s Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun-248 110
24.	Sh. Sanjeev Kumar Sharma	Office Executive	M/s Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun
25.	Sh. Kamaldeep Kamboj	-	-	G-3, Janpath Shopping Complex, Chakrata Road, Dehradun
26.	Sh. Gulshan Khanduri	-	M/s Ganesh Roller Flour Mills	Mohabbewala Industrial Area, Subhash Nagar, Dehradun
27.	Sh. Vishal Bhardwaj	-	-	Buggawala, Haridwar
28.	Sh. Manmohan Bhardwaj	-	-	Buggawala, Haridwar
29.	Sh. Naveen Patwal	-	-	Khasra no. 504&506, Village-Sadhauri, P.O.-Jhabrera, Roorkee-247665, Haridwar
30.	Sh. Manish Gera	-	-	Village-Jalalpur Dada, Tehsil-Bhagwanpur, Haridwar
31.	Sh. Prashant Bhardwaj	-	-	Sai Lok, GMS Road, Dehradun

Sl. No.	Name	Designation	Organization	Address
32.	Sh. Anurag Sharma	-	-	Buggawala, Haridwar
33.	Sh. Arvind Sharma			Buggawala, Haridwar
34.	Sh. Hiresha Verma	-	-	13, Prakash Lok, Phase-2, Shimla Bypass Road, Dehradun
35.	Ms. Sunita Chaudhary	-	-	Village-Kheda Jat, Post Off.-Gurukul Narsan, Distt. Haridwar
36.	Sh. Dinesh Kumar Walia	-	-	Jagjeetpur, Near Chatrivala Kua, P.O.-Kankhal, Haridwar
37.	Sh. Dhruv Agrawal	-	-	8, Kalidas Road, Hathibarkala, Dehradun-248001

**List of Participants in Hearing at Kotdwar on 08.03.2022**

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Daulat Singh Rawat	-	-	Village-Maganpur, P.O.- Kishanpur, Kotdwar, Distt. Pauri Garhwal
2.	Sh. Kunwar Singh Rawat	-	-	Village-Maganpur, P.O.- Kishanpur, Kotdwar, Distt. Pauri Garhwal
3.	Sh. Mahendra Singh Negi	-	M/s Pushkar Steel Pvt. Ltd.	Padampur, Sukhro, Near Sunil Tent House, Lalpur Road, Kotdwar (Garhwal), Distt. Pauri Garhwal
4.	Sh. Subhash Chand	-	M/s Pushkar Steel Pvt. Ltd.	Jasodarpur, Kotdwar, Distt. Pauri Garhwal
5.	Sh. Arun Bahuguna	-	M/s Kotdwar Steel Pvt. Ltd.	Block-E, Jasodarpur Industrial Area, Maganpur, Kotdwar, Distt. Pauri Garhwal
6.	Sh. Sunil Singh Rawat	-	-	SLB-103, Aashiyana Housing Society, Near Motor Nagar, Behind Khushi Hotel, BAV Road, Sitabpur, Kotdwar-246149, Distt. Pauri Garhwal
7.	Sh. Devendra Pal Singh	-	-	Near Balaji Mandir, Lower Kalabarh, Kotdwar, Distt. Pauri Garhwal
8.	Sh. Jagdish Prasad Bhardwaj	-	-	Lalpul, Beladaat, P.O.-Padampur, Kotdwar, Distt. Pauri Garhwal
9.	Sh. J.S. Rana	-	-	Gusain Purum Colony, Sitabpur, Devi Road, P.O.-Kotdwar, Distt. Pauri Garhwal
10.	Sh. Pawan Agarwal	Vice-President	M/s Uttarakhand Steel Manufacturers Association	C/o Shree Sidhbal Industries Ltd., Kandi Road, Kotdwar, Uttarakhand
11.	Sh. Ripudaman Bisht	General Secretary	ofj"B ukxfjd laxBu	Office-Major Balam Singh Chandrawati Negi Sainik Kalyan Trust, Near Khushi Hotel, Devi Road, Kotdwar-246149, Distt. Pauri Garhwal



Sl. No.	Name	Designation	Organization	Address
12.	Sh. Kulbeer Singh Rawat	-	-	Village-Balasaur, Near Saraswati Vidya Mandir, Jankinagar-246149, Kotdwar, Distt. Pauri Garhwal
13.	Sh. A.K. Badola	-	-	House No.-17, Govind Nagar, Kotdwar-246149, Distt. Pauri Garhwal
14.	Sh. Atul Bhatt	-	Nagrik Manch	Malviya Udhyan, Kotdwar, Distt. Pauri Garhwal
15.	Sh. Chandresh Kumar Lakhera	-	-	Village-Lalpani, P.O.- Kumbhichaur, Ward No.-3, Kotdwar, Distt. Pauri Garhwal
16.	Sh. Indra Mohan Singh	-	-	Lower Kalabarh, Near Balaji Mandir, Kotdwar, Distt. Pauri Garhwal
17.	Sh. Rajesh Kumar	-	M/s Bhagya Shree Steel & Alloys Pvt. Ltd.	Jasodarpur, Kotdwar, Distt. Pauri Garhwal
18.	Sh. Balveer Singh Rawat	-	-	Village-Balasaur, Kotdwar, Distt. Pauri Garhwal
19.	Dr. Chandra Mohan Kharkwal	-	-	Sitabpur, Kotdwar, Distt. Pauri Garhwal
20.	Sh. Chandra Mohan Singh Negi	-	-	Shiv Nagar, Devi Road, Kotdwar, Distt. Pauri Garhwal
21.	Sh. Brijpal Singh Negi	-	-	Manpur, Kotdwar, Distt. Pauri Garhwal
22.	Sh. Anil Singh Negi	-	-	Near MKVN International School, Shibbu Nagar, Kotdwar, Distt. Pauri Garhwal
23.	Sh. Mujib Naithani	-	-	Lansdowne Bhawan, Near Devi Mandir, Sitabpur, Kotdwar, Distt. Pauri Garhwal
24.	Sh. Sandeep Joshi	-	-	Village-Sitabpur, Kotdwar, Distt. Pauri Garhwal
25.	Sh. Abhay Kala	-	-	Village-Kashirampur, Near Maheshwari Petrol Pump, Najibabad Road, Kotdwar-246149, Distt. Pauri Garhwal
26.	Sh. Digmohan Negi	-	-	Village-Chamolsain, P.O.-Banghat, Satpuli-246172, Distt. Pauri Garhwal
27.	Sh. Manorath Nirala	-	-	C/o Sh. Kailash Bisht, Near Patwal Chakki, Circuit House Road, Distt. Pauri Garhwal-246001
28.	Sh. D. S. Rawat	-	-	Village-Odda, P.O.-Khandyusain, Block-Koti, Distt. Pauri Garhwal-246001
29.	Sh. Rajendra Jajedi	-	-	Ward No. 3, Lalpani, Kotdwar, Distt. Pauri Garhwal
30.	Sh. Mahendra Pal Singh Rawat	-	-	Village-Ratanpur, P.O.- Kumbhichaur, Ward No.-1, Kotdwar, Distt. Pauri Garhwal
31.	Sh. Chandra Mohan Singh Rawat	-	-	Village-Jeetpur, P.O.- Kumbhichaur, Kotdwar, Distt. Pauri Garhwal

Sl. No.	Name	Designation	Organization	Address
32.	Sh. Rohit Dandriyal	-	-	399, Shayama Vihar Colony, Padampur, Sukhron, Kotdwar, Distt. Pauri Garhwal
33.	Sh. Harendra Singh Negi	-	-	Near Panchayat Ghar, Shibu Nagar, Kotdwar, Distt. Pauri Garhwal
34.	Sh. Umed Rawat	-	-	Badrinath Road, Near GGIC, Padampur, Sukhron, Kotdwar-246149, Distt. Pauri Garhwal
35.	Sh. Ashish Kimothi	-	-	Kalabarh, Kotdwar, Distt. Pauri Garhwal

## 7.5 Annexure-5: List of items shifted from R&M to Add Cap for FY 2020-21

Sl. No.	Reference No.	Asset Name/Description	Amount in Rs.
<b>MB-II</b>			
<b>Plant &amp; Machinery</b>			
1.	74070001, 22-05-2020	245 KV CVT for 220 KV switchyard (Stock Items)	772900
2.	74070001, 25-05-2020	245 KV CVT for 220 KV switchyard (Stock Items)	1545800
3.	74070001, 27-06-2020	245 KV CVT for 220 KV switchyard (Stock Items)	772900
4.	74070001, 03-07-2020	245 KV CVT for 220 KV switchyard (Stock Items)	772900
<b>Total amount transferred from R&amp;M to Add Cap</b>			<b>3864500</b>
<b>Khatima Power Plants</b>			
<b>Plant &amp; Machinery</b>			
1.	5200002191, 20-11-2020	Dewatering pump 4SR-20M/100	6,68,344.92
<b>Total amount transferred from R&amp;M to Add Cap</b>			<b>6,68,344.92</b>
<b>Civil Dhalipur</b>			
<b>Major Civil Works</b>			
1.	19/2019-20 Dt.14.01.2020 DKP	Slope Protection works of silt ejector channel of Dakpathar barrage	3,04,48,838.00
2.	19/2019-20 Dt.14.01.2020 DKP	Slope Protection works of silt ejector channel of Dakpathar barrage	2,33,47,369.00
<b>Total amount transferred from R&amp;M to Add Cap</b>			<b>5,37,96,207.00</b>
<b>List of items shifted from R&amp;M to Add Cap pertaining to the DRIP works in FY 2020-21</b>			
<b>Ichari Dam</b>			
1.	-	Supply, Installation, testing & commissioning of 2 Nos 16m High mast & AMC (1+4) years at Ichari Dam	200000
		<b>Total</b>	<b>200000</b>
<b>Expenditure pertaining to Chibro LHP</b>			<b>133300</b>
<b>Expenditure pertaining to Khodri LHP</b>			<b>66667</b>
<b>Dakpathar Barrage</b>			
1.	-	Engineering, Design, Supply, Erection, Testing and Commissioning of the complete automation of barrage control and monitoring systems for water distribution and barrage.	500000
		<b>Total</b>	<b>500000</b>
<b>Expenditure pertaining to Dhakrani LHP</b>			<b>199120</b>
<b>Expenditure pertaining to Dhalipur LHP</b>			<b>300088</b>
<b>Asan Barrage</b>			
1.	-	Complete Automation including engineering, design, supply, erection, testing & commissioning of Barrage control and monitoring system for water distribution and barrage management at Asan Barrage, Dhalipur (Dehradun) along with AMC for 5 years	900000
		<b>Total</b>	<b>900000</b>
<b>Expenditure pertaining to Kulhal LHP</b>			<b>900000</b>
<b>Grand Total Expenditure pertaining to DRIP works transferred to Add Cap</b>			<b>1600000</b>
<b>Grand Total of expenses transferred from R&amp;M to Add Cap</b>			<b>5,99,29,051.92</b>

## 7.6 Annexure-6: List of items disallowed/deferred by the Commission in FY 2020-21

### List of items disallowed/deferred from the claim of Add cap expenses for FY 2020-21

Sl. No.	Reference No.	Asset Name	Amount in Rs.
<b>Chilla HEP</b>			
<b>Plant &amp; Machinery</b>			
1.	8200000659 31.03.2021	Restoration of Machine No#4 of Chilla Power Plant	36,48,630.80
		<b>Total disallowed claim of Add cap expenses</b>	<b>36,48,630.80</b>
		<b>Grand Total of disallowed claim of Add cap expenses</b>	<b>36,48,630.80</b>

### List of items disallowed/deferred from the claim of R&M expenses for FY 2020-21

Sl. No.	Reference No.	Asset Name	Amount in Rs.
<b>MB-II</b>			
<b>Plant &amp; Machinery</b>			
1.	74070001 13-03-2021	220kV SF6 Circuit Breaker	15,00,000.00
2.	74070001 13-03-2021	220kV SF6 Circuit Breaker	15,00,000.00
		<b>Total deferred claim of R&amp;M expenses</b>	<b>30,00,000</b>
<b>Chilla HEP</b>			
<b>Plant &amp; Machinery</b>			
1.	2600006839 31.03.2021	Overhauling of 42.5 MVA GTF 11/139 KV (deferred on account of flood incident machine No. 4)	96,64,200.00
		<b>Total disallowed claim of R&amp;M expenses</b>	<b>96,64,200.00</b>
		<b>Grand Total of deferred/disallowed claim of R&amp;M expenses</b>	<b>1,26,64,200.00</b>

### CSR Expense disallowed from the claim of A&G expenses for FY 2020-21

Sl. No.	Name of Plant	Amount in Rs. Crore
1.	Dhakrani	0.19
2.	Dhalipur	0.29
3.	Chibro	1.35
4.	Khodri	0.68
5.	Kulhal	0.17
6.	Ramganga	1.20
7.	Chilla	0.87
8.	MB-I	0.48
9.	Khatima	0.25
10.	MB-II	0.87
	<b>Total A&amp;G to be Disallowed on account of CSR works</b>	<b>6.34</b>

## 7.7 Annexure-7: Details of Balance Capital Expenditure for MB-II

Sl. No.	Description of claimed item	Estimated amount as per DPR. (in Rs. Cr.)	Revised estimated cost (in Rs. Cr.)	Expenditure upto FY 2019-20 (in Rs. Cr.)	2020-21 (in Rs. Cr.)	2021-22 (in Rs. Cr.)	Total (in Rs. Cr.)
1.	Rehabilitation	15.56	27.32	23.59	0.00	0.30	23.89
2.	Construction of school building for Saraswati Shishu Mandir School in Shaktipuram Colony Chinyalisaur	2	2.72	2.19	0.00	0.00	2.19
3.	Modification of tail race channel.	24	27.3	27.30	0.00	0.00	27.30
4.	Compensation for the affected people	1.14	1.14	0.48	0.00	0.50	0.98
5.	Payments to M/s NPCC against claims of Principal Agreement in accordance to the decision of High Power Committee.	12.86	12.19	12.19	0.00	0.00	12.19
6.	Construction of Cement Concrete Protection wall around Joshiyara barrage reservoir.	83.08	75.87	52.29	0.00	0.00	52.29
7.	Construction of Office Building at Joshiyara.	1.03	1.06	1.06	0.00	0.00	1.06
8.	Construction of officer's residence at Joshiyara colony. (Annexure-CE-8)	1.1	1.15	1.15	0.00	0.00	1.15
9.	Construction of 04 Nos Type-IV Residences and 01 Nos Type-V Residence in Shaktipuram Colony, Chinyalisaur.	1.1	1.12	0.68	0.00	0.00	0.68
10.	Strengthening of water distribution system of Shaktipuram colony, Chinyalisaur.	0.89	0.84	0.84	0.00	0.00	0.84
11.	Construction of workshop building at Dharasu power house of MB-II project.	1.69	1.6	0.92	0.00	0.00	0.92
12.	Protection work on hill slope behind Dharasu power house.	2.57	3.12	3.07	0.00	0.00	3.07
13.	Construction of Road from Joshiyara Bridge to Flushing conduit on left Bank (1.2 km) and from Barrage to NH-108 on Right Bank (0.4 Km).	2.22	3.3	2.27	0.42	0.00	2.69
14.	Construction of Infrastructure works for affected villagers from Joshiyara, Gyansu and Kansain village as per their demands.	9.5	9.5	2.44	1.68	9.15	13.27
15.	Construction of boundary wall, security fencing and gate for Shaktipuram colony and Shifting of existing boundary wall of Shaktipuram colony and provide the separate way for villagers behind Shaktipuram colony.	1.21	1.12	0.97	0.00	0.00	0.97
16.	Testing of surge shaft gate.	5	5	0.00	0.00	0.00	0.00

Sl. No.	Description of claimed item	Estimated amount as per DPR. (in Rs. Cr.)	Revised estimated cost (in Rs. Cr.)	Expenditure upto FY 2019-20 (in Rs. Cr.)	2020-21 (in Rs. Cr.)	2021-22 (in Rs. Cr.)	Total (in Rs. Cr.)
17.	River training works from Dharasu Steel bridge to Dharasu Power house up to TRC.	2	3.63	3.37	0.27	0.00	3.64
18.	Slope protection work on uphill side of Surge shaft.	0.9	1.3	1.26	0.00	0.00	1.26
19.	Consultancy expenditure on TRC works & other works except for Joshiyara Barrage.	2	0.79	0.66	0.00	0.00	0.66
20.	Liabilities against major civil contract of MB-II Project.			0.11	0.00	0.00	0.11
a)	Reimbursement of Sales Tax.	8.15	19.24	19.24	0.00	0.00	19.24
b)	Reimbursement of royalty.	0.45	0.45	0.00	0.00	0.00	0.00
c)	Award given by the arbitrator in favour of M/s Hydel Construction (P) Ltd against dispute related to swellex Rock Bolt, Steel Fibre as Extra Item and loss due to flood along with interest of Rs. 95424/- per month.	30.73	35.3	35.30	0.00	0.00	35.30
d)	Payment against misc. Works.	0.26	0.26	0.19	0.00	0.00	0.19
e)	Security.	0.35	0.35	0.26	0.00	0.00	0.26
f)	Pending payment of GSI.	0.95	0.95	0.00	0.95	0.00	0.95
g)	Expenditure incurred for arbitration.	1	2	1.19	0.00	0.80	1.99
h)	Claim due to incentive & Idle Charges			0.00	0.00	0.00	0.00
i)	Claim due to foreclosure			0.00	0.00	0.00	0.00
	IDC amount claimed by UJVN Ltd. against the works of Balance capital works petition in FY 2016-17 (provisionally allowed by the Commission in TO dated 21.03.2018)			17.56	0.00	0.00	17.56
	An adjustment entry considered to nullify the impact of decapitalisation of Rs 36.94 Crore considered by UJVN Ltd. in FY 2017-18*.			36.94	0.00	0.00	36.94
	Payment of decree amount to M/s Continental Company Ltd against arbitration case of MB-II			0.00	1.99	1.19	3.18
<b>Total</b>		<b>211.74</b>	<b>238.62</b>	<b>247.52</b>	<b>5.31</b>	<b>11.94</b>	<b>264.77</b>

\* In FY 2017-18, UJVN Ltd. has considered a de-cap of Rs. 36.94 Crore against works covered under S. No. 6 above i.e. Construction of Cement Concrete Protection wall around Joshiyara barrage reservoir, as grant was received from GoU in FY 2017-18 against the said works executed in FY 2015-16. In this regard, it is observed that the Commission in its Tariff Order dated 23.03.2017 had considered the funding of additional capitalisation of around Rs. 40.37 Crore through grants from GoU and now UJVN Ltd. has received a grant of Rs. 36.94 Crore against the same in FY 2017-18. Therefore, an entry of +36.94 Crore is added to ascertain the actual amount of additional capitalisation done in FY 2017-18 by UJVN Ltd. against the Balance capital works Petition in FY 2017-18.

## 7.8 Annexure-8: Details of the Additional Capitalisation for MB-II (Other works not covered under Balance Capital Works)

Sl. No.	Description of claimed item	Estimated Amount as Per DPR (Rs. In Lakhs)	Agreement Amount (In Lakhs)	2016-17 (Actual)	2017-18 (Actual)	2018-19 (Actual)	2019-20 (Actual)	2020-21 (Actual)	2021-22 (Proposed)
1	Renovation and Modification of Roller Bucket, Guide Wall and Piers of Joshiyara Barrage MB-II, Uttarkashi (Annexure A-1)	495.00	468.46	112.00	286.95	0.00	69.51	0.00	0.00
2	Design, Supply, Erection, Commissioning & Testing of Sewer Treatment Plant with (STP) with BIO-DIGESTER, REED BED & ETP at Dharasu Power House, MB-II, Uttarkashi.	30.59	26.13	10.00	13.26	0.00	2.88	0.00	0.00
3	Reconstruction and laying of Semi Dense Bituminous Concrete (SDBC) of Roads from Switchyard to Surge shaft at Dharasu Power House of MB-II Project. 6% deducted sale tax + 10.50% service tax = Rs 3.27 L	90.89	77.78	0.00	55.88	21.99	0.00	0.00	0.00
4 (a)	Reconstruction and laying of Semi Dense Bituminous Concrete (SDBC) of Roads of Shaktipuram colony, Chinyalisaur of MB-II Project. (Annexure A-4)	126.5	119.85	0.00	66.84	0.00	53.01	0.00	0.00
4(b)	Balance reconstruction and laying of Semi Dense Bituminous Concrete (SDBC) of Roads at Shaktipuram Colony, Chinyalisaur, MB-II Project, Uttarkashi."	117.53	138.56	0.00	0.00	0.00	0.00	0.00	138.56
5	Design, Supply, Erection, Commissioning & Testing of Sewer Treatment Plant with (STP) with BIO-DIGESTER, REED BED & ETP and Laying of sewer line in Joshiyara colony, Uttarkashi.	90	74.98	0.00	0.00	0.00	0.00	83.78	0.00
			74.95	0.00	0.00	0.00	0.00	0.00	74.95
6	Fencing and CC road work of Office and Residential colony of Joshiyara Uttarkashi.	70	76.97	0.00	51.08	0.00	21.46	0.00	0.00
7	CC Road and Fencing work from Police line to Sadhubela Gyansu at right side Uttarkashi.	145	142	0.00	29.08	25.79	0.00	79.87	0.00
8	Renovation of water treatment Plant in Joshiyara Uttarkashi.	30	27.78	0.00	13.68	5.59	4.00	0.00	0.00
9	Slope protection of hill slope from chainage 30 to 180 Rm from Dharasu steel bridge to Dharasu Power House of Maneri Bhali Project Stage -II at Dharasu, Uttarkashi. (Annexure A-9)	70	78.05	0.00	0.00	0.00	78.05	0.00	0.00
10	Security Fencing and misc. civil work around Shring Camp and NPCC campus area.	65	65.68	0.00	32.28	0.00	33.41	0.00	0.00

Sl. No.	Description of claimed item	Estimated Amount as Per DPR (Rs. In Lakhs)	Agreement Amount (In Lakhs)	2016-17 (Actual)	2017-18 (Actual)	2018-19 (Actual)	2019-20 (Actual)	2020-21 (Actual)	2021-22 (Proposed)
11(a)	Laying of sewer line in Shaktipuram Colony Ag. Amount= 150.34+GST extra after variation = 170.97+ GST extra with GST Variation amount=201.74	175	201.74	0.00	0.00	0.00	0.00	201.75	0.00
11(b)	Execution of household sewage service connection to existing sewage network and balance appurtenant works at Shaktipuram Colony Chinyalisaur, Uttarkashi.	60.45	60.15	0.00	0.00	0.00	0.00	0.00	60.15
11(c)	Supply, Erection, Commission & Testing of Sewage Treatment Plant capacity 120 KLD with automatic membrane Bio-Reactor (MBR) including operation & maintenance for two years at Plant store, Chinyalisaur.	75	146.01	0.00	0.00	0.00	0.00	0.00	146.01
12	Renovation of spillway Gate no. 1,2 & 3 of Joshiyara Barrage			0.00	0.00	0.00	0.00	0.00	0.00
13 (a)	Flood protection works right bank of Bhagirathi River in front of Tail Race Channel at Dharasu Power House near Hitara village, Dharasu, Uttarkashi.	297.6	271.56	0.00	0.00	117.61	153.96	0.00	0.00
13 (b)	Balance protection works right bank of Bhagirathi River in front of Tail Race Channel at Dharasu power house near Hitara village, Dharasu, Uttarkashi.		199.19	0.00	0.00	0.00	0.00	0.00	199.19
13 (c)	Balance flood protection work left bank of Bhagirathi River ahead TRC outlet Chainage 100 mtr to chainage 200mtr at Dharasu Power House, MB-II, Dharasu, Uttarkashi.		149.86	0.00	0.00	0.00	0.00	0.00	147.87
14	Balance work of slope protection on hill slope behind Surge Shaft Tank of Maneri Bhali Project stage -II at Dharasu Uttarkashi.	92	92	0.00	0.00	0.00	0.00	0.00	0.00
15 (a)	Construction of multipurpose hall (Badminton court, Gym, Table Tennis etc) at Shaktipuram Colony, Chinyalisaur.	120	113.32	0.00	0.00	0.00	113.31	0.00	0.00
15 (b)	Balance Construction work of Badminton Hall /Multipurpose Hall at Shaktipuram Colony, Chinyalisaur, Uttarkashi.		89.55	0.00	0.00	0.00	0.00	0.00	89.55
16	Construction of Security hut and its associate work at Dharasu Power House Complex at Dharasu, Uttarkashi.	31.03	30.28	0.00	17.09	0.00	13.19	0.00	0.00
17	Renovation and modernization of officer's field hostel at Shaktipuram Colony Chinyalisaur, Uttarkashi. 6% deducted sale tax = Rs 2.10 L	40	41.37	0.00	10.19	0.00	28.60	0.00	0.00



Sl. No.	Description of claimed item	Estimated Amount as Per DPR (Rs. In Lakhs)	Agreement Amount (In Lakhs)	2016-17 (Actual)	2017-18 (Actual)	2018-19 (Actual)	2019-20 (Actual)	2020-21 (Actual)	2021-22 (Proposed)
18	Construction of security hut & fencing at Dhanari Gad Adit of MB-II Project at Dhanari, Uttarkashi.	40	38.6	0.00	17.40	0.00	20.21	0.00	0.00
19	Construction of garage & vehicle shed at Shaktipuram Colony Chinyalisaur, Uttarkashi.	70	71.48	0.00	32.14	37.18	0.00	0.00	0.00
20	Renovation and modernization of BP type Quarters at Shaktipuram colony Chinyalisaur, Uttarkashi. 6% deducted sale tax = Rs 2.23 L	45	43.76	0.00	24.13	0.00	19.63	0.00	0.00
21	Renovation and modernization of CP type Quarters in Shaktipuram colony Chinyalisaur, Uttarkashi. 6% deducted sale tax = Rs 3.72 L	45	77.73	0.00	0.00	73.19	0.00	0.00	0.00
22	Renovation and modernization of balance CP type Quarters in Shaktipuram Colony Chinyalisaur, Uttarkashi	30	103.98	0.00	0.00	0.00	103.78	0.00	0.00
23	Renovation and modernization of Type -III Club near Shiv Mandir at Shaktipuram Colony Chinyalisaur, Uttarkashi. 6% deducted sale tax = Rs1.74 L	35	34.26	0.00	0.00	15.43	18.60	0.00	0.00
24	Reconstruction of damaged left-wing wall at d/s of Joshiyara barrage	1993.36	1993.36	0.00	0.00	0.00	0.00	2290.73	0.00
	Consultancy services for drawing, design, technical supervision for wing wall construction		38.00	0.00	0.00	0.00	0.00	0.00	38.00
25	Construction of GM Office Room with toilet at Shaktipuram Colony, Chinyalisaur		23.88	23.88	-11.15	0.00	0.00	0.00	0.00
26	Purchase/TR of asset from HO (Computer, Printer etc.		1.40	0.00	1.40	0.00	0.00	0.00	0.00
27	<b>Other works (works not covered under Balance Capital Works) (in Lakh)</b>	<b>4479.95</b>	<b>5192.67</b>	<b>145.88</b>	<b>640.24</b>	<b>296.78</b>	<b>733.60</b>	<b>2656.13</b>	<b>894.28</b>

(1) Rs 0.53 Crore for work at Sl. No. 4(a) for FY 2019-20 was not allowed by UERC in add cap. UERC vide its Tariff order dated April 26, 2021 on page 43 has shifted this expenditure in R&M expenses.  
(2) FY 2016-17- 1.46 Crore (Allowed by UERC in its Tariff order dated 21-03-2018)  
(3) FY 2017-18 - 6.40 Crore (Allowed by UERC in its Tariff order dated 27-02-2019)  
(4) FY 2018-19 - 2.97 Crore (Allowed by UERC in its Tariff order dated 18-04-2020)  
(5) FY 2019-20 - 6.81 Crore (Allowed by UERC in its Tariff order dated 26-04-2021. Rs 0.53 Crore of repair of roads in Shaktipuram Colony has been shifted in O&M work)  
(6) FY 2020-21 - 26.56 Crore (For FY 2020-21 and is being submitted for consideration in True-up)