

Order
On
True up for FY 2015-16,
Annual Performance Review
for FY 2016-17
&
Annual Fixed Charges
for FY 2017-18
For
UJVN Ltd.
March 29, 2017

**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 Nos.: 52 to 61 of 2016

In the Matter of:

Petitions filed by UJVN Ltd. for True up for FY 2015-16, Annual Performance Review for FY 2016-17 and Annual Fixed Charges for FY 2017-18 for 10 LHPs.

In the Matter of:

UJVN Ltd.

UJJWAL, Maharani Bagh, GMS Road, Dehradun.

.....Petitioner

Coram

Shri Subhash Kumar

Chairman

Date of Order: March 29, 2017

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 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 06.05.2013 for the 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 10.04.2014, 11.04.2015 and 05.04.2016 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 Order on approval of Business Plan and Multi Year Tariff dated 05.04.2016 for the Control Period from FY 2016-17 to FY 2018-19. As per the provisions of Regulation 12 of the UERC Tariff Regulations, 2015, UJVN Ltd. (hereinafter referred to as “UJVN Ltd.” or “the Petitioner”) filed the Petitions (Petitions No. 52 to 61 of 2016 and hereinafter referred to as the “Petitions”), giving details of its revised projections of Annual Fixed Charges (AFC) for FY 2017-18, based on the true up for FY 2015-16 and Annual Performance Review for FY 2016-17 on 25.11.2016.

The Petitions filed by UJVN Ltd. had certain infirmities/deficiencies which were informed to UJVN Ltd. vide Commission’s letter no. UERC/6/TF/359/2016/1352 dated 01.12.2016 and UJVN Ltd. was directed to rectify the said infirmities in the Petitions and submit certain additional information necessary for admission of the Petitions. UJVN Ltd. vide its letter no. 1625/UJVNL/02/D(O) dated 07.12.2016 has removed the critical deficiencies. Based on the submission dated 07.12.2016 made by UJVN Ltd., the Commission vide its Order dated 08.12.2016 provisionally admitted the Petitions for further processing subject to the condition that UJVN Ltd. shall furnish any further information/clarifications as deemed necessary by the Commission during the processing of the Petitions, 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.

This Order, accordingly, relates to Annual Performance Review Petitions filed by UJVN Ltd. for true up for FY 2015-16, APR for FY 2016-17 and revised AFC for FY 2017-18 and is based on the original as well as all the subsequent submissions made by UJVN Ltd. during the course of the proceedings and the relevant findings contained in the MYT Order dated 06.05.2013, Tariff Order dated 11.04.2015 and MYT Order dated 05.04.2016.

Tariff determination being the most vital function 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 tariffs. 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' Responses & Petitioner's Comments
Chapter 3 -	Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing up for FY 2015-16
Chapter 4-	Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2016-17, Revised AFC & Tariff for FY 2017-18
Chapter 5-	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 major 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 06.05.2013 approved the Business Plan and Multi Year Tariff for UJVN Ltd. for the first Control Period FY 2013-14 to FY 2015-16. Further the Commission vide its Orders dated 10.04.2014, 11.04.2015 and 05.04.2016 had carried out the Annual Performance Review for FY 2013-14, FY 2014-15 and FY 2015-16 respectively.

In exercise of powers conferred to it under Section 61 of the Electricity Act, 2003, and all other powers enabling it in this behalf, the Commission notified the UERC Tariff Regulations, 2015 on 10.09.2015. These Regulations superseded the UERC Tariff Regulations, 2011.

The Commission vide its Order dated 05.04.2016 approved the Business Plan and Multi Year Tariff for UJVN Ltd. for the second Control Period FY 2016-17 to FY 2018-19. The Commission, in the approval of Business Plan, approved the Capital Expenditure Plan, Capitalisation Plan, Human Resource Plan and Trajectory of the performance parameters and, in the approval of MYT, approved the Aggregate Revenue Requirement for each year of the Control Period from FY 2016-17 to FY 2018-19. In accordance with Regulation 12 of the UERC Tariff Regulations, 2015, the Generating Company is required to file a Petition for Annual Performance Review by November 30 of every year.

In compliance with the Regulations, UJVN Ltd. filed its Petitions for Annual Performance Review for FY 2016-17 on 25.11.2016. Through the above Petitions, UJVN Ltd. sought true up for FY 2015-16, APR for FY 2016-17 and AFC for FY 2017-18 based on the audited accounts for FY 2015-16. The above Petitions were provisionally admitted by the Commission vide its Order dated 08.12.2016. In order 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., the Commission, through its Admittance Order dated 08.12.2016, directed UJVN Ltd. to publish the salient points of its proposals in the leading newspapers. The salient points of the proposal were published by the Petitioner in the following newspapers:

Table 1.1: Publication of Notice

S. No.	Newspaper Name	Date Of Publication
1	Amar Ujala	10.12.2016
2	Dainik Jagaran	10.12.2016
3	Times of India	11.12.2016
4	Hindustan Times	11.12.1016

Through above notice, stakeholders were requested to submit their objections/suggestions/comments latest by 31.01.2017 (copy of the notice is enclosed as **Annexure- 1**). The Commission received in all three (3) objections/suggestions/comments in writing on the Petitions filed by UJVN Ltd. The list of stakeholders who have submitted their objections/suggestions/comments in writing is enclosed as **Annexure-2**.

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

S. No.	Place	Date
1	Almora	21.02.2017
2	Rudrapur	22.02.2017
3	Dehradun	02.03.2017
4	New Tehri	03.03.2017

The list of participants who attended the Public Hearing is enclosed at **Annexure-3**.

The Commission also sent the copies of the salient features of 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. The Commission also held a meeting with the Members of the Advisory Committee on 08.03.2017, 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 public hearing 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.

Meanwhile, based on the scrutiny of the Petitions submitted by UJVN Ltd., the Commission vide its letter no. UERC/6/TF/359/Petitions No. 52 to 61 of 2016/1431 dated 20.12.2016, pointed out certain data gaps in the Petitions and sought following additional information/clarifications from the Petitioner:

- Detailed breakup of R&M expenses.
- Reconciliation of additional capitalization with audited accounts for FY 2015-16
- Details of bills of water tax paid for FY 2015-16 and FY 2016-17.
- Quarter wise interest paid, refund received and repayment of actual loan for FY 2015-16
- Sub-asset breakup of additional capitalization claimed during FY 2015-16.
- Asset wise de-capitalization for each station
- Supporting documents vide which GoU loans have been disbursed.
- Sub-head wise expenses incurred/proposed to be incurred on works covered under Balance Capital Expenditure for MB-II generating station.

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 09.01.2017, 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/6/TF/359/Pt. No. 52 to 61 of 2016/1565 dated 11.01.2017, for its response.

The Petitioner submitted the replies to Minutes of TVS vide letters no. 45/UJVNL/04/D(F) dated 23.01.2017 and 45/UJVNL/01/MD/GM(Com) dated 14.01.2017. The submissions made by UJVN 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' Responses & Petitioner's Comments

The Commission has received three objections/suggestions/comments on UJVN Ltd.'s Petition for True-Up of FY 2015- 16, Annual Performance Review for FY 2016-17 and determination of Annual Fixed Charges for FY 2017-18 of 10 Large Generating Stations. List of stakeholders who have submitted their objections/ suggestions/comments in writing is given at **Annexure-2** and the list of respondents who have raised the issues in the public hearings is enclosed at **Annexure-3**. 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, responses of the Petitioner & Commission's view on the same have been consolidated and summarised below. In the subsequent Chapters of this Order, the Commission has, kept in view the objections/suggestions/comments of the stakeholders related to approval of True Up of FY 2015-16, Annual Performance Review for FY 2016-17 and determination of AFC for FY 2017-18 of 10 Large Generating Stations and replies of the Petitioner while deciding the Annual Fixed Charges and Tariffs for different generating stations of UJVN Ltd.

2.1 Tariff Hike

2.1.1 Stakeholder's Comment

M/s Asahi Glass India Ltd. requested the Commission not to increase the tariff at this juncture as any tariff increase would put the industry into further hardship.

2.1.2 Petitioner's Reply

The Petitioner submitted that the Petitions for determination of tariff are prepared in accordance to the Regulations notified by Hon'ble Commission. The tariff of upcoming years is proposed on normative basis and trueing up for the past year is claimed based on the actual audited expenditure and as per the provisions specified in the Regulations. The Petitioner also submitted that UJVN Ltd. continuously makes efforts to ensure strict commercial discipline, strive to protect the public interest and comply with the directives of Hon'ble Commission.

The Petitioner further submitted that UJVN Ltd. has proposed additional capitalization in various old hydro power stations which have become necessary for efficient and safe operation of power stations, thus resulting in increase of proposed tariff.

2.1.3 Commission's View

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 so far has been 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 under truing up of previous years 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 inefficiencies of the Petitioner is passed on to the consumers.

2.2 Annual Fixed Charges

2.2.1 Stakeholder's Comments

Dr. V.K. Garg submitted that the Annual Fixed Charges (AFC) of Rs. 779.89 Crore for FY 2017-18 proposed by UJVN Ltd. as compared to approved AFC of Rs. 555.7 Crore for FY 2016-17 appears to be high unless there has been a major Capex. to do a life extension. He requested that this increase has to be examined as such a high increase may wipe away the advantage of hydro power over thermal, renewable and gas.

2.2.2 Petitioner's Reply

The Petitioner submitted that UJVN Ltd. has proposed AFC of Rs. 698.77 Crore for FY 2016-17 against the approved AFC of Rs. 555.87 Crore for FY 2016-17. Similarly, UJVN Ltd. has proposed AFC of Rs. 779.89 Crore against the approved AFC of Rs. 613.03 Crore for FY 2017-18 respectively. The Petitioner also submitted that in the proposed AFC, UJVN Ltd. has considered the impact of RoE on PDF amounting to Rs. 56 Crore approx. for MB-II HEP which the Commission had not approved in order dated 05.04.2016. UJVN Ltd. further submitted that it has considered Return on Equity on full equity including the amount invested out of PDF in view of the Appeal filed with the Hon'ble APTEL in matter of Capital cost and RoE on PDF for MB-II.

2.2.3 Commission's Views

The Commission had approved the Annual Fixed Charges for FY 2016-17 and FY 2017-18 in accordance with the provisions of UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2015 as detailed under each item of Annual Fixed Charges.

2.3 Carrying Cost

2.3.1 Stakeholder's Comments

Dr. V.K. Garg submitted that the carrying cost of Rs. 34 Crore and Rs. 89 Crore has been considered, which needs clarification.

2.3.2 Petitioner's Reply

The Petitioner submitted that as regards to carrying cost, UJVN Ltd. has to refund Rs. 34.43 Crore (including carrying cost) in FY 2016-17 to UPCL on account of true up of FY 2014-15. However, UJVN Ltd., in the Petitions has estimated to receive an amount of Rs. 89.05 Crore (including carrying cost) from UPCL in FY 2017-18 on account of true up of FY 2015-16.

2.3.3 Commission's Views

The Commission has carried out the truing up for FY 2015-16 and considered the carrying cost on revenue deficit/surplus in accordance with the UERC Tariff Regulations, 2011 and the approach adopted by it in the truing up of previous years as discussed in detail in Chapter 3 of the Order.

2.4 Capital Cost and RoE of MB-II Project

2.4.1 Stakeholder's Comment

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that the Commission has given its analysis on Capital Cost of Maneri Bhali-II Project in its Order issued in previous years. In the current Petition, UJVN Ltd. has mentioned that it has considered on equity amount of Rs. 591.80 Crore including investment of Rs. 341.39 Crore made out of Power Development Fund (PDF). He further submitted that the Commission has already decided this issue in previous Orders and in the current Petition, UJVN Ltd. has argued that even though the funds from PDF have been used for creation of some of its assets, it should be allowed RoE on these funds. UJVN Ltd. has tried to argue that PDF is like any other tax and, therefore, funds from PDF should also be considered as loan from Govt. of Uttarakhand and hence, RoE on these funds should be allowed like any other fund.

He further submitted that the PDF Act is for development of electricity related projects and only in the State Sector and hence, the argument of UJVN Ltd. that PDF is a duty imposed under

PDF Act and can be deployed for any purpose is not correct. He mentioned that Section 4 of the PDF Act says that proceeds of duty levied through PDF Act will be credited to the Power Development Fund and Section 5 further allows State Government to credit more sums of money either by way of grant or loans to this fund. Hence, such sums of money credited as per Section 5 of the PDF Act can be taken as loan and funds received through levy of PDF under Section 4 of the PDF Act cannot be taken as loan.

2.4.2 *Petitioner's Reply*

The Petitioner submitted that in the proposed AFC, UJVN Ltd. has considered the impact of RoE on PDF amounting to Rs. 56 Crore approx. for MB-II HEP which UERC has not approved in the Order dated 05.04.2016. UJVN Ltd. submitted that it has considered Return on Equity on full equity including the amount invested out of PDF in view of the Appeal filed with the Hon'ble APTEL in matter of Capital cost and RoE on PDF for MB-II.

2.4.3 *Commission's Views*

The Commission had 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 there under, further, clearly indicate that money available in this fund has to be utilized for the purposes of development of generation and transmission assets. Though the UJVN Limited has filed an Appeal on this issue with 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 Return on Equity for MB-II project.

2.5 *Design Energy/Actual Energy Generated*

2.5.1 *Stakeholder's Comments*

Shri Pankaj Gupta of Industries Association of Uttarakhand submitted that in the previous Orders, the Commission had taken the average of annual generation of last 15 years as projected generation for FY 2004-05. The same analogy should not hold good for future years as the same was

acceptable as sufficient data was not available and considering the requests of UJVN Ltd. that the plants were not kept in good conditions.

He submitted that UJVN Ltd. is claiming that it has moved a long distance in setting right its generating stations by taking appropriate steps and hence, there is a substantial improvement in availability. He requested the Commission to revisit the design energy and allow the benefit of power generation to the consumers which is in line with the Tariff Policy in respect of the operating norms as the tariff policy stipulates that the operating norms should be at normative levels and not at lower of normative and actual.

2.5.2 *Petitioner's Reply*

The Petitioner submitted that it has not sought any deviation in saleable energy for its old hydro power plants' in the Petitions. The Petitioner also submitted that the Hon'ble Commission may revisit the Design Energy after Renovation and Modernization of old hydro power plants.

2.5.3 *Commission's View*

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 had considered the design energy as per DPR of the Project in the previous Tariff Order. The same approach has been continued in this order also. However, for Khatima HEP for which RMU works have been completed, the Commission has considered revised design energy in accordance with DPR for RMU works of the said project.

2.6 Other Costs

2.6.1 *Stakeholder's Comment*

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

2.6.2 *Petitioner's Reply*

The Petitioner submitted that it has proposed additional capitalization in various old hydro power stations which have become necessary for efficient and safe operation of power stations, thus resulting in increase of proposed AFC.

2.6.3 *Commission's View*

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 and revenues and only legitimate expenses are allowed in accordance with the UERC Tariff Regulations applicable from time to time.

2.7 *Issues Raised During Meeting of State Advisory Committee*

2.7.1 *Views of State Advisory Committee*

During the Advisory Committee meeting held on 08.03.2017, the Members made the following suggestions on the Tariff Petitions for FY 2017-18.

- Additional capitalisation projected by UJVN Ltd., is on higher side and the same needs to be examined, unless there is some major capital expenditure towards life extension.
- 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 at APTEL. As no stay has been granted by APTEL on Commission's Orders, RoE on PDF amount should not be allowed.

2.7.2 *Petitioner's Reply*

The Petitioner submitted that the increase in additional capitalisation proposed is due to RMU works being carried out at Chilla and Tiloth stations.

2.7.3 *Commission's View*

The Commission suggested UJVN Ltd. to make appropriate arrangements for long term power and actively pursue the following issues for the State:

- a. Speed up of works at Vyasi HEP and Lakhwar HEP.

- b. Speed up of implementation of Kishau HEP in which Government of India agreed to provide 90% of the funds in the irrigation component and power component of the project cost.
- c. Additional allocation from THDC in the Case pending before Supreme Court.

On the issues related to additional capitalisation and RoE on contribution of PDF, the Commission has already expressed its views in the preceding paras and is not reiterating the same.

3 Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on Truing up of 9 LHPs and MB-II for FY 2015-16

Regulation 13 of the UERC Tariff Regulations, 2011 specifies as follows:

"13. 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 2004 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 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 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 2015-16 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 2015-16 alongwith the sharing of gains and losses. In addition to the above, with regard to MB-II, the Petitioner has also requested the Commission to consider the capital cost as Rs. 1923.60 Crore as on COD.

In the matter of truing up of AFC of MB-II for FY 2007-08 to FY 2014-15, the Commission in its Tariff Order dated 05.04.2016, had carried out the final true up of the aforesaid period considering the capital cost as Rs. 1885.50 Crore as approved by the Commission as on COD of the project. Hence, the Commission in the current tariff proceedings has decided to carry out the truing up of MB-II for FY 2015-16 considering the capital cost as on COD as approved by the Commission in the Tariff Order dated 05.04.2016 in accordance with the UERC Tariff Regulations, 2011.

3.1 Impact of Sharing of Gains and Losses on account of Controllable Factors for FY 2015-16

Regulation 15 of the UERC Tariff Regulations, 2011 specify as follows:

"15. Sharing of Gains and Losses on account of Controllable factors

(1) The approved aggregate gain to the Applicant on account of controllable factors shall be dealt with in the following manner:

20% of such gain shall be passed on as a rebate in tariffs over such period as may be specified in the Order of the Commission;

The balance amount of gain may be utilized at the discretion of the Applicant.

(2) The approved aggregate loss to the Applicant on account of controllable factors shall be dealt with in the following manner:

25% of the amount of such loss shall be allowed by the Commission to be recovered through tariffs over such period as may be specified in the Order of the Commission under;

The balance amount of loss shall be absorbed by the Applicant."

The UERC Tariff Regulations, 2011 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 comprise 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, 2011 these are controllable expenses. Similarly, in accordance with the UERC Tariff Regulations, 2011, the variation in working capital requirements is also a controllable factor. Hence, the sharing of gains and losses has been carried out for these expenses. While, the capital related expenses like interest

on loans, depreciation etc. have been treated as uncontrollable and hence, no sharing of losses or gains for the same has been carried out.

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, 2011.

3.1.1 Physical Parameters

3.1.1.1 Relaxation sought in approved NAPAF

Relaxation sought for 9 LHPs

The Commission vide its MYT Order dated 06.05.2013 had approved the NAPAF in accordance with Regulation 51 of UERC Tariff Regulations, 2011. Thereafter, the Petitioner filed the Review Petition dated 01.07.2013 seeking relaxation of NAPAF for its LHPs. In that Petition, UJVN Ltd. had submitted that LHPs face problems during rainy season in terms of flood pass, high PPM content, silt problem, flushing and choking, etc. The Petitioner had also submitted that River Tons carries heavy trash, debris and high concentration of silt during monsoon season thereby restricting the operations of the plants in the Yamuna Valley significantly resulting in appreciable reduction of plant availability.

Further, with regard to plants on river Bhagirathi, the Petitioner had submitted that the river Bhagirathi carries huge amount of silt during monsoon which contains pentangular shaped quartz particles having very high hardness and these particles causes severe erosion to the underwater parts of the machines resulting in substantial increase in maintenance period, thus, reduction in plant availability.

Thus, the Commission vide its Order dated 03.09.2013 on the above referred review Petition had re-fixed NAPAF of 9 LHPs & MB-II as follows:

Table 3.1: NAPAF approved vide review Order dated 03.09.2013

Sl. No.	Name of Plant		NAPAF approved in the MYT Order dt. 06.05.2013	NAPAF proposed by UJVN Ltd. in Review Petition dt. 01.07.2013	NAPAF approved by the Commission in Order dt. 03.09.2013		
					FY 13-14	FY 14-15	FY 15-16
1	Dhakrani	RoR	77%	44%	57%		
2	Dhalipur	RoR	77%	45%	57%		
3	Chibro	Pondage	85%	29%	62%	63%	64%
4	Khodri	Pondage	85%	30%	55%	56%	57%
5	Kulhal	RoR	77%	49%	65%		
6	Ramganga	Storage	85%	-	19%		
7	Chilla	RoR	76%	65%	74%		
8	MB-I	Pondage	85%	50%	77%	78%	79%
9	Khatima	RoR	78%	67% (44% in view of RMU)	47%		
10	MB-II	Pondage	85%	59%	71%	73%	74%

Now, in the current Petitions, the Petitioner has further requested to relax the NAPAF norms for FY 2015-16 for its plants namely MB-I, Chilla, Ramganga and Khatima LHPs. In support of its claim, the Petitioner has submitted the following plant wise reasons for not being able to achieve the approved NAPAF and the same are discussed below:

- **MB-I**-The Petitioner has submitted that the station could not achieve NAPAF as the generating station remained closed during 15.08.2015 to 07.09.2015 due to monsoon closure. Hence, the Petitioner has requested the Commission to approve the NAPAF for FY 2015-16 as 77% instead of 79% (approved vide 03.09.2013).
- **Chilla**-The Petitioner has submitted that Lower Guide Bearing vibration was observed in April, 2015 & May, 2015 and accordingly, maintenance work was carried out in Unit-1 from 23.04.2015 to 27.05.2015. Therefore, the power station could not run on full load during April and May 2015. Unit-3 also remained under shut down for maintenance from 21.08.2015 to 15.09.2015. The Petitioner has further submitted that sufficient water could not be made available from mid of September 2015 onwards due to leakage from barrage gates besides danger to safety of power channel. Therefore, the station was under shutdown from 18.11.2015 to 17.12.2015 for repair of power channel and barrage gates. Based on the above, the Petitioner has requested the Commission to approve the NAPAF of 67.51% for FY 2015-16 instead of NAPAF of 74% approved in Order dated 03.09.2013 of the Commission.

- **Khatima**-The Petitioner has submitted that the power station could not achieve the normative plant availability factor for FY 2014-15 due to forced closure of the power station w.e.f. 31.08.2014 on account of breaching of power channel. It further submitted that the generation could start only by the end of March 2015 after completion of all restoration works. Based on the availability of water in power channel the PAFM achieved in FY 2014-15 was 15.36% only. The Petitioner also submitted that it had also requested in the MYT Petition for the Control Period FY 2016-17 to FY 2018-19 to review and relax the NAPAF for FY 2014-15. Further, with regard to FY 2015-16, the Petitioner has submitted that the station was under RMU, on account of which Unit 2 was under shutdown from 22.05.2015 to 21.05.2016 and Unit 3 was under shutdown from 02.11.2015 to 25.09.2016. The Petitioner has further submitted that it had computed PAFM for FY 2014-15 and FY 2015-16 considering the entire installed capacity which is not as per the Commission's Order dated 03.09.2013 wherein the Commission had allowed it to compute PAFM by not considering the capacity under RMU. The Petitioner has, accordingly, requested the Commission to allow it to revise the PAFM as per the methodology stated in the Commission's Order dated 03.09.2013.

The Commission has gone through the submissions of the Petitioner and is of the view that the norms for 9 LHPs have already been relaxed considering the actual site conditions and, therefore, further relaxation of the approved norms is not justified unless under exceptional circumstances. The reasons for not achieving NAPAF as submitted by the Petitioner for MB-I is on account of site conditions and the Commission while approving the NAPAF for the first Control Period in its Order dated 03.09.2013 had already envisaged operating problems due to the site conditions as stated by the Petitioner for FY 2015-16. The Commission, therefore, is of the view that any further relaxation with regard to the NAPAF for FY 2015-16 of MB-I station is not justified, and therefore, no relaxation has been allowed by the Commission.

With regard to review of NAPAF of Khatima for FY 2014-15, the Commission in its order dated 05.04.2016 has already taken a view on NAPAF for Khatima station and had stated as under:

"...With regard to Khatima, the Petitioner has sought relaxation in NAPAF due to forced closure of the Power Station w.e.f. 31.08.2014 on account of breaching of Power Channel. In this regard, District Magistrate, Khatima had constituted a Committee to investigate the matter. In this regard, the Commission is of the view that the Petitioner should submit copy of the investigation report

alongwith the next APR Petition and based on the findings of the report, the Commission shall take a view on the same in the next tariff proceedings."

In line with the above direction of the Commission in the Order dated 05.04.2016, the Commission sought the above Investigation Report for Khatima LHP in current tariff proceeding. In response, the Petitioner has submitted the copy of the Investigation Report. As per the investigation report submitted by the Petitioner, it is observed that the report holds UJVN Ltd. responsible for breaching of power channel which resulted in shutdown of the Units. Therefore, no relaxation in NAPAF has been considered for FY 2014-15 as the same was due to controllable factor. With regard to FY 2015-16, the Commission would like to re-iterate that it had restated the NAPAF for the first Control Period vide its Review Order dated 03.09.2013 after factoring in the RMU works and, therefore, there is no case for further relaxation of NAPAF for Khatima LHP.

With regard to the issue of consideration of installed capacity for calculation of PAF for the Khatima LHP for FY 2014-15 and FY 2015-16, the Commission in its order dated 03.09.2013 had stated as follows:

"Further, with regard to the request of the Petitioner to allow the NAPAF for Khatima Power Station as 2/3rd value of NAPAF of the plant during the year 2013-14, as RMU of Unit No. 1 of Khatima Power Station is in progress and the unit shall not be available for generation till 31.3.2014, i.e. the scheduled date of completion, the Commission is of the view that the capacity of generating units under Renovation and Modernization shall not be considered in installed capacity while computing the plant availability factor. For relaxation to this effect shall be applicable only upto the scheduled date of completion of RMU works."

It is observed that the Petitioner has submitted that it has inadvertently while computing the PAFY for the Khatima LHP has considered the entire installed capacity instead of considering the installed capacity of the Unit under consideration. In response to the direction of the Commission the Petitioner submitted the computation for the actual PAFY for FY 2015-16. The Commission from the computation observed that the Petitioner has considered entire installed capacity instead of capacity not under RMU works. The Commission further observed that in FY 2015-16 the RMU of the Units were not as per the original schedule and RMU of two Units were taken simultaneously which may have resulted in increase in PAFY for the Unit under operation due to increase in water availability. Further, as one Unit had already completed RMU in May 2015, hence, the availability of the Unit has gone beyond the NAPAF of 47%. Since the RMU of the Unit was already completed in

May 2015, therefore, the NAPAF that was approved on the basis of old Units may not hold true for the FY 2015-16. Further, as also stated earlier, the Commission in its Review Order dated 03.09.2013 had specifically stated that the relaxation shall be till the completion of RMU.

Further, with regard to FY 2014-15, the Commission allows the Petitioner to revise its PAFY after excluding the Unit under RMU and revise its PAFY for the Khatima LHP for FY 2014-15. The Petitioner in its latest reply had submitted the actual PAFY for FY 2014-15 as 13.82% considering 41.40 MW as the installed capacity instead of 27.60 MW. The Commission has re-determined the PAFY for the Khatima LHP for FY 2014-15 which works out to 20.73%. The Commission has computed the impact of the revision of PAFY for the year on the basis of trued up AFC for FY 2014-15 as per Order dated 05.04.2016. The impact works out to Rs. 0.67 Crore.

With regard to Chilla LHP, it is observed that except for the station being under shutdown due to repair of power channel and barrage, all other reasons stated by the Petitioner are operational issues, which has already been considered while approving the NAPAF. With regard to the station being under complete shutdown due to repair of power channel and barrage gate from 18.11.2015 to 17.12.2015, the Commission is of the view that the work was necessary as the same was leading to operational outages and was hindering full load operations. The Commission has, therefore, considered the outage period as beyond the control of the Petitioner and has allowed the impact of such shutdown to the Petitioner.

In the past the Commission have been restating the NAPAF for the station wherein there was an impact on PAF of the station on account of exceptional reasons beyond the control of the Petitioner. However, the Commission would like to review the methodology for passing on the impact of the shutdown on NAPAF to consumers. The Commission is of the view that norms specified by the Commission vide its Regulations are an outcome of detailed deliberation with stakeholders and is determined after following a due procedure. Therefore, repeatedly reviewing the norms dilutes the very sanctity of the Regulations and due procedures followed for determination of the same. Further, one of the most important goal of MYT framework is to provide regulatory certainty and, therefore, dilution of norms is not prudent. The Commission has, therefore, not revised the NAPAF approved for Chilla LHP. Instead, the Commission has restated the PAFY during the year for the purpose of fixed cost recovery considering the actual operation period after adjusting the shut down period due to closure of power channel. For the period, during

which the plant was operating the Commission has considered the actual PAF achieved. For the period (18.11.2015 to 17.12.2015) in which the plant was completely under shutdown, the PAF for those months have been considered equal to five year average monthly PAF extrapolated to approved NAPAF of 74%. Accordingly, the Commission has restated the actual PAFY of 67.5% to 72.66% for FY 2015-16 for allowing the recovery of fixed charges.

A. Relaxation sought for MB-II

The NAPAF for MB-II was fixed as 85% in the MYT Order issued for the first Control Period from FY 2013-14 to FY 2015-16. Thereafter, the Commission vide its Order dated 03.09.2013 disposed of the Petitioner's Review Petition dated 01.07.2013 and had re-determined NAPAF of MB-II at 71%, 73% and 74% for FY 2013-14, 2014-15 and FY 2015-16 respectively. The Petitioner, in the Tariff Petition, has sought relaxation of NAPAF to 62.03% for FY 2015-16. In justification, the Petitioner has submitted that the plant was under shutdown for carrying out TRC modification works from 20.02.2015 to 08.05.2015 and further shutdown was taken for protection wall construction/repair work at Joshiyara Barrage from 27.02.2016 to 14.03.2016.

The Commission in its order dated 05.04.2016, while relaxing the NAPAF for FY 2014-15, had considered the shutdown during the said financial year for the period 01.04.2014 to 06.06.2014 for carrying out flood protection work at Joshiyara Barrage and for the period 20.02.2015 to 31.03.2015 for TRC modification works.

It is observed that the station was under shutdown for carrying out works which was approved by the Commission and was necessary for MB-II to achieve higher power output and improve efficiency. The Commission has, therefore, considered the impact of the shutdown on PAF on account of the work in FY 2015-16.

As discussed in case of Chilla LHP, the Commission has, therefore, not revised the NAPAF approved for MB-II. Instead, the Commission has restated the PAFY during the year for the purpose of fixed cost recovery considering the actual operation period after adjusting the shut down period. For the period, during which the plant was operating the Commission has considered the actual PAF achieved. For the period in which the plant was either partially or completely under shutdown, the PAF for those months have been considered equal to five year average monthly PAF extrapolated to approved NAPAF of 74% for FY 2015-16. Accordingly, the Commission has restated

the actual PAFY of 56.33% for FY 2015-16 for MB-II to PAFY of 63.86% for allowing the recovery of fixed charges.

3.1.1.2 Energy Generation and Saleable Primary Energy

The Commission in its MYT Order dated 06.05.2013 on approval of Business Plan and Multi Year Tariff for the first Control Period from FY 2013-14 to FY 2015-16 had approved the Design Energy equivalent to the Design Energy approved in previous Orders. UJVN Ltd. has not sought any deviation in the approved design energy for FY 2015-16. Accordingly, the Commission decides to maintain the design energy and saleable primary energy as considered in the MYT Order dated 06.05.2013 for 9 old large generating stations and MB-II LHP of the Petitioner.

3.1.2 Financial Parameters

3.1.2.1 Apportionment of Common Expenses

The Petitioner in its Petition has considered the allocation for indirect expenses in the ratio of 85:10:5 among 9 LHPs, MB-II and SHPs respectively. The Commission in its Order dated 05.04.2016 had considered the allocation for indirect expenses in the ratio of 85:10:5 among 9 LHPs, MB-II and SHPs respectively, and had stated as follows:

"The Petitioner in its Petition has changed the allocation for indirect expenses from the initial ratio of 80:10:10 to 85:10:5 among 9 LHPs, MB-II and SHPs respectively. The Commission directed the Petitioner to submit the rationale for changing the methodology for apportionment of common expenses. The Petitioner in its reply has submitted that the ratio towards SHPs have been reduced as 22 nos. of SHPs have been transferred to UREDA which has resulted in the reduction in the existing capacities with UJVN Ltd. to 32.70 MW from the earlier 58.10 MW and, therefore, the said expenses have been allocated on to 9 LHPs.

The Commission has gone through the submission made by the Petitioner and observes that almost half of the capacity of the SHPs has been transferred to UREDA and, therefore, the Commission agrees with the methodology proposed by the Petitioner and has considered the same for allocation of common expenses."

Accordingly, in line with the above decision in the Order dated 05.04.2016, the Commission has considered the ratio of 85:10:5 among 9 LHPs, MB-II and SHPs, respectively, for allocation of common expenses.

3.1.2.2 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 opening GFA for the nine LHPs as on 14.01.2000 as Rs. 506.17 Crore.

The Commission directed UJVN Ltd. to submit the current status towards finalization of transfer scheme. In response, UJVN Ltd. submitted that the issues regarding transfer scheme viz. (a) liability of LIC loan of Rs. 352.59 Crore regarding MB-II LHP and (b) remittance of GPF liabilities of Rs. 135.78 Crore are yet to be finalized. UJVN Ltd. Employees Trust (GPF) has decided to file writ Petition in the Hon'ble High Court, Nainital against UP Power Sector Employees Trust, Lucknow for recovery of the said GPF liabilities and in this regard, the drafting of writ Petition is under process.

Since, the Transfer Scheme is yet to be finalized, the Commission for the purposes of truing up for FY 2015-16 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 3.2: Approved Capital Cost as on 14.01.2000 (Rs. Crore)

Name of the Generating Stations (9LHPs)	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
Total	506.17	506.17

A. Maneri Bhali-II

The Petitioner has requested the Commission to consider the capital cost of Rs. 1923.60 Crore as on COD, i.e. 15.03.2008 and, accordingly, allow true up of AFC and Tariff for MB-II HEP.

With regard to fixation of the Capital Cost of MB-II on the date of its Commercial Operation (COD), the Commission in its Tariff Order dated 05.04.2016 had revised the Capital Cost as on COD

to Rs. 1885.50 Crore and stated as follows:-

“The Commission in the current tariff proceedings observed that the Petitioner has submitted that the Capital Cost as on COD included provisioning towards discharge of liabilities in future amounting to Rs. 3.72 Crore which was actually discharged in FY 2008-09 and wrongly included as R&M expenses. In accordance with MYT Regulations, 2011, any capital expenditure after COD is to be considered as additional capital expenditure subject to condition provided there in and also it has been the approach of the Commission in the past to not allow tariff on the provisioned amount and, therefore, the Commission has revised the Capital Cost of MB-II as on COD to Rs. 1885.50 Crore. Further, the Commission has considered the aforesaid amount of Rs. 3.72 Crore as additional capitalisation in FY 2008-09 as the same was actually discharged during FY 2008-09.”

Moreover, the Petitioner has filed an Appeal before the Hon’ble ATE agitating the issue of Capital Cost of MB-II LHP approved by the Commission which is pending before the Hon’ble ATE. Hence, pending disposal of the Appeal, the Commission does not find any reason to revisit the capital cost of MB-II LHP as already approved by it in the Order dated 05.04.2016.

Accordingly, in line with the above decision in Tariff Order dated 05.04.2016, the Commission for the purpose of this Tariff Order is considering the capital cost for MB-II power station, as on COD 15.03.2008, as Rs. 1885.50 Crore only as per the details given below:

Table 3.3: Approved Capital Cost for MB-II as on COD (Rs. Crore)

Particulars	Approved
Capital Expenditure	1490.98
Add: Adjustment on Account of DRB Award	44.51
Price Variation	-7.94
Sub-total (A)	1527.55
IDC & Other Financial Charges	
Interest paid to PFC	257.41
Guarantee Fee	28.86
Intt. On GoU Loan	5.04
Intt. Repayment AGSP	66.64
Excess Guarantee Fee Payable	0.00
Sub-total (B)	357.95
Total Capital cost (A+B)	1885.50

Further, financing of the approved capital cost of MB-II Power Station as on COD has been considered in line with Tarff Order dated 05.04.2016 and is shown in the Table below:

Table 3.4: Financing for MB-II as on COD (Rs. Crore)

Particulars	Approved
Loans	
PFC Loan	1200.00
Unpaid Liability	0.00
Guarantee Fee Payable	0.00
Normative Loan	119.85
Total debts	1319.85
Equity	
PDF	326.76
GoU Budgetary support	74.89
Pre-2002 expense	164.00
Total Equity	565.65
Total Loan and Equity	1885.50

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 upto COD of Rs. 326.76 Crore and the balance amount of Rs. 74.89 Crore from the GoU budgetary support.

3.1.2.3 Additional Capitalisation

A. Old Nine Generating Stations

In addition to the opening GFA of Rs. 506.17 Crore as on 14.01.2000, the Commission had approved the additional capitalization from FY 2001-02 to FY 2014-15 amounting to Rs. 98.43 Crore in its previous Tariff Orders.

Accordingly, the additional capitalisation from FY 2001-02 to FY 2014-15 so far considered by the Commission for 9 LHPs is shown in the Table below:

Table 3.5: Additional Capitalisation already Approved by the Commission from FY 2001-02 to FY 2014-15 for 9 LHPs (Rs. Crore)

Name of Generating Station	Amount
Dhakrani	2.67
Dhalipur	4.50
Chibro	23.39
Khodri	12.11
Kulhal	2.59
Ramganga	5.52
Chilla	14.68
MB-I	31.18
Khatima	1.79*
Total	98.43

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

From FY 2001-02 to FY 2014-15, total additional capitalisation in Khatima LHP was Rs. 1.79 Crore, however, de-capitalisation during FY 2014-15 was Rs. 2.03 Crore. The de-capitalisation was under plant and machinery. Since RMU works were being carried out, it is understandable that old plant and machinery would have been de-capitalised and the same also needs to be adjusted from the opening value of GFA inherited from UPJVNL as the asset is not in existence now. Accordingly, the entire de-capitalised amount has been reduced from opening GFA of Khatima HEP inherited from UPJVNL.

Based on the approved capital cost of 9 LHPs as on 14.01.2000 and considering the additional capitalisation upto FY 2014-15 for these LHPs, the Commission has considered the opening GFA for FY 2015-16 for nine LHPs as presented below:

Table 3.6: Opening GFA for 9 LHPs as considered by the Commission for FY 2015-16 (Rs. Crore)

Name of the Generating Stations	GFA inherited as on 14.01.2000	GFA inherited as on 1.4.2015	Additional Capitalisation from FY 2001-02 to FY 2014-15	GFA as on 31.03.2015
Dhakrani	12.40	12.40	2.67	15.07
Dhalipur	20.37	20.37	4.50	24.87
Chibro	87.89	87.89	23.39	111.28
Khodri	73.97	73.97	12.11	86.08
Kulhal	17.51	17.51	2.59	20.10
Ramganga	50.02	50.02	5.52	55.54
Chilla	124.89	124.89	14.68	139.57
MB-I	111.93	111.93	31.18	143.11
Khatima	7.19	5.16*	1.79#	6.95
Total	506.17	504.14	98.43	602.57

*De-Cap adjustment of Rs. 2.03 Crore in FY 2014-15

#excluding de-cap of Rs. 2.03 Crore in FY 2014-15

The Petitioner for its 9 LHPs has claimed the additional capitalisation for FY 2015-16 as given in the Table below:

Table 3.7: Additional Capitalisation for 9 LHPs Claimed by the Petitioner for FY 2015-16

Name of the Generating Stations	Amount
Dhakrani	0.13
Dhalipur	0.11
Chibro	3.64
Khodri	0.77
Kulhal	0.14
Ramganga	0.19
Chilla	23.49
MB-I	2.79
Khatima	66.56
Total	97.83

It is observed that the Commission in its Order dated 05.04.2016 had considered the additional capitalisation of Rs. 47.57 Crore for FY 2015-16, however, UJVN Ltd. in this instant Petition has submitted the additional capitalisation of Rs. 97.83 Crore for FY 2015-16. In this regard, the Commission directed UJVN Ltd. for detailed break-up of additional capitalisation now claimed along with justification for such increase in additional capitalisation and station-wise reconciliation of additional capitalisation with audited accounts for FY 2015-16. In response, UJVN Ltd. submitted that the capital expenditure of Rs. 97.83 Crore is on the basis of audited balance sheet for FY 2015-16 and submitted the station wise reconciliation of the same. The Petitioner further submitted that the major difference in the actual additional capitalisation is on account of works capitalised in Khatima LHP and Chilla LHP. The Petitioner further submitted that the total actual additional capitalisation for Khatima LHP was Rs. 66.56 Crore as against Rs. 42.24 Crore submitted earlier. This was on account of RMU and other works actually carried out and capitalised in FY 2015-16. With regard to Chilla LHP the Petitioner has submitted that the actual additional capitalisation was Rs. 23.49 Crore as against Rs. 0.20 Crore submitted earlier. The Petitioner further submitted the detailed breakup of the additional capitalisation for 9 LHPs.

The Commission in its MYT Order for FY 2016-17 to FY 2018-19 dated 05.04.2016 considered the actual additional capitalisation till FY 2014-15, based on the audited accounts while carrying out the truing up of the said financial years. Accordingly, the Commission while truing up for FY 2015-16 has now considered the actual additional capitalisation based on the audited accounts for FY 2015-16 after prudence check.

The Commission has gone through the submissions of the Petitioner. With regard to Khatima LHP, the Petitioner in this tariff proceeding has submitted the investigation report for Khatima LHP with regard to investigation carried out on account of breaching of Power Channel. From the investigation report, it can be inferred that the report has held UJVN Ltd. responsible for breaching of power channel.

It is further observed that the Petitioner had incurred the expenditure of Rs. 10.20 Crore (comprising of Rs. 7.68 Crore for major civil works and Rs. 2.53 Crore for plant & machinery) for restoring the failure in Khatima LHP on account of damages due to breaching of Power Channel that occurred due to own fault of UJVN Ltd. The Commission has, accordingly, disallowed such expenses from additional capitalisation of Khatima LHP.

The Commission, accordingly, approves additional capitalisation for FY 2015-16 for 9 LHPs as shown below:

Table 3.8: Additional Capitalisation for 9 LHPs for FY 2015-16 Approved by the Commission (Rs. Crore)

Name of the Generating Station	Claimed	Approved
Dhakrani	0.13	0.13
Dhalipur	0.11	0.11
Chibro	3.64	3.64
Khodri	0.77	0.77
Kulhal	0.14	0.14
Ramganga	0.19	0.19
Chilla	23.49	23.49
MB-I	2.79	2.79
Khatima	66.56	56.35
Total	97.83	87.62

A. Maneri Bhali-II

In addition to the Capital Cost of Rs. 1885.50 Crore as on COD of the station the Commission had approved the additional capitalization from COD to FY 2014-15 amounting to Rs. 132.20 Crore in its previous Tariff Orders.

Based on the approved capital cost of MB-II as on COD and considering the additional capitalisation upto FY 2014-15 for MB-II, the Commission has considered the opening GFA for FY 2015-16 as presented below:

Table 3.9: Opening GFA Considered for MB-II for FY 2015-16 (Rs. Crore)

Name of the Generating Station	As on COD	Additional Capitalisation upto FY2014-15	Opening GFA for FY 2015-16
MB-II	1885.50	132.20	2017.70

The breakup of components of Additional Capitalisation as submitted by UJVN Ltd. for FY 2015-16 is as under:

Table 3.10: Additional Capitalisation submitted by the Petitioner (Rs. Crore)

Components	FY 2015-16
Land	0.17
Building	0.16
Major Civil Works	106.79
Plant & Machinery	19.50
Vehicles	0.05
Furniture and Fixtures	0.05
Office Equipment & Others	0.26
Total	126.97

It is observed that the Commission in its Order dated 05.04.2016 had considered the additional capitalisation of Rs. 114.30 Crore for FY 2015-16, however, UJVN Ltd. in this instant Petition has submitted the additional capitalisation of Rs. 126.97 Crore for FY 2015-16. The Commission further observed that UJVN Ltd. with regard to MB-II has claimed balance capital works of Rs. 266.07 Crore till FY 2017-18 as against Rs. 211.72 Crore approved in the Tariff Order dated 05.04.2016. The Commission, accordingly, directed UJVN Ltd. to submit proper justification towards increase in the balance capital expenditure works along with the status of balance capital works completed and submit its revised claim of additional capitalisation for FY 2015-16 onwards. In response, UJVN Ltd. submitted that after reconciliation the capital expenditure incurred up to 31.03.2016 is Rs. 190.06 Crore against balance capital works of MB-II HEP. The Petitioner further submitted that the revised expenditure on balance capital work is estimated to Rs. 238.62 Crore up to FY 2018-19. The Petitioner also submitted that the actual capital expenditure for FY 2015-16 against Balance Capital works is Rs. 106.04 Crore. It also submitted that in the tentative statement for FY 2015-16 as submitted in last year tariff Petition an amount of Rs. 18.01 Crore was shown against item no 20 of Balance Capital Works. This amount has been deposited in Hon'ble High Court of Uttarakhand as per Judgment of Hon'ble High Court in favour of M/s Hydel Construction. This is against the claim due to idle charges and incentive, which was not in the scope of the DPR of Balance Capital Works (item no 20), therefore, the same has been corrected and now booked in Additional Capital Work of MB-II. UJVN Ltd. further submitted the details of revised claim of actual and projected Add Cap of MB-II LHP for FY 2015-16 to FY 2017-18 along with the details of balance capital works and additional capitalisation (Civil works) for FY 2015-16 to FY 2018-19. The revised additional capitalisation on account of the above claim by the Petitioner for FY 2015-16 for MB-II is as follows:

Table 3.11: Revised Additional Capitalisation submitted by the Petitioner (Rs. Crore)

Components	FY 2015-16
Land	0.17
Building	0.16
Major Civil Works	106.56
Plant & Machinery	19.50
Vehicles	0.05
Furniture and Fixtures	0.05
Office Equipment & Others	0.26
Total	126.74

Further, the Commission sought detailed breakup of the additional capitalisation and R&M expenses along with vouchers exceeding Rs. 10 Lakh for FY 2015-16 for MB-II from UJVN Ltd., which was submitted by UJVN Ltd. From the details of additional capitalisation of MB-II, it is observed that UJVN Ltd. had included some of the expenses totalling to Rs. 0.0048 Crore of R&M nature under “other equipment & others” in additional capitalisation for FY 2015-16 for MB-II. The Commission has, accordingly, deducted expenses of R&M nature from additional capitalisation and considered the same as R&M expenses.

Further, the Commission while scrutinising the R&M expenses observed that expenses of Rs. 0.50 Crore were of the nature of additional capital expenditure and included Circuit Breaker and expenses towards implementation of Restricted Governor Mode of Operation (RGMO). The Commission has, therefore, considered the same under additional capitalisation and has reduced the same from R&M expenses. The Commission has, accordingly, adjusted the above additional capitalisation and approves the additional capitalisation for FY 2015-16 for MB-II LHP as given below:

Table 3.12: Additional Capitalisation approved by the Commission for FY 2015-16 (Rs. Crore)

Particulars of Assets	Approved in Tariff Order for FY 2015-16	Approved now after Truing Up for FY 2015-16
Land	0.00	0.17
Building	0.00	0.16
Major Civil Works	0.00	106.56
Plant & Machinery	0.00	20.00
Vehicles	0.00	0.05
Furniture and Fixtures	0.00	0.05
Office Equipment & Other Items	0.00	0.25
Total	0.00	127.24

3.1.2.4 Depreciation

A. Old Nine Large Generating Stations

Regulation 29 of UERC Tariff Regulations 2011 specifies as follows:

“(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.*

(3) *Provided that in case of generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of site;*

Provided further that the capital cost of the assets of the generating station for the purpose of computation of depreciable value for the purpose of determination of tariff under these regulations shall correspond to the percentage of sale of electricity under long-term power purchase agreement at regulated tariff.

(4) *Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.*

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

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

(6) *In case of the existing projects, the balance depreciable value as on 1.4.2013 shall be worked out by deducting the cumulative depreciation as admitted by the Commission upto 31.3.2013 from the gross depreciable value of the assets. The difference between the cumulative depreciation recovered and the depreciation so arrived at by applying the depreciation rates as specified in these Regulations corresponding to 12 years shall be spread over the remaining period upto 12 years. The remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance life.*

(7) *Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."*

The Petitioner has submitted that while computing the depreciation, it has considered 90% of the opening GFA as the permissible limit. Accordingly, for the plants where accumulated depreciation on the approved opening GFA has already reached 90%, such as Khatima, Dhakrani, Dhalipur, Ramganga, Kulhal, Chilla and Chibro, the Petitioner has not claimed any depreciation.

The Petitioner has claimed depreciation on the opening GFA only for the remaining two plants, i.e. Khodri and Maneri Bhali-I.

The Petitioner submitted that it has computed depreciation on the basis of rates considered by the Commission in its previous Tariff Orders. UJVN Ltd. submitted that it has considered depreciation till FY 2012-13 at the rate of 2.38% on the opening GFA. Thereafter, the Petitioner has spread the remaining depreciable value over the balance useful life. With regard to the depreciation on additional capitalization, the Petitioner has computed depreciation for different class of assets in accordance with the rates specified in UERC Tariff Regulations, 2004 till FY 2012-13 and UERC Tariff Regulations, 2011 from 01.04.2013.

With regard to the opening GFA as on January, 2000, the Commission has computed depreciation in accordance with the UERC Tariff Regulations, 2011. All the 9 LHPs are over 12 years old and 7 out of 9 stations have depreciated by 90% of the original cost. Depreciation allowed for Khodri and MB-I LHPs have not reached 90% till FY 2015-16, and hence, the Commission has computed the accumulated depreciation on opening GFA till 01.04.2013 to determine the remaining depreciable value for each LHP. The Commission for computing the accumulated depreciation till 01.04.2013 has considered the depreciation rate of 2.38% as considered in previous Tariff Orders till FY 2012-13. Further, in accordance with UERC Tariff Regulations, 2011 and considering the life of 35 years from the COD, the Commission has equally divided the remaining depreciable value as on 01.04.2013 on the remaining useful life of each LHP.

As regards the depreciation on the asset added during the period from FY 2001-02 to FY 2012-13, the Commission has computed the depreciation in accordance with the provisions of UERC Tariff Regulations, 2011. 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 upto 31.03.2013 from the gross depreciable value of the assets. The Commission, further, computed the difference between the cumulative depreciation as on 31.03.2013 and the depreciation so arrived at by applying the depreciation rates as specified in UERC Tariff Regulations, 2011 corresponding to 12 years. The Commission has spread over the above difference in the remaining period upto 12 years of such asset addition. Further, in case where asset life has crossed 12 years from the year of addition, the remaining depreciable value as on 31st March of the year closing has been spread over the balance life.

As regards the depreciation computation on assets added during FY 2015-16, the Commission has computed the depreciation by applying the depreciation rates as specified in UERC Tariff Regulations, 2011. Based on the above discussed approach, the summary of depreciation as approved in APR Order dated 11.04.2015 and as approved now by the Commission for FY 2015-16 after truing up is shown in the Table given below:

Table 3.13: Depreciation approved for 9 LHPs after truing up of FY 2015-16 (Rs. Crore)

Name of the Generating Stations	On Opening GFA as on 14.01.2000		On Additional Capitalisation upto FY 2014-15		Total Depreciation		
	Approved in Tariff Order dt. 11.4.2015 for FY 2015-16	Approved now after Truing Up for FY 2015-16	Approved in Tariff Order dt. 11.4.2015 for FY 2015-16	Approved now after Truing Up for FY 2015-16	Approved in Tariff Order dt. 11.4.2015 for FY 2015-16	Claimed by the Petitioner in FY 2015-16	Approved after truing up for FY 2015-16
Dhakrani	0.00	0.00	0.18	0.19	0.18	0.18	0.19
Dhalipur	0.00	0.00	0.29	0.30	0.29	0.30	0.30
Chibro	0.00	0.00	1.29	1.30	1.29	1.30	1.30
Khodri	0.59	0.59	0.76	0.76	1.35	1.36	1.36
Kulhal	0.00	0.00	0.16	0.17	0.16	0.17	0.17
Ramganga	0.00	0.00	0.33	0.33	0.33	0.33	0.33
Chilla	0.00	0.00	1.14	1.15	1.14	1.16	1.15
*MB-I	2.58	2.58	1.43	1.44	4.01	4.41	4.02
Khatima	0.00	0.00	0.11	0.11	0.11	0.00	0.11
Total	3.17	3.17	5.68	5.76	8.85	9.21	8.93

**Including DRB*

A. Maneri Bhali-II

As discussed earlier, the Commission has worked out the additional capitalization for FY 2015-16 for MB-II plant. Accordingly, the Commission has computed the depreciation considering the Capital Cost approved as on COD of the project and year wise additional capitalisation approved by the Commission upto FY 2014-15.

The Commission for computing the depreciation for FY 2015-16 in accordance with the UERC Tariff Regulations, 2011 has computed the balance depreciable value for MB-II by deducting the cumulative depreciation as admitted by the Commission upto 31.03.2013 from the gross depreciable value of the assets. The Commission, further, computed the difference between the cumulative depreciation as on 31.03.2013 and the depreciation so arrived at by applying the depreciation rates as specified in UERC Tariff Regulations, 2011 corresponding to 12 years. The Commission has spread the above difference in the remaining period upto 12 years from COD of MB-II. Further, as UERC Tariff Regulations, 2011 does not provide for Advance Against

Depreciation (AAD), the Commission while computing the depreciation has not allowed the AAD for FY 2015-16.

In line with the above approach, the Commission has computed the depreciation for FY 2015-16 for MB-II on the approved capital cost as on COD of Rs. 1885.50 Crore alongwith additional capitalisation approved upto FY 2014-15. Accordingly, the Commission in this Order has trued up the depreciation for FY 2015-16 as follows:

Table 3.14: Revised Depreciation for MB-II for FY 2015-16 (Rs. Crore)

Particulars	Approved in Tariff Order dated 11.04.2015 for FY 2015-16	Claimed	Approved after truing up for FY 2015-16
FY 2015-16	49.93	59.91	54.99

3.1.2.5 Return on Equity (RoE)

A. Old Nine Large Generating Stations

Regulation 27 of the UERC Tariff Regulations, 2011 stipulates as follows:

"27. Return on Equity

(1) Return on equity shall be computed on the equity base determined in accordance with Regulation 22.

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 rate of 15.5% for Generating Stations, Transmission Licensee and SLDC and at the rate of 16% for Distribution Licensee **on a post-tax basis.***

..."

In its 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 regard RoE on Additional Capitalisation, the Commission has considered a normative equity of 30% where 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, 2011.

Further, it has been observed that UJVN Ltd. has computed the RoE for FY 2015-16 on the opening equity at the allowable rate of 15.50% post tax which is in accordance with the provisions of UERC Tariff Regulations, 2011. As discussed in the earlier Orders, the Commission had observed that as per the practice followed by UJVN Ltd. the capitalisation of assets added during the year occurs on 31st March, i.e. at the end of each financial year. In view of the above, the Commission is following the same approach as adopted in its previous Tariff Orders and has allowed the RoE only on opening equity in accordance with the Regulations.

As regard finalization of Transfer Scheme, the Commission in the MYT Order dated 06.05.2013 again directed UJVN Ltd. as follows:

"The Commission in view of the above once again directs UJVN Ltd. to take steps to coordinate with UPJVN Ltd. for finalisation of transfer without further delay and submit quarterly progress in this regards to the Commission."

In compliance to the above directions, UJVN Ltd. in its ARR & Tariff Petition for FY 2014-15 submitted that the transfer scheme finalisation is under way and the same is being followed on a regular basis. In this regard, the Commission in the Tariff Order for FY 2014-15 dated 10.04.2014 directed UJVN Ltd. as follows:

"The Commission directs UJVN Ltd. that till the time transfer scheme is finalised it should submit the quarterly progress report to the Commission."

Further, as discussed earlier there was de-capitalisation of Rs. 2.03 Crore in the year FY 2014-15 which the Commission has deducted from the original GFA resulting in reduction in the Original capital cost as on 1.4.2015. Due to de-capitalisation, the Commission has reduced the 30% of equity of the de-capitalised amount from the equity infused in the original capital cost and has thus computed RoE on Rs. 150.58 Crore instead of the earlier amount of Rs. 151.19 Crore.

As the Transfer Scheme is yet to be finalized, the Commission is, provisionally, allowing a return on normative equity @ 15.50% post tax in accordance with the provisions of the UERC Tariff Regulations, 2011 and the approach as discussed in the above paragraphs. The summary of the Return on Equity approved for 9 LHPs for FY 2015-16 is shown in the Table given below:

Table 3.15: Equity and Return on Equity for Nine Old LHPs for FY 2015-16 (Rs. Crore)

Name of the Generating Station	RoE approved in Tariff Order dated 11.04.2015 for FY 2015-16			Claimed by the Petitioner		Approved after Truing Up for FY 2015-16				
	On Transferred Asset	On Additional Capitalisation	RoE	Opening Equity	RoE	On Transferred Asset as on Jan 14, 2000		On Additional Capitalisation upto FY 2014-15		Total
						Normative Equity	RoE	Opening Equity	RoE	
Dhakrani	0.58	0.12	0.70	4.52	0.70	3.72	0.58	0.80	0.12	0.70
Dhalipur	0.95	0.20	1.15	7.46	1.16	6.11	0.95	1.35	0.21	1.16
Chibro	4.09	1.05	5.14	33.38	5.17	26.37	4.09	6.83	1.06	5.15
Khodri	3.44	0.55	3.99	25.82	4.00	22.19	3.44	3.57	0.55	3.99
Kulhal	0.81	0.11	0.93	6.03	0.93	5.25	0.81	0.78	0.12	0.93
Ramganga	2.33	0.25	2.58	16.66	2.58	15.01	2.33	1.66	0.26	2.58
Chilla	5.81	0.66	6.46	41.87	6.49	37.47	5.81	4.30	0.67	6.47
MB-I	5.10	1.44	6.54	42.93	6.65	32.92	5.10	9.35	1.45	6.55
Khatima	0.33	0.08	0.42	2.08	0.32	1.55	0.24	0.54	0.08	0.32
Total	23.43	4.47	27.90	180.76	28.02	150.58	23.34	29.18	4.52	27.86

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 Order dated 05.04.2016 and, accordingly, the financing of the project. The relevant para of the Tariff Order dated 05.04.2016 with respect to financing of the capital cost is as extracted below:

“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.”

With regard to the funding of additional capitalisation for FY 2015-16, it is observed that out of the total additional capitalisation claimed by the Petitioner for the year around Rs. 40.37 Crore of additional capitalisation was carried out to restore the damage caused due to natural calamity which occurred in FY 2013-14. It is further observed that the Petitioner has claimed the said fund from the Government of Uttarakhand as relief. The Commission has therefore considered the funding of the said additional capitalisation for FY 2015-16 as grants. **The Commission directs the Petitioner to pursue the matter with the GoU and submit the quarterly status report to the Commission.**

As already decided in Tariff Order dated 05.04.2016, the Commission has considered equity infusion from FY 2013-14 onwards subject to ceiling limit of 30% towards funding of additional capitalisation as extracted below:

"With regards to funding of additional capitalisation, the Commission directed the Petitioner to submit the proof of actual equity infused towards additional capitalisation. The Petitioner in its reply submitted that it received GoU budgetary support of Rs. 25.56 Crore in FY 2013-14 through three separate sanctions. The Petitioner submitted the required documentary proof for the same. The Commission has, accordingly, considered equity infusion from FY 2013-14 subject to ceiling limit of 30% towards funding of additional capitalisation."

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 as discussed above. The cost of such cess is further passed on to UPCL which in turn recovers the same from ultimate consumers of electricity through tariffs.

The Commission has revised the RoE allowed for FY 2015-16 considering the additional capitalisation allowed upto FY 2014-15 as shown below:

Table 3.16: RoE approved for MB-II for FY 2015-16 (Rs. Crore)

Particulars	Approved in Tariff Order for FY 2015-16 dated 11.04.2015	Claimed	Approved after truing up
FY 2015-16	34.93	95.60	39.36

3.1.2.6 Interest on Loans

A. Old Nine Generating Stations

The Petitioner submitted that as per the provisions of Regulation 22 of UERC Tariff Regulations, 2011, interest on normative debt has been considered on the value equivalent to 70% of additional capitalisation only.

Further, the Petitioner submitted that the rate of interest has been considered as the weighted average rate of interest for FY 2015-16 and the repayment has been considered as equal to the depreciation claimed for the year. Further, the Commission sought details of quarter wise actual loan repayment, interest paid towards existing loans along with interest refund received for FY 2015-16 for the ten LHP and the same was submitted by the Petitioner.

For the purpose of truing up and computing the interest expenses for FY 2015-16, the Commission has determined the normative loan in accordance with the UERC Tariff Regulations, 2011. The Commission, in accordance with UERC Tariff Regulations, 2011 has computed the weighted average interest rate based on the outstanding loans for UJVN Ltd. except for loans taken for new projects that are yet to achieve COD. The interest rate, based on the above, works out to 11.53% in case of Khatima LHP and 11.84% for other 8 LHPs. The Commission has accordingly considered the above mentioned interest rates for computing the interest expenses for 9 LHPs.

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 2015-16 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 3.17: Interest on Loan for Nine Old LHPs for FY 2015-16 (Rs. Crore)

Name of the Generating Station	Approved in APR Order dt. 11.04.2015	Interest Claimed	Approved after Truing Up				
			Opening Loan	Addition	Repayment	Closing Loan	Interest
Dhakrani	0.06	0.07	0.62	0.09	0.19	0.53	0.06
Dhalipur	0.11	0.12	1.17	0.07	0.30	0.94	0.12
Chibro	1.32	1.55	11.56	2.55	1.30	12.81	1.29
Khodri	0.24	0.29	2.76	0.54	1.36	1.95	0.25
Kulhal	0.06	0.07	0.73	0.10	0.17	0.66	0.08
Ramganga	0.17	0.19	1.67	0.13	0.33	1.47	0.18
Chilla	0.00	0.98	0.16	16.44	0.16	16.44	0.01
MB-I*	0.99	1.16	10.37	1.95	4.26	8.06	0.97
Khatima	0.05	2.88	0.00	39.45	0.00	39.45	0.00
Total	3.01	7.33	29.05	61.32	8.07	82.31	2.96

*Including DRB

A. Maneri Bhali-II

The Commission has considered the Capital Cost of Maneri Bhali-II as on COD and the financing thereof as approved in the Tariff Order dated 05.04.2016. 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.

For calculation of Interest for MB-II LHP for FY 2015-16, the Petitioner has submitted that it has fulfilled the conditions of PFC and has availed a reduction in interest by 1.10%-1.35% p.a. and that the benefit on account of saving in interest cost was Rs. 1.53 Crore in FY 2015-16. In this regard, the Commission sought the following details:

- a. Details of recomputed post COD timely payment rebate as calculated by PFC at S. No. 2 of PFC letter no. 03/22 dated 14.01.2016.
- b. Year wise post COD recalculated interest rates for loan no. 09202001, 09202002 and 09202003 from PFC.
- c. Reason for not availing the post COD timely rebate for loan no. 09202005.
- d. New reset period start date from which UJVN Ltd. would become eligible for post COD timely payment rebate.

In response, UJVN Ltd. furnished the details of recalculated timely payment rebate post COD as calculated by PFC, and submitted that for calculating the interest expense for FY 2015-16, year wise recalculated interest rates post COD for loan no. 09202001, 09202002 and 09202003 have been considered. UJVN Ltd. also submitted that, post COD, PFC has introduced the timely payment rebate scheme on 27.07.2015 with a pre-requisite that borrower entity should have valid long Term Debt Instrument credit rating not below BBB(-/+) from at least one credit agency approved by SEBI. Accordingly, UJVN Ltd. has re-initiated the process of credit rating as per directive of BOD given in the 76th meeting held on 30.09.2015 and received the revised rating on 06.01.2016. The revised rating was provided to PFC to extend the benefit of timely payment rebate post COD which PFC vide its letter dated no. 03/22/UK/UJVNL/Vol. 1/Gen dated 14.01.2016 extended to the Petitioner. Hence, UJVN Ltd. was able to avail the benefits of the scheme from 15.01.2016 as scheme was introduced on 27.07.2015 and UJVN Ltd. became eligible to avail the benefit of scheme in January, 2016 after obtaining valid credit rating.

Further, the Commission sought documents vide which GoU loans has been disbursed and the same were submitted by UJVN Ltd. Further, it is observed that in case of MB-II LHP, guarantee fee for FY 2015-16 has been considered as interest while computing the rate of interest. In this regard, the Commission sought the loan details including repayment done so far and balance repayment, which was submitted by UJVN Ltd.

Further, the Commission sought details of rebate received on loans pertaining to MB-II LHP for FY 2015-16 and FY 2016-17 and the same was submitted by the UJVN Ltd.

In case of MB-II station as the actual loan has been availed for the project, therefore, the interest has been computed on the basis of these loans availed for the project. For calculating the interest expense for FY 2015-16, the Commission has considered the interest rate of 12.12% for MB-II LHP. The Commission has adjusted the yearly interest refunds received by the Petitioner as done previously in the Order dated 05.04.2016. As discussed above, the Commission has computed the weighted average interest rate of 12.12% based on the outstanding PFC loans and GoU loans. The Commission for computing interest for MB-II station for FY 2015-16 has considered the above mentioned interest rate.

The Commission based on the approved capital cost and the opening and closing loan including the normative loan for MB-II as on 31.03.2016 has computed the interest expenses for FY 2015-16 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 28(3) of the UERC Tariff Regulations, 2011 has considered the repayment for FY 2015-16 equal to the depreciation allowed for that year.

Further, the Commission in its Order dated 22.01.2016 stated that the guarantee fee calculation on the basis of opening loan as against the closing loan shall be considered at the time of MYT Petition. The Commission has, therefore, for computing guarantee fee on PFC loan has considered opening value of loan as against the previous approach of closing value.

Based on the above considerations and the UERC Tariff Regulations, 2011, the Commission has calculated the interest expenses for MB-II for FY 2015-16 as shown in the Table below:

Table 3.18: Interest on Loan as approved for MB-II for FY 2015-16 (Rs. Crore)

Particulars	Approved in Tariff Order for FY 2015-16 dated 11.04.2015	Claimed	Approved after truing up for FY 2015-16
FY 2015-16	78.08	95.98	86.61

Further, with regards to saving in interest cost of Rs. 1.53 Crore in FY 2015-16, the Petitioner has sought to pass on 50% of the benefit to the consumers and retain 50% of the benefit as per the Regulation 28(7) of the UERC MYT Regulations, 2011. The Commission in accordance with the said Regulation allows Rs. 0.765 Crore, i.e. 50% of the benefit to be retained by the Petitioner.

3.1.2.7 Operation & Maintenance (O&M) Expenses

3.1.2.7.1 Truing up of O&M Expenses for FY 2015-16 (Nine Large Generating Stations)

The Petitioner submitted that O&M expenses for FY 2015-16 have been considered as per the audited accounts. 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 earlier in this Order. The Commission, in this regard, has also taken a similar view on the approach of allocating indirect expenses.

The Petitioner has submitted the actual O&M expenses on the basis of audited accounts for FY 2015-16. Further, the Petitioner has submitted the separate details of employee, R&M and A&G expenses.

The Commission does not deem it appropriate to revise every component of annual fixed charges as approved in MYT Order based on the latest actual data available as this would defeat the whole purpose of having a Multi Year Tariff. 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 52(2) of UERC Tariff Regulations, 2011. Accordingly, for projecting the O&M expenses for FY 2015-16, the Commission has considered FY 2011-12 as the base year expenses. The Commission for the purpose of escalation has considered the following escalation rates.

Table 3.19: Escalation Rates as considered by the Commission

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
CPI Inflation	9.76%	9.50%	8.80%
WPI Inflation	8.62%	7.42%	5.11%

Further, for the purpose of arriving at employee expenses for FY 2015-16, the Commission has considered the value of Growth Factor 'Gn' on the basis of actual details of recruitment provided by UJVN Ltd. Further, the Commission has considered a Constant Factor 'K' as determined in the Tariff Order dated 10.04.2014 for FY 2014-15.

3.1.2.7.2 Employee Cost

The Commission has considered the same approach for computation of employee expenses for FY 2015-16 as considered by it in MYT Order dated 06.05.2013. The Commission sought the actual number of employees recruited/retired in FY 2015-16 and the same was submitted by the Petitioner. Growth Factor 'Gn' has been considered as given below:

Table 3.20: Growth Factor 'Gn' as considered by the Commission for FY 2015-16

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Gn	1.05%	0.00%	0.00%	0.07%

Accordingly, the Commission has approved the employee expenses for FY 2015-16 as shown in the Table below:

Table 3.21: Employee Expenses approved for FY 2015-16 (Rs. Crore)

Name of the Generating Stations	Approved in Tariff Order dated 11.4.2015	Claimed	Approved after Truing Up
Dhakrani	7.61	10.49	7.57
Dhalipur	11.49	7.76	11.42
Chibro	31.76	33.68	31.58
Khodri	17.54	16.35	17.44
Kulhal	6.77	5.60	6.73
Ramganga	21.31	24.00	21.19
Chilla	23.21	25.72	23.07
MB-I	16.97	18.94	16.87
Khatima	9.43	10.14	9.38
Total	146.07	152.68	145.24

3.1.2.7.3 Repairs and Maintenance Expenses

The Commission has considered the same constant factor 'K' as determined by the Commission in the Tariff Order dated 10.04.2014 as follows:

Table 3.22: K-Factor as considered by the Commission

Station	Average of 3 years
Dhakrani	13.60%
Dhalipur	12.15%
Chibro	6.33%
Khodri	2.90%
Kulhal	9.13%
Ramganga	4.15%
Chilla	5.46%
MB-I	11.83%
Khatima	26.60%
Weighted Average	7.39%

For computing the R&M expenses for FY 2015-16, the Commission has multiplied the 'K' Factor as given above with the opening GFA approved for FY 2015-16. The Commission has considered the average increase in WPI for last three years from FY 2012-13 to FY 2014-15 as 5.11%. Accordingly, the Commission has approved the R&M expenses for FY 2015-16 as shown in the Table below:

Table 3.23: R&M Expenses approved for FY 2015-16 (Rs. Crore)

Name of the Generating Stations	Tariff Order dated 11.04.2015 for FY 2015-16	Claimed	Approved after Truing Up for FY 2015-16
Dhakrani	2.53	6.54	2.51
Dhalipur	3.73	5.68	3.71
Chibro	8.73	11.14	8.64
Khodri	3.09	2.47	3.06
Kulhal	2.25	3.18	2.25
Ramganga	2.85	3.24	2.82
Chilla	9.42	12.54	9.34
MB-I	20.95	9.42	20.76
Khatima	2.96	2.10	2.27
Total	56.50	56.31	55.35

3.1.2.7.4 Administrative & General Expenses

The Commission in its MYT Order dated 06.05.2013 on approval of Business Plan and MYT for the Control Period FY 2013-14 to FY 2015-16 approved the A&G expenses in accordance with the UERC Tariff Regulations, 2011. The Commission is considering the same approach for determining the A&G expenses for FY 2015-16. The WPI escalation rate is revised to 5.11% based on the actual values. Accordingly, the Commission approves the A&G expenses as shown in the Table below:

Table 3.24: A&G Expenses approved for FY 2015-16 (Rs. Crore)

Name of the Generating Stations	Tariff Order dated 11.04.2015 for FY 2015-16	Claimed	Approved after Truing Up for FY 2015-16
Dhakrani	0.58	2.11	0.53
Dhalipur	0.95	2.37	0.88
Chibro	3.64	9.10	3.34
Khodri	1.64	5.19	1.51
Kulhal	0.50	1.75	0.46
Ramganga	2.57	7.19	2.36
Chilla	2.66	6.30	2.45
MB-I	1.53	4.87	1.41
Khatima	0.52	1.90	0.48
Total	14.60	40.79	13.41

Here, it would be pointed out that the A&G Expenses of the Petitioner are very high. The Actual A&G Expenses claimed by the Petitioner for FY 2014-15 was Rs. 23.14 Crore which increased to Rs. 40.79 Crore in FY 2015-16, i.e., an increase of 76% which is totally unimaginable. The only reason that can be foreseen for such an increase can be the increase in overheads towards new ventures/projects that UJVN Ltd. is venturing into like solar projects, new LHPs etc., and expenses relating to such new ventures cannot be allowed to be loaded in the expenditure of 9 LHPs. Accordingly, **UJVN Ltd. is directed to submit the following details within one month from the date of Order.**

- 1) Detail of various offices of UJVN Ltd. and activities being run by them and number of staff in each office.
- 2) Details of various projects being run/taken up by UJVN Ltd. and number of employees in each such projects.

Further, as per UERC Tariff Regulations, 2011, O&M Expenses are controllable expenses and accordingly, the sharing of gains and losses have been carried out for O&M expenses. For computing net gain or loss, the Commission has determined O&M expenses for sharing as stated below.

With regard to employee expenses, the Commission has not considered generation incentive, interest on GPF trust, while comparing the actual employee expenses with normative expenses for sharing in line with its earlier approach. In case of R&M expenses, the Commission from the details submitted by the Petitioner observed that some entries pertained to provision made by the Petitioner in its books amounting to Rs. 3.21 Crore which is not allowable as per the UERC

Tariff Regulations, 2011. The Commission has, therefore, not considered these amounts as R&M expenses as the same had not been actually paid in FY 2015-16. The Station wise detail of provisioning amount not considered for 9 LHP is as shown in Table below and detailed in **Annexure-4**. The Petitioner may claim the same in FY 2016-17 subject to discharge of such liability and also providing the reconciliation for the same before the Commission in its tariff filings.

Table 3.25: Amount Towards Provision Claimed in R&M Expenses for 9 LHPs

Name of Station	Amount (In Rs.)
Chilla	1.75
Ramganga	0.03
Khatima	0.02
Chibro	0.02
Dhakrani	0.54
Dhalipur	0.48
Kulhal	0.37
Total	3.21

Apart from above, it is observed that the Petitioner had done double accounting of Rs. 0.027 Crore towards Supply, Erection Testing & Commissioning of on-line vibration monitoring system of Unit 03 & 04 of Khodri LHP, as the Petitioner had claimed the same amount under additional capitalisation. Accordingly, the said amount has not been considered in R&M expenses of Khodri LHP.

With regard to A&G expenses, the Commission observed that UJVN Ltd. has claimed approximately Rs. 12 Crore towards rebate to customer in FY 2015-16 under A&G expenses for 10 LHPs including MB-II. The Commission directed the Petitioner to submit the detailed working for the amount of rebate claimed along with justification for claiming the same as a part of AFC. In response, UJVN Ltd. submitted that such rebate to customers is an expense to the company and consequently causes reduction in actual revenue realization of AFC and, therefore, requested to allow such rebate to customers.

The Commission is of the view that timely payment rebate is a commercial arrangement between two parties to save on working capital requirement and, therefore, the expenses arising out of the same cannot be passed on to the consumers and, therefore, the same has not been considered as a part of A&G expenses for the purpose of sharing of gains or losses.

Accordingly, the Commission has approved the total O&M expenses for FY 2015-16 as shown in the Table below:

Table 3.26: O&M Expenses approved for FY 2015-16 (Rs. Crore)

Name of the Generating Stations	Approved in Tariff Order dt. 11.4.2015 for FY 2015-16	Actual Claimed	Adjusted Claim	Normative Approved after Truing Up for FY 2015-16	Efficiency gain/(loss)	Net Entitlement
Dhakrani	10.73	19.14	18.10	10.62	(7.48)	12.49
Dhalipur	16.17	15.81	14.65	16.00	1.35	15.73
Chibro	44.12	53.92	51.27	43.56	(7.71)	45.49
Khodri	22.27	24.01	22.64	22.01	(0.63)	22.16
Kulhal	9.52	10.53	9.76	9.44	(0.32)	9.52
Ramganga	26.72	34.44	31.99	26.37	(5.62)	27.78
Chilla	35.29	44.56	40.72	34.86	(5.86)	36.33
MB-I	39.45	33.24	31.20	39.03	7.83	37.46
Khatima	12.91	14.13	13.51	12.12	(1.39)	12.47
Total	217.17	249.78	233.84	214.01	(19.83)	219.43

3.1.2.8 O&M Expenses for Maneri Bhali-II

As discussed earlier, the Commission has approved the capital cost of Rs. 1885.50 Crore for MB-II as on COD. The Commission for computing normative O&M Expenses has first computed the O&M Expenses for MB-II for the base year of FY 2007-08 at 1.5% of the capital cost, as approved by the Commission, for the first year of operation and then suitably escalated it with the escalation rate, as approved by the Commission, for the respective years. 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 O&M expenses on the basis of Regulation 52 of UERC Tariff Regulations, 2011.

Table 3.27: Normative O&M Expenses as Approved for FY 2015-16 (Rs. Crore)

Particulars	Approved in Tariff Order dated 11.04.2015	Normative O&M Approved Now
FY 2015-16	50.98	50.13

As discussed above employee expenses for the purpose of sharing has been considered after excluding interest on GPF trust and VI Pay Commission arrear. In case of A&G expenses the rebate amount booked as expenses have not been considered.

From the details of R&M expenses for MB-II submitted by the Petitioner, the Commission observed that the Petitioner has provisioned an amount of Rs. 1.22 Crore towards the works

detailed in **Annexure-5**. The Commission has not considered the works mentioned in the said Annexure as the same have not been actually incurred and is not allowable as per the UERC Tariff Regulations, 2011.

Further, as already discussed in the additional capitalisation section, expenses of Rs. 0.50 Crore towards RGMO and Circuit Breaker which are expenses of capital in nature were wrongly booked under R&M expenses and, therefore, the same have been considered as additional capitalisation and have not been considered as a part of R&M expenses for the purpose of sharing of gains and loss. The Commission has, accordingly, determined the O&M expenses for the purpose of sharing of gains and loss.

As already discussed above, O&M expenses have been considered as controllable factor, accordingly, the gains/losses for FY 2015-16 will have to be shared in the manner given in the Table below:

Table 3.28: O&M Expenses Approved After Sharing of Gains and Losses for FY 2015-16 (Rs. Crore)

Particulars	Actual Claimed in the Petition	Adjusted claim considered for sharing	Normative approved now	Efficiency gain/(loss)	Generator Share	Net Entitlement
O&M Expenses		A	B	C=B-A	D=75%xC (Loss) = 80%xC (Gain)	E=A+D
FY 2015-16	48.43	39.13	50.13	11.00	8.80	47.93

3.1.2.9 Interest on Working Capital

A. Old Nine Medium and Large 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, 2011, on normative basis. The rate of interest considered by the Petitioner for computing interest on working capital for FY 2015-16 has been considered as 14.75% on the basis of the PLR of State Bank of India, as considered by the Commission, in its previous Orders.

The components of working capital as per Regulation 34 (1) c) of UERC Tariff Regulations, 2011 are as follows:

“(i) Operation and maintenance expense for one month;

(ii) Maintenance spares @ 15% of operation and maintenance expenses; and

(iii) Receivables for sale of electricity equivalent to two months of the annual fixed charges calculated on normative capacity index."

With respect to the interest on working capital, Regulation 34 of the UERC Tariff Regulations, 2011 specifies as under:

"34. Interest on Working Capital

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 is made.

(1) Generation:

...

c) In case of hydro power generating stations, working capital shall cover:

(i) Operation and maintenance expenses for one month;

(ii) Maintenance spares @ 15% of operation and maintenance expenses; and

(iii) Receivables for sale of electricity equivalent to two months of the annual fixed charges calculated on normative capacity index.

..."

3.1.2.9.1 One Month O&M Expenses

The Commission has trued up the annual O&M expense plant wise for FY 2015-16. Based on the approved O&M expenses, one month's O&M expenses has been worked out plant wise for determining the working capital requirement.

3.1.2.9.2 Maintenance Spares

The Commission has considered the maintenance spares in accordance with UERC Tariff Regulations, 2011. The Commission has determined the plant wise maintenance spares requirement @ 15% of the trued up O&M Expenses for FY 2015-16.

3.1.2.9.3 Receivables

UERC Tariff Regulations, 2011 envisage 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 trued up plant wise AFC for FY 2015-16.

As regards the interest on working capital, Regulation 34 of the UERC Tariff Regulations, 2011 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 is made. As the Tariff Petition for FY 2015-16 was filed on 28.11.2014, the Commission has considered the prevailing State Bank Advance Rate (SBAR) of State Bank of India, i.e., 14.75% for computing the Interest on Working Capital.

Accordingly, the normative Interest on working Capital for FY 2015-16 as approved by the Commission is as shown in the Table below:

Table 3.29: Interest on Working Capital for Nine LHPs for FY 2015-16 (Rs. Crore)

Plant	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 APR Order dt. 11.04.2015	Claimed	Normative Approved after Truing Up
Dhakrani	1.04	1.87	2.19	5.11	0.67	1.18	0.75
Dhalipur	1.31	2.36	2.78	6.45	1.01	1.00	0.95
Chibro	3.79	6.82	8.21	18.82	2.82	3.46	2.78
Khodri	1.85	3.32	4.34	9.51	1.46	1.59	1.40
Kulhal	0.79	1.43	1.74	3.96	0.60	0.67	0.58
Ramganga	2.31	4.17	4.58	11.06	1.66	2.16	1.63
Chilla	3.03	5.45	7.04	15.52	2.30	2.91	2.29
MB-I	3.12	5.62	8.07	16.81	2.66	2.32	2.48
Khatima	1.04	1.87	1.97	4.88	0.79	0.94	0.72
Total	18.29	32.91	40.93	92.13	13.96	16.23	13.59

Further, the UERC Tariff Regulations, 2011 specify for sharing of gains/losses due to controllable factors and as per UERC Tariff Regulations, 2011, variation in working capital requirements is a controllable factor. The actual interest on working capital for UJVNL as per audited accounts is 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, 2011.

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

Table 3.30 Interest on Working Capital for Nine LHPs for FY 2015-16 After Sharing of Gains (Rs. Crore)

Particulars	Actual	Normative as Trued up	Efficiency gain/loss	Rebate in Tariff	Net Entitlement
	A	B	C=B-A	D=20%xC	E=B-D
Interest on Working Capital	0.00	13.59	13.59	2.72	10.87

A. Maneri Bhali-II

As discussed earlier, the Commission has approved the Capital Cost of MB-II as on COD and has considered additional capitalisation, and has reviewed all the components of AFC. As a result of which the Interest on Working Capital has been revised in accordance with UERC Tariff Regulations, 2011 as shown in the Table below:

Table 3.31 Revised Interest on Working Capital as approved for FY 2015-16 (Rs. Crore)

Particulars	Approved in Tariff Order for FY 2015-16 dated 11.04.2015	Claimed	Approved after truing up
FY 2015-16	7.14	9.27	7.34

As discussed above, as the actual interest on working capital incurred by the Petitioner for FY 2015-16 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, 2011.

The interest on working capital for MB-II after sharing the gains for FY 2015-16 is as given in Table below:

Table 3.32: Interest on Working Capital for MB-II for FY 2015-16 After Sharing of Gains (Rs. Crore)

Particulars	Actual	Normative as Trued up	Efficiency gain/loss	Rebate in Tariff	Net Entitlement
Interest on Working Capital	A	B	C=B-A	D=20%xC	E=B-D
FY 2015-16	0.00	7.34	7.34	1.47	5.88

3.1.2.10 Annual Fixed Charges for Nine LHPs for FY 2015-16

Based on the above analysis, the Commission has worked out the approved figures of Gross AFC for FY 2015-16 after truing up. The summary of Gross AFC for FY 2015-16 is as shown in the Table below:

Table 3.33: Summary of AFC for FY 2015-16 (Rs. Crore)

Name of Generating Stations	Approved in Tariff Order dt. 11.04.2015 for FY 2015-16	AFC Claimed	AFC Approved after truing up of FY 2015-16					
			Depreciation	Interest on loan	Interest on Working Capital after sharing of gains	O&M expenses	RoE	Gross Annual Fixed Cost
Dhakrani	12.33	21.27	0.19	0.06	0.60	12.49	0.70	14.04
Dhalipur	18.73	18.38	0.30	0.12	0.76	15.73	1.16	18.07
Chibro	54.70	65.42	1.30	1.29	2.22	45.49	5.15	55.45
Khodri	29.31	31.25	1.36	0.25	1.12	22.16	3.99	28.88
Kulhal	11.27	12.37	0.17	0.08	0.47	9.52	0.93	11.17
Ramganga	31.46	39.71	0.33	0.18	1.31	27.78	2.58	32.18
Chilla	45.19	56.11	1.15	0.01	1.83	36.33	6.47	45.79
MB-I	53.65	47.78	4.02	0.97	1.98	37.46	6.55	51.00
Khatima	14.27	18.28	0.11	0.00	0.58	12.47	0.32	13.48
Total	270.90	310.57	8.93	2.96	10.87	219.43	27.86	270.05

3.1.2.11 Non Tariff Income**A. Old Nine Large Hydro Generating Stations**

Regulation 47 of the UERC Tariff Regulations, 2011 specifies as follows:

"47. 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) Income from sale of Ash/rejected coal;*
- e) Interest on delayed or deferred payment on bills;*
- f) Interest on advances to suppliers/contractors;*
- g) Rental from staff quarters;*

- h) Rental from contractors;
- i) Income from hire charges from contractors and others;
- j) Income from advertisements, etc.;
- k) Any other 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 2015-16 in accordance with the audited accounts.

Accordingly, the Commission has considered the plant-wise non-tariff income for truing up purposes as proposed by the Petitioner. Further, as discussed in Commission's Order dated 21.10.2009, that the provision of the UERC Tariff Regulations, 2011 permitting adjustment of non-tariff income from AFC is not in consonance with the 1972 Agreement with HP as the components of cost of generation specified in Schedule-VIII of The Electricity (Supply) Act, 1948 considers only the cost components and does not provide for adjustment of any kind of revenue. Therefore, in order to have conformity with the provisions of the said agreement, the Commission has not considered any adjustment of proportion of non-tariff income for HPSEB and has considered the entire amount of above said non-tariff income for adjustment in truing up of UPCL's share of AFC. The Non-Tariff income as approved by the Commission for FY 2015-16 is shown in the Table below:

Table 3.34: Non-Tariff Income for 9 LHPs for FY 2015-16 (Rs. Crore)

Name of the Generating Stations	Approved in Tariff Order dated 11.04.2015 for FY 2015-16	Claimed	Approved after Truing Up for FY 2015-16
Dhakrani	0.27	0.88	0.88
Dhalipur	0.36	1.40	1.40
Chibro	1.66	6.20	6.20
Khodri	0.92	2.83	2.83
Kulhal	0.21	0.71	0.71
Ramganga	1.37	4.70	4.70
Chilla	1.21	3.54	3.54
MB-I	0.64	2.56	2.56
Khatima	0.35	1.65	1.65
Total	6.99	24.46	24.46

3.1.2.12 Truing up for Nine LHPs for FY 2015-16 and its net impact on UPCL

The Commission has Trued-up the (Surplus)/Gap for 9 LHPs pertaining to FY 2015-16 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 3.35: Summary of Net AFC as Trued up by the Commission for 9 LHPs to be Recovered from UPCL (Rs. Crore)

Power Stations	Approved Net AFC in Tariff Order dated 11.04.2015 for FY 2015-16	Total AFC to be recovered without Carrying Cost after True-up for FY 2015-16
Dhakrani	8.98	9.65
Dhalipur	13.69	12.16
Chibro	39.36	35.38
Khodri	21.06	18.83
Kulhal	8.80	8.22
Ramganga	30.09	27.48
Chilla	43.98	42.25
MB-I	53.01	48.43
Khatima	13.92	11.83
Total	232.89	214.25

The summary of truing up for FY 2015-16 for UPCL after considering the actual performance parameter achieved in FY 2015-16 is shown in the Table below:

Table 3.36: Summary of Net Truing-up for FY 2015-16 for UPCL (Rs. Crore)

Name of the Station	AFC to be recovered from UPCL (Rs Crore)	Capacity Charges (Rs Crore)	NAPAF (%)	Restated /Actual PAFY (%)	Capacity charges allowable (Rs Crore)	Capacity charges after sharing	Actual Energy Considered (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 (Rs Crore)	Total recovered from UPCL	Truing up impact
Dhakrani	9.65	4.83	57%	59.06%	5.00	4.97	89.04	0.413	3.68	0.00	0.384	0.00	8.65	8.08	0.57
Dhalipur	12.16	6.08	57%	57.81%	6.16	6.15	151.26	0.425	6.08	8.27	0.425	0.35	12.58	14.19	-1.62
Chibro	35.38	17.69	64%	71.30%	19.71	19.31	605.73	0.318	17.69	49.98	0.318	1.59	38.59	43.37	-4.78
Khodri	18.83	9.42	57%	62.24%	10.28	10.11	273.74	0.368	9.42	17.57	0.368	0.65	20.17	22.75	-2.58
Kulhal	8.22	4.11	65%	73.29%	4.64	4.53	108.17	0.336	3.64	0.00	0.316	0.00	8.17	8.86	-0.69
Ramganga	27.48	13.74	19%	30.07%	21.75	20.14	500.07	0.445	13.74	117.76	0.359	4.23	38.12	48.22	-10.11
Chilla	42.25	21.12	74%	72.66%	20.74	20.84	740.64	0.318	21.12	22.89	0.294	0.67	42.64	44.58	-1.94
MB-I	48.43	24.22	79%	74.06%	22.70	23.08	471.11	0.617	24.22	0.00	0.447	0.00	47.30	56.68	-9.39
Khatima	11.83	5.92	47%	47.00%	5.92	5.92	116.33	0.307	3.57	0.00	0.286	0.00	9.49	9.71	-0.22
Total	214.25	107.12			116.90	115.04	3056.10		103.16	216.49		7.50	225.70	256.44	-30.74

Thus, for 9 LHPs, the Commission has computed the net surplus of Rs. 30.74 Crore for FY 2015-16 on account of sharing of gains and losses and considering the actual performance parameters.

The Commission has Trued-up the (Surplus)/Gap for 9 LHPs pertaining to FY 2015-16 to be recovered by UJVN Ltd. from UPCL and HPSEB. In addition to FY 2015-16 as discussed earlier in

this section, the Commission has approved the impact of Rs. 0.67 Crore on account of revision in PAFY for Khatima LHP for FY 2014-15. The impact along with carrying cost of FY 2014-15 works out to Rs. 0.71 Crore which has been considered as opening gap in FY 2015-16. Based on the above, the total amount (refundable)/recoverable by UJVN Ltd. from UPCL and HPSEB along with the carrying cost is as summarized in the Table below:

Table 3.37: Summary of Net AFC as Trued-up by the Commission for 9 LHPs to be Recovered from UPCL (Rs. Crore)

Particulars	FY 2015-16	FY 2016-17
Opening Balance	*0.71	(32.19)
True Up Amount Gap/(Surplus)	(30.74)	-
Carrying Cost	(2.16)	(4.52)
Closing Balance	(32.19)	(36.71)
Interest Rate	14.75%	14.05%

**Impact on account of revision of PAFY for Khatima LHP for FY 2014-15*

The Commission directs UJVN Ltd. to refund Rs. 36.71 Crore to UPCL in accordance with the provisions of UERC Tariff Regulations, 2011 in twelve equal monthly instalments starting from April 2017 to March 2018.

3.1.2.13 Truing up of 5 LHPs of UJVN Ltd. for FY 2015-16 for HPSEB

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

Table 3.38: Summary of Net AFC as Trued-up by the Commission for 5 LHPs to be Recovered from HPSEB (Rs. Crore)

Power Stations	Approved Net AFC in APR Order dated 11.04.2015	Total AFC to be recovered without carrying cost after Tariff Order for FY 2015-16
Dhakrani	3.08	3.51
Dhalipur	4.68	4.52
Chibro	13.67	13.86
Khodri	7.33	7.22
Kulhal	2.25	2.23
Total	31.02	31.34

Table 3.39: Summary of Net AFC as Trued up by the Commission for 5 LHPs to be recovered from HPSEB (Rs. Crore)

Particulars	FY 2015-16	FY 2016-17
Opening Balance	0.00	0.35
True Up Amount Gap/ (Surplus)	0.32	0.00
Carrying Cost	0.02	0.05
Closing Balance	0.35	0.39
Interest Rate	14.75%	14.05%

The Commission directs UJVN Ltd. to recover Rs. 0.39 Crore from HPSEB on the basis of actual NAPAF and energy billed in accordance with the provisions of UERC Tariff Regulations, 2011 in equal twelve equal monthly instalments starting from April, 2017 to March, 2018.

3.1.2.14 Net Annual Fixed Charges for MB-II from FY 2015-16

Based on the approved capital cost of MB-II and the approved additional capitalisation and O&M expenses in accordance with MYT Regulations 2011, the net truing up AFC for FY 2015-16 is as shown in the table below:

Table 3.40: Summary of Net AFC Truing up of MB-II for FY 2015-16 (Rs. Crore)

Particulars	Approved in Tariff Order for FY 2015-16 dated 11.04.2015	Claimed	Approved after truing up
Depreciation	49.93	59.91	54.99
Interest on loan	78.08	95.98	86.61
Interest on Working Capital	7.14	9.27	5.88
O&M expenses	50.98	50.47	47.93
RoE	34.93	95.60	39.36
Total Annual Fixed Costs	221.06	311.23	234.76
NTI	2.08	3.11	3.11
Net AFC	218.98	308.12	231.65

The summary of truing up of MB-II with regard to the Net AFC approved for FY 2015-16 in the Order dated 11.04.2015 is as shown in the Table below:

3.1.2.15 Net impact on account of Truing-up of FY 2015-16 of MB-II

Table 3.41: Net Impact on Account of Truing-up of FY 2015-16 (Rs. Crore)

Name of the Station	AFC to be recovered from UPCL (Rs Crore)	Capacity Charges (Rs Crore)	NAPAF (%)	Restated/ Actual PAFY (%)	Capacity charges allowable (Rs Crore)	Capacity charges after sharing	Saleable Primary Energy (MU)	Actual Billed Energy (MU)	Allowable EC (Rs. Crore)	Total allowable (Rs Crore)	Total recovered from UPCL	Truing up impact
MB-II	231.65	115.83	74.00	63.86	99.96	103.92	1550.44	1214.03	90.70	194.62	170.29	24.32

In addition to above, the Commission has allowed an amount of Rs. 0.765 Crore as benefit of refinancing to be retained by the Petitioner and therefore the net impact of truing up works out to Rs. 25.09 Crore.

3.1.3 Net Impact on Account of Truing-up of FY 2015-16 of MB-II

The Commission has Trued-up the (Surplus)/Gap for MB-II pertaining to FY2015-16 to be recovered by UJVN Ltd. from UPCL. Based on the above, the total amount (refundable)/recoverable by UJVN Ltd. from UPCL along with the carrying cost is summarized in the Table below:

Table 3.42: Summary of net amount Trued up by the Commission for FY 2015-16 to be recovered from UPCL (Rs. Crore)

Particulars	2015-16	2016-17
Opening (Surplus)/Gap	0.00	26.94
True Up Amount	25.09	0.00
Carrying Cost	1.85	3.79
Closing (Surplus)/Gap	26.94	30.73
Interest Rate	14.75%	14.05%

The Commission directs UJVN Ltd. to recover the above approved amount of Rs. 30.73 Crore on account of Truing up of MB-II for FY 2015-16 from UPCL in 12 equal monthly instalments commencing from April 2017 to March 2018.

4 Petitioner's Submissions, Commission's Analysis, Scrutiny and Conclusion on APR for FY 2016-17, Revised AFC & Tariff for FY 2017-18

4.1 Annual Performance Review

The Commission, vide its Order dated 05.04.2016, approved the Multi Year Tariff for the Petitioner for the Control Period FY 2016-17 to FY 2018-19. Regulation 12(3) of the UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2015 stipulate that under the MYT framework, the performance of the generating company shall be subject to Annual Performance Review.

Regulation 12(3) of the UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2015 specify that:

"The scope of Annual Performance Review shall be a comparison of the performance of the Applicant with the approved forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges and shall comprise the 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 factor) and those caused by factors beyond the control of the applicant (un-controllable factors);*
- c) Revision of estimates for the 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 05.04.2016, on approval of Business Plan and MYT Petition for the Control Period from FY 2016-17 to FY 2018-19 approved the AFC for the Control Period based on the audited accounts till FY 2014-15. The Petitioner, in this Petition, proposed revision of estimates for FY 2017-18 based on the audited accounts for FY 2015-16 and revised estimates for FY 2016-17.

The Commission, in this Order, has carried out the Truing up of 9 LHPs and MB-II for FY 2015-16 in accordance with the UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011. In accordance with Regulation 12(3) of the UERC Tariff Regulations, 2015 the scope of annual performance review is limited to the revision of estimates for the ensuing year, if required, based on the audited financial results for the previous year and does not provide for the revision of estimates for the current year and give effect on this account in the estimates of the ensuing year. The Commission shall carry out the truing up of FY 2016-17 based on the audited accounts for that year and give effect on this account in the AFC of FY 2018-19. The Commission, as discussed earlier, while carrying out the truing up has revised additional capitalisation and R&M expenses for FY 2015-16 for 9 LHPs and MB-II. Hence, the Commission, under the provisions of Regulation 12(3) of the UERC Tariff Regulations, 2015, has revised the AFC for FY 2017-18 based on the revised additional capitalization and O&M expenses for 9 LHPs and MB-II for FY 2015-16 and FY 2016-17. The approach adopted by the Commission in the approval of each element of ARR for FY 2017-18 is elaborated in the subsequent paragraphs.

4.2 Physical Parameters

4.2.1 NAPAF

Regulation 47(1) (b) of UERC Tariff Regulations, 2015 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 in its MYT Order dated 05.04.2016 had approved NAPAF of 8 LHPs excluding Khatima and MB-II. As the RMU works for Khatima LHP will get completed in FY 2016-17 the Commission has approved the NAPAF for the station for FY 2017-18. With regard to MB-II, as per the submissions made by the Petitioner, the works related to raising of dam height have been completed and all administrative approval for raising the water level have been received, the Petitioner will be able to achieve the desired water head, the Commission, is therefore, now fixing the NAPAF for the station which is discussed subsequently. With regard to other LHPs, the Commission is of the view that the NAPAF approved for FY 2017-18 in the MYT Order dated

05.04.2016 for second Control Period shall continue to be applicable without any change.

4.2.1.1 NAPAF for Khatima LHP

The Petitioner in its Petition has claimed PAFY for FY 2017-18 as 53.30% which is based on the PAFY data for FY 2013-14 to FY 2015-16. The Commission sought justification for claiming PAFY of 53.30% for Khatima LHP for FY 2017-18 as the same has been projected on the basis of past three years data during which the plant was under RMU. Further, since the RMU works have been completed, the Commission directed UJVN Ltd. that PAFY for FY 2017-18 should be projected considering completion of all RMU works in FY 2016-17. In response, UJVN Ltd. submitted that during lean discharge season, U.P Irrigation Department releases 90% of available discharge into Power Channel for Khatima LHP or retains approximately 10-15 cumecs in river. Further, during June to September, there is a high discharge in the river which contains trash/silt which results in frequent flood condition which leads to closure of the Power Channel. On account of such closure, UJVN Ltd. has considered 90% availability for calculation of PAFM in these months. Further closure of Power Channel of almost one month is taken by U.P Irrigation Department during October-November resulting in corresponding reduction in PAFM during October-November. Accordingly, UJVN Ltd. has revised its projection for achievable PAFY after RMU for Khatima LHP as 58% for FY 2017-18.

The Commission has examined the matter and is of the view that since generation data on actual performance of the station post RMU works is not available, the Commission as a principle for approving NAPAF for the station has relied on the submissions made by the Petitioner and information available with regards to the RMU works and has determined NAPAF for the station considering efficiency improvement on account of RMU works as discussed below.

It is observed that the Commission in its MYT Order dated 06.05.2013 for First Control Period from FY 2013-14 to FY 2015-16 had approved the NAPAF of 78% for Khatima LHP. Further, UJVN Ltd. in its Review Petition dated 01.07.2013 had projected the NAPAF of 67%. However, the Commission in its Order dated 03.09.2013 in view of ongoing RMU works had approved the NAPAF of 47%. As the RMU works for Khatima will be completed in FY 2016-17, the Commission directed UJVN Ltd. to submit the detailed computation of PAFY proposed in Review Petition dated 01.07.2013 by UJVN Ltd. In response, UJVN Ltd. submitted the detailed computation of PAFY of

67%. It is observed that in the detailed computation, all the eventualities of closure/loss of generation as submitted by UJVN Ltd. in the current proceeding and discussed in the above paragraph have been factored. Hence, repeated revision of NAPAF is unwarranted. However, UJVN Ltd. had then considered generator efficiency of 96% and turbine efficiency of 90% for projecting NAPAF whereas, the contract for RMU works of Khatima was awarded to the Joint Venture of M/s Alstom India Ltd. & M/s PES Engineers Pvt. Ltd. and based on guaranteed parameters by M/s Alstom India Ltd., it is observed that the guaranteed generator efficiency is 97% and turbine efficiency is 93% after RMU completion. Therefore, considering the generator efficiency of 97% and turbine efficiency of 93%, the achievable PAFY for Khatima LHP works out to 69.30%. Accordingly, the Commission has revised the NAPAF for Khatima LHP to 69.30% post RMU works for the rest of the Control Period, i.e. FY 2017-18 and FY 2018-19 for recovery of capacity charges.

The Commission would like to clarify that though it has approved NAPAF of 78% in the MYT Order for the first Control Period, it is now approving a lower NAPAF in absence of reliable data post RMU works as discussed above. Primarily, this is to ensure that the Petitioner does not face any undue financial hardship on account of higher NAPAF. However, the Commission would also like to safeguard the interest of the consumers and, therefore, in case the actual PAFY of FY 2017-18 and FY 2018-19 for Khatima LHP is between 69.30% and 78.00%, the Petitioner shall be not entitled to any incentive on account of higher PAFY till 78% and incentive will only be applicable beyond PAFY of 78.00%.

4.2.1.2 NAPAF for Maneri Bhali-II

The Petitioner in its Petition has projected PAFY for the station as 61.50%. The Petitioner in its Petition further stated that the LHP is expected to achieve 64.93% availability in FY 2016-17 and so far has achieved 81% availability during April 2016 till September 2016 at a dam height of 1104 m. The Petitioner has further stated that had it been allowed to raise water level by district administration to 1108 m and, therefore, it would have achieved PAFY of 73% in FY 2016-17. Subsequently during the current tariff proceeding, the district administration of Uttarkashi approved raising of water level to 1108 m. The Commission, accordingly, sought for revised PAFY projections of MB-II for FY 2017-18 considering that the dam height has now been increased to its FRL, i.e. 1108 m. In response, UJVN Ltd. submitted the revised projection of PAFM for MB-II LHP as 74.97% for FY 2017-18.

The Commission has gone through the submissions of the Petitioner. The Commission in its MYT Order dated 06.05.2013 for the First Control Period had approved a NAPAF of 85% for MB-II. The Petitioner in its Review Petition had filed for revision of NAPAF approved by the Commission for first Control Period and prayed to relax the NAPAF for the station to 52% due to various factors including restrictions on dam height, high silt, evacuation problem in TRC and various other factors. The Commission in its Review Order dated 03.09.2013 considered the relaxation to NAPAF on account of following factors, viz.

- (i) restriction of the level of Joshiyara barrage to 1104 m against FRL of 1108 m due to rehabilitation and resettlement problem near the barrage (98.38% availability),
- (ii) restriction of plant generation to 280 MW instead of full load of 304 MW on account of higher vibration in machines due to improper water evacuation in Tail Race Channel (92.10% availability);
- (iii) Normal maintenance period of 60 days due to extensive repair of major components of machines. The Commission in its Review Order dated 03.09.2013 had considered 35 days for annual maintenance and allowed 25 days more in normal maintenance. (Availability of 93% in FY 2013-14, 95% in FY 2014-15 and 97% in FY 2015-16).

Accordingly, the Commission in its Review Order dated 03.09.2013 had approved the NAPAF of $85\% \times 98.38\% \times 92.10\% \times 97\% = 74\%$ in FY 2015-16.

As discussed above, the dam height issue is now resolved and further TRC modification works have now been completed, therefore, the Commission has not reduced availability on account of the same. With regard to impact of shutdown on account of overhauling as given in (iii) above, the Commission has considered factor of 97% towards machine availability as approved for FY 2015-16. Hence, NAPAF stands revised to 82.00% (i.e. $85\% \times 97\%$) for rest of the Control Period, i.e. FY 2017-18 and FY 2018-19.

Accordingly, the NAPAF for the 10 LHPs for FY 2017-18 is approved as per the Table below:

Table 4.1: NAPAF as approved by the Commission for FY 2017-18

Station	Approved in MYT Order dated 05.04.2016 for FY 2017-18	Approved Now
Dhakrani	66.17%	66.17%
Dhalipur	61.07%	61.07%
Chibro	65.06%	65.06%
Khodri	57.23%	57.23%
Kulhal	65.00%	65.00%
Ramganga	19.00%	19.00%
Chilla	74.00%	74.00%
MB-I	79.00%	79.00%
Khatima	-	69.30%
MB-II	-	82.00%

4.2.2 Design Energy, Auxiliary Energy Consumption and Saleable Primary Energy

A. Old Nine Large Generating Station

The Petitioner in its Petition has projected energy generation from Khatima LHP as 217 MU for FY 2017-18. The Commission sought justification for projecting generation of 217 MU from Khatima power station in FY 2017-18 (post completion of RMU of all the three Units) as against 235.59 MU projected in the DPR submitted for investment approval of RMU. The Commission further sought for post RMU design energy alongwith the basis of computation of such design energy. In response, the Petitioner submitted that the discharge in Sharda Canal is controlled by U.P Irrigation Department from Banbasa barrage and TRC level goes high in case of increased discharge which is pre-dominant if the Nagla escape channel is closed. This decreases the head thereby reducing the generation. Accordingly, UJVN Ltd. has submitted that possible generation would be reduced to 207.44 MU in FY 2017-18. The Petitioner, accordingly, revised the projected generation to 207.44 MU.

The Commission in its MYT Order dated 05.04.2016 with regard to design energy of 9 LHPs had stated as follows:

"..., the Commission provisionally approves the earlier approved primary energy as design energy for the Control Period. However, the same is subject to revision as and when RMU works for generating stations are completed. Thereafter, for ascertaining the saleable primary energy, normative auxiliary consumption including transformation losses as specified in the UERC Tariff Regulations, 2015 is deducted from the Design Energy to arrive at the saleable primary energy for the second Control Period."

Since the RMU works for Khatima LHP have been completed in FY 2016-17, the Commission is revising the design energy for the LHP. It is observed that the Petitioner in its Petition dated 06.09.2013 for Investment Approval had submitted that after execution of the RMU works as per the revised DPR the LHP is expected to generate 41.4 MW with average generation of 235.59 MU in 90% dependable year. The Commission taking cognisance of the submissions made by the Petitioner and the revised DPR gave in-principle approval of RMU works in its Order dated 07.05.2015. The Petitioner has, however, now submitted that the station shall only be able to generate 207 MU as compared to earlier projected generation of 235.59 MU. The Commission, in this regard, is of the view that the projected generation of 235.59 MU submitted by the Petitioner was based on revised DPR while the current projection of the Petitioner does not have any basis or grounds for refuting the projection made in its revised DPR. Further, the Petitioner cannot have separate set of performance parameters for getting investment approval and for claiming tariff which only results in unjust financial burden on to the consumers. The Commission, therefore, finds no merit in considering the design energy projected by the Petitioner.

Hence, the Commission in line with the order dated 07.05.2015 for approval of "Capital Investment for Renovation & Modernization" of Khatima (3x13.8 MW) HEP has revised the design energy of Khatima LHP to 235.59 MU.

With regard to Auxiliary energy consumption, it is observed that the Petitioner for Khatima LHP has prayed for revised auxiliary consumption norm of 1% from the earlier approved norm of 0.70%. Since Khatima LHP after RMU works has static excitation system. The Commission has gone through the submissions of the Petitioner and approves revised auxiliary consumption of 1% as per the MYT Regulations. With regard to the other stations, the Commission has considered auxiliary consumption as approved in its MYT Order dated 05.04.2016.

Accordingly, the design energy and saleable primary energy approved by the Commission is shown in the Table below:

Table 4.2: Design Energy and Saleable Primary Energy Approved for FY 2017-18 (MU)

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	156.88	0.70%	1.10	155.78
Dhalipur	192.00	192.00	0.70%	1.34	190.66
Chibro	750.00	750.00	1.20%	9.00	741.00
Khodri	345.00	345.00	1.00%	3.45	341.55
Kulhal	164.00	153.91	0.70%	1.08	152.83
Ramganga	385.00	311.00	0.70%	2.18	308.82
Chilla	725.00	671.29	1.00%	6.71	664.58
MB-I	546.00	395.00	0.70%	2.77	392.24
Khatima*	235.59	235.59	1.00%	2.36	233.23
Total	3511.59	3210.67		29.98	3180.69

**Post RMU*

For, other LHPs, the Commission in the past had not considered the Original Design Energy for some of the LHPs for calculation of energy charge rate (ECR) as it would have resulted in under-recovery of the AFC of the Petitioner on account of old hydro stations. The Commission in line with its previous approach for the calculation of ECR has approved design energy as approved in MYT Order dated 05.04.2016 except for Khatima LHP. The ECR will be calculated based on the approved saleable primary energy as specified above. However, secondary energy will be calculated only in case the actual energy generation exceeds the Original Design Energy and any energy generated in excess of design energy (approved in this Tariff Order) upto the original design energy shall not be considered as secondary energy. However, the Commission as discussed in Chapter 3 of this Order shall re-determine the design energy for the stations undergoing RMU as and when the approved RMU works get completed.

B. Maneri Bhali-II

With regard to the design energy and saleable primary energy, UJVN Ltd. submitted that it has considered the design energy as approved in the previous Control Period.

The Commission approves the original design energy as 1566.10 MU as per the DPR of the station and saleable primary energy after deducting the normative auxiliary consumption (including transformation losses) of 1% as 1550.44 MU.

4.3 Financial Parameters

4.3.1 Apportionment of Common Expenses

As discussed in detail in Chapter 3 of this Order, the Commission has considered the ratio of 85:10:5 among 9 LHPs, MB-II and SHPs, respectively, for allocation of common expenses, as proposed by the Petitioner.

4.3.2 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 determination of ARR for FY 2017-18 is considering the opening GFA of nine old LHPs, as on 14.01.2000, as Rs. 506.17 Crore only. Further, as discussed in the Chapter 3 of this Order, the Commission has revised the Original Cost of Khatima LHP as on 1.4.2015 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 4.3: Approved Original Cost Inherited from UPJVNL (Rs. Crore)

Name of the Generating Stations	Claimed	Approved as on 14.01.2000	Approved as on 01.04.2015
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
Total	506.17	506.17	504.14

B. Maneri Bhali-II

As detailed earlier in Chapter 3, the Commission has considered the capital cost as on COD to Rs. 1885.50 Crore in accordance with the Order dated 05.04.2016. The financing for the project has been considered same as approved in MYT Order dated 05.04.2016 as shown in the Table below:

Table 4.4: Approved Capital Cost and Financing for MB-II as on COD (Rs. Crore)

Particulars	Approved in Order dated 05.04.2016	Approved Now
Loans		
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
Total debts	1319.85	1319.85
Equity		
PDF	326.76	326.76
GoU Budgetary support	74.89	74.89
Pre-2002 expense	164.00	164.00
Total Equity	565.65	565.65
Total Loan and Equity	1885.50	1885.50

4.3.3 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. 186.06 Crore for 9 LHPs for the period 01.04.2001 to 31.03.2016 and de-capitalisation of Rs. 2.03 Crore in Khatima LHP in FY 2014-15 as discussed in Chapter 3 of this Order. UJVN Ltd. in its current Petition submitted the projected additional capitalization details for FY 2016-17 and FY 2017-18 as shown in the Table below:

Table 4.5: Additional Capitalisation Projected for FY 2016-17 and FY 2017-18 (Rs. Crore)

Name of the Generating Stations	FY 2016-17	FY 2017-18
Dhakrani	8.42	21.49
Dhalipur	26.33	47.54
Chibro	47.35	31.36
Khodri	28.40	32.12
Kulhal	20.28	20.06
Ramganga	9.67	7.50
Chilla	2.72	61.21
Maneri Bhali-I	26.76	70.49
Khatima	69.76	10.00
Total	239.71	301.77

The Commission observed that, as compared to previous years, the Petitioner has projected a considerable amount of capitalization in FY 2016-17 and FY 2017-18 and asked UJVN Ltd. to submit the reasons for the same. In response, UJVN Ltd. submitted that the projected capital expenditure also includes works of RMU and DRIP. The Petitioner, further, submitted that most of

the power plants of UJVN Ltd. are very old and require capital expenses for extension of life and, therefore, it has projected capital works that are essential for efficient and safe operation of the power plant.

Further, the Petitioner submitted the revised claim of additional capitalization for FY 2016-17 and FY 2017-18 as follows:

Table 4.6: Additional Capitalisation Projected for FY 2016-17 and FY 2017-18 (Rs. Crore)

Name of the Generating Stations	FY 2016-17	FY 2017-18
Dhakrani	8.24	21.49
Dhalipur	26.20	47.54
Chibro	43.97	35.76
Khodri	28.02	32.12
Kulhal	20.26	20.06
Ramganga	9.67	7.50
Chilla	2.72	63.73
Maneri Bhali-I	26.70	70.49
Khatima	99.43	10.00
Total	265.21	308.69

Based on the submissions of the Petitioner, the Commission with regard to Chibro LHP observed that UJVN Ltd. has claimed capital expenditure of Rs. 7 Crore twice towards capital maintenance of Machine No. 1 in FY 2017-18. In response, the UJVN Ltd. accepted the error and requested the Commission to condone the same.

4.3.3.1 RMU Works and DRIP

The Commission observed that the Petitioner is taking more than 1.5 years from the date of investment approval to the date of award of the contract for RMU works which is evident from the information submitted by the Petitioner as shown in the Table below:

Table 4.7: Status of Tender Award for MB-I, Chilla and Dhalipur LHPs as Submitted by Petitioner

S. No	Plant	Date of Investment Approval	Status of Tender Award			
			Pre-Bid Meeting	Technical Bid Opening	Financial Bid Opening	LOA
1.	MB-I	30.07.2015	01.12.2016	21.06.2016	Expected in 1st week of Nov 2016	Expected in Dec 2016
2.	Chilla	29.01.2016	18.11.2016	20.01.2017	20.01.2017	-
3.	Dhalipur	14.09.2016	-	23.09.2016	23.09.2016	-

In view of the above, the Commission sought justification for considerable delay in

concluding the tendering process for RMU works. The Commission, further, directed UJVN Ltd. to submit the current status of all the ongoing RMU projects pertaining to LHPs. In response, UJVN Ltd. submitted that in case of Chilla LHP, the initial tender for “Comprehensive RMU of Chilla HEP” was published in 2013 and the same was cancelled for incorporating the components based on newer technologies and replacing all the components refurbished with new ones except for the embedded legacy components. The modifications incorporated in the approval accorded by the Commission included major technical changes such as the type and capacity of turbine, generation Unit and all associated auxiliaries which ultimately resulted in major changes in the scope of the tender. Accordingly, the new tender with complete revised technical specifications was published in October, 2016 incorporating all the directives of the Board and Commission and in discussions with eminent OEMs. Accordingly, the pre bid meeting for “Comprehensive RMU of Chilla HEP” was held on 18.11.2016 and accordingly, RMU of the four Units of Chilla HEP is now scheduled to be completed by March 2022.

UJVN Ltd. further submitted that in case of RMU of Tiloth HEP, the tender was published on 24.10.2015. However, the tendering for RMU of Tiloth HEP included replacement of some specific equipments and refurbishment that were complicated in nature as the prospective bidders/manufacturers insisted for complete replacement under RMU for desired results and enhanced life of the Tiloth LHP. Accordingly, two addendums were issued after repeated requests from prospective bidders/manufacturers and this resulted in delay.

In case of Dhalipur HEP, the Petitioner has projected the time schedule of November 2018 to May 2021 for completion of RMU works.

It is observed that the Commission vide its Order dated 07.05.2015 had approved an amount of Rs. 256.77 Crore (including IDC) for “Capital Investment for Renovation & Modernisation” of Khatima (3x13.8 MW) LHP of UJVN Ltd. The Petitioner in the instant Petition has claimed additional capital expenditure amounting to Rs. 52.28 Crore and Rs. 69.74 Crore for FY 2015-16 and FY 2016-17, respectively under the head “plant & machinery” and Rs. 14.24 Crore under “major civil works” in FY 2015-16. In this regard, the Commission sought for details of capitalization on yearly basis upto the end of FY 2016-17 in respect of RMU works of Khatima LHP. In response, UJVN Ltd. submitted the yearly capitalisation of RMU and other civil works of Khatima LHP as follows:

Table 4.8: Details of RMU and other Capital Expenditure for Khatima LHP

S. No.	Particulars	FY 2015-16	FY 2016-17(upto December 2016)	FY 2016-17 (in January 2017)
1	Major Civil Works			
	Civil works other than RMU	0.10	0.00	0.00
	IDC	1.15	0.00	0.00
	Installation of draft tube gate and other	5.31	0.00	0.00
	Civil works other than RMU (restoration after flood)	7.68	0.00	0.00
2	Plant & Machinery	47.83	49.32	49.66
	IDC	4.22	0.00	0.00
	Auxiliary in Power House (other than RMU)	0.23	0.45	0.00
3	Other than RMU	0.04		
	Total	66.56	49.77	49.66

Further, the Commission observed that UJVN Ltd. in its instant Petition for various LHPs has claimed capital expenditure for FY 2017-18 on account of DRIP scheme along with other capital expenditure. As the works under DRIP scheme have separate financing structure, the Commission sought station wise works under DRIP scheme along with the financing of the scheme separately from other capital expenditure claimed and also directed to submit the revised financing of schemes other than DRIP. In response, UJVN Ltd. submitted that, for DRIP projects 80% funding will be from World Bank (50% IDA credit and 50% IBRD loan) and 20% funding will be from State/Central Government budgetary support. The cost of borrowing to UJVN Ltd. shall be as per loan terms and conditions to be defined by GoU at the time of sanction of such funds/loans to UJVN Ltd. The Petitioner, however, did not submit the details of financing cost associated with the funding.

4.3.3.2 Construction of New Multi-Storied Residential and Office Buildings in Dehradun

With regard to construction of office buildings, the Petitioner in its Petition has proposed the construction of a six storey pre-engineered environment friendly building and a separate training centre cum sports complex in the Ujjwal premises in order to meet the corporate office requirement and motivate the employees for fitness and developing their skills. In this regard, the Petitioner has claimed the expenditure of Rs. 10.00 Crore for FY 2016-17, Rs. 25.00 Crore for FY 2017-18 and Rs. 5.00 Crore for FY 2018-19 for the said office buildings.

Further, with regard to construction of residential buildings, the Petitioner has proposed three multi storied buildings, 01 tower (type-IV, 3+1 BHK, super area for each unit of 224.48 Sq.m.) for senior officers with designation DGM and above, 01 tower (type-III, 3 BHK, super area for each

unit 170.20 Sq.m.) for officers of EE/AE level and 01 tower (type-II, 2 BHK, super area for each unit=115.05 Sq.m.) for staff class-III, in order to meet the short fall of residences for Nigam employees posted in Dehradun. The Petitioner further submitted that each tower shall consist of 9+ stilt (10 floors) with each tower having total 36 units (04 units on each floor). In this regard, the Petitioner has projected estimated cost for Type-II, Type-III and Type-IV residential buildings as Rs. 11.00 Crore, Rs. 17.00 Crore and Rs. 22.00 Crore respectively, thus making total cost of all the three tower of different types of residential building as Rs.50.00 Crore. The Petitioner has claimed the expenditure of Rs. 5.00 Crore for FY 2016-17, Rs. 25.00 Crore for FY 2017-18 and Rs. 20.00 Crore for FY 2018-19 for the said three multi storied buildings.

With regard to claims made by the Petitioner towards construction of new multi-storied residential and office buildings in Dehradun, the Commission sought reason for not submitting the proposal in the Business Plan. In this regard, the Commission also sought detailed project reports, approval of BOD along with resolution of existing corporate office buildings/structures. In response, UJVN Ltd. submitted that the proposal for office building was included in Business Plan for FY 2016-17 to FY 2018-19 which was available on page no. 95, 96 & 97 of the Business Plan Petition. However, the proposed expenditure for multi storied residential building was not included because the proposal for construction of multi storied building was initiated after submission of Business Plan Petition. The Petitioner, further, submitted that such multi storied residential buildings are essentially required to meet requirement of officers and staff posted at remote locations or outside Dehradun to cater to their family needs for better higher education and proper health care treatment in Dehradun.

With regard to approval of BoD for the said works, the Petitioner in its reply submitted that the proposal for Corporate Office building was approved in the 80th BoD meeting held on 28.09.2016 and has submitted the copy of the minutes of meeting. The Petitioner further submitted that the existing corporate office building being a temporary building was constructed in various phases and involved less expenditure and, therefore, the approval of the Board was not required for the same.

Further with regard to the multi-storied residential building, the Petitioner submitted that the proposal for multi-storied residential building was submitted for consideration in the 81st BoD meeting held on 11.11.2016, however, the same could not be discussed in the said meeting. The

Petitioner further submitted that the proposal for multi-storey residential building is now expected to be discussed in the next upcoming BoD meeting scheduled after the completion of Model Code of Conduct.

In view of the above submissions towards expenditure claimed against the works of office buildings in Dehradun, the Commission grants in-principle approval for the works pertaining to the office building excluding the cost of sports complex. However, the claimed expenditure of Rs.10.00 Crore for FY 2016-17, Rs.25.00 Crore for FY 2017-18 and Rs.5.00 Crore for FY 2018-19 has not been considered in approved additional capital expenditure and the same shall be scrutinised on the basis of actual at the time of truing up and shall be considered subject to prudence check. Further, with regard to the expenditure claimed towards said multi storied residential buildings, the Commission is not going into the merits of such claim as the same has not been approved by the BoD of the Petitioner. In this regard, once it gets BoD approval, the Petitioner is directed to work out the cost benefit analysis of the same vis-a-vis if houses are given on lease rent to the employees of the Petitioner as per their individual entitlement.

With regard to 9 LHPs, as RMU works of other LHPs except Khatima LHP is not yet completed, the Commission has approved the additional capitalization for FY 2016-17 and FY 2017-18 same as that approved in MYT Order dated 05.04.2016 except for Khatima LHP. For Khatima LHP the Commission has revised the additional capitalisation for FY 2016-17 as discussed below, however the additional capitalisation for FY 2017-18 has been considered as approved in the MYT Order dated 05.04.2016.

As discussed above, the Petitioner has submitted that it has incurred capitalisation of Rs. 49.77 Crore in FY 2016-17 (upto December 2016) and Rs. 49.66 Crore in January 2017 under RMU and other civil works in case of Khatima LHP. The Commission in its investment approval dated 17.05.2015 has given in-principle approval of Rs. 256.77 Crore (including IDC) towards RMU works subject to prudence check. The Commission is of the view that the amount so far claimed till FY 2016-17 is well within the approval however, since the final completion cost is yet to be finalised, the Commission shall carry out detailed prudence check of RMU expenses once audited cost is available during the truing up of FY 2016-17. **The Petitioner is directed 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. The Petitioner is also**

directed to submit the details of scrap available on de-capitalisation of old plant and machinery and expected time frame in which the same will be disposed.

In view of the above submission, the Commission has provisionally considered the capitalisation of Rs. 99.43 Crore (i.e. Rs. 49.77 Crore + Rs. 49.66 Crore) for Khatima LHP for FY 2016-17. However, for other LHPs the Commission has considered additional capitalisation equal to those approved in MYT Order dated 05.04.2016. Accordingly, additional capitalisation approved for FY 2016-17 and FY 2017-18 is as follows:

Table 4.9: Additional Capitalisation as Approved for FY 2016-17 and FY 2017-18 (Rs. Crore)

Particulars	Approved in Order dated 05.04.2016 for the Control Period from FY 2016-17 to FY 2018-19		Approved Now	
	FY 2016-17	FY 2017-18	FY 2016-17	FY 2017-18
Dhakrani	9.89	0.00	9.89	0.00
Dhalipur	28.30	32.60	28.30	32.60
Chibro	5.19	0.00	5.19	0.00
Khodri	2.60	0.00	2.60	0.00
Kulhal	12.16	0.00	12.16	0.00
Ramganga	0.00	0.00	0.00	0.00
Chilla	2.60	47.43	2.60	47.43
MB-I	53.15	0.00	53.15	0.00
Khatima	50.00	12.00	99.43	12.00
Total	163.89	92.03	213.32	92.03

B. Maneri Bhali-II

The Commission, as discussed earlier has decided to consider additional capitalisation since COD and has approved additional capitalisation of Rs. 259.44 Crore till 31.03.2016. With regard to FY 2016-17, the Petitioner submitted the likely additional capitalisation to be incurred in FY 2016-17 as Rs. 15.04 Crore. As discussed in Chapter 3 of this Order, the Commission directed UJVN Ltd. to submit proper justification towards increase in the balance capital expenditure works along with the status of balance capital works completed and submit its revised claim of additional capitalisation for FY 2015-16 onwards. In response, UJVN Ltd. submitted the details of revised claim of actual and projected additional capitalisation of MB-II LHP for FY 2016-17 and FY 2017-18 along with the details of Balance Capital Works and additional capitalisation (Civil works) for FY 2016-17 and FY 2018-19. The revised additional capitalisation claimed by the Petitioner for FY 2016-17 and FY 2017-18 for MB-II is as follows:

Table 4.10: Revised Additional Capitalisation Claimed by the Petitioner for FY 2016-17 and FY 2017-18

Particulars	FY 2016-17					FY 2017-18			
	Apr-Sep	Oct-Mar				Balance Cap	Add Cap Civil	Add Cap Direct	Total
		Balance Cap	Add Cap Civil	Add Cap Direct	Total				
Land	0.02	-	-	0.00	0.02	-	-	0.00	0.00
Building	0.00	2.18	-	0.00	2.18	0.51	4.06	0.00	4.57
Major Civil Works	8.89	4.44	0.96	0.00	14.29	17.93	289.74	0.00	307.67
Plant & Machinery	3.13	-	-	2.57	5.70	-	-	-	0.00
Vehicles	0.00	-	-	0.15	0.15	-	-	0.25	0.25
Furniture & Fixtures	0.04	-	-	-	0.04	-	-	-	0.00
Office Equipments & Others	0.23	-	-	-	0.23	-	-	-	0.00
Total	12.32	6.62	0.96	2.72	22.62	18.44	293.80	0.25	312.49

4.3.3.3 Centage Charges to Irrigation Department for Construction works of MB-II HEP

The Petitioner in its Petition has submitted that civil works of Maneri Bhali Stage-II (MB-II) Project were being carried out by UP Irrigation Department (ID) in year 1981, however, due to paucity of funds, the project works were abandoned in year 1982. After formation of Uttarakhand State, this project was handed over to UJVN Limited in year 2002 and the works were started again and the MB-II HEP was commissioned in year 2008. In this regard, GoU vide its letter no. 1439/II-2011-18(38)/2004 dated 21.07.2011 informed the Petitioner that Centage Charges @ 12.50% was to be levied by Irrigation Department against the project civil works carried out by them as per the provisions of GO No. 284/9-1Irr.(Erection)/2003 dated 09.05.2003. Accordingly, GOU directed that instead of Centage Charges payable to Irrigation Department @ 12.50%, actual expenditure amounting to Rs. 60.84 Crore incurred towards establishment expenses of the manpower deployed for the project should be paid by UJVN Limited to Irrigation Department.

In this regard, the Petitioner further submitted that as the issue of Centage Charges was not mentioned in Memorandum signed between Uttarakhand Irrigation Department and UJVN Ltd. in year 2002, no provision could be made in the budget of MB-II LHP. Thereafter, the Board of Directors of the Petitioner in its 60th meeting held on 07.09.2011 passed the resolution to arrange the funds to make the payment of Rs. 60.84 Crore to Irrigation Department. Accordingly, UJVN Ltd. vide its letter no. 744/MD/UJVNL/MB-2 dated 23.08.2011 & no. 784/MD/UJVNL/MB-2 dated 28.02.2012 requested the Secretary (Energy), GoU to arrange the aforesaid amount of Rs. 60.84 Crore to UJVN Ltd, however, the said amount has not been released by the GoU till date.

The Petitioner has further submitted that as it is liable to pay Rs. 60.84 Crore to the Irrigation Department towards Centage Charges, the same should be included into the capital cost of MB-II LHP. Accordingly, the Petitioner has requested the Commission to approve the aforesaid claim of Rs. 60.84 Crore towards Centage Charges to be paid to Irrigation Department.

In view of the above submissions regarding Centage Charges claimed for MB-II LHP, it is observed that the issue was not mentioned, in the Memorandum signed between Uttarakhand Irrigation Department and UJVN Ltd. in year 2002, further, the Petitioner has already sought financial support from the Government for payment of the same. The Commission, therefore, is of the view that the Petitioner should pursue with Government of Uttarakhand (GoU) for release of funds for payment of Centage Charges of Rs. 60.84 Crore as the payment of salary to the employees of Irrigation Department would have already been made in the previous years. The project also got delayed in commissioning and as a result interest subsidy under AG&SP scheme also got forfeited. Loading the consumers further with this amount would not be justified.

In view of the above, the Commission has considered the additional capitalisation of Rs. 22.62 Crore as submitted by the Petitioner for FY 2016-17 and the same shall be subject to detailed scrutiny during the truing up of FY 2016-17 and shall be finally allowed after carrying out due prudence check of actual expenditure incurred.

With regard to the additional capitalisation proposed in FY 2017-18, the Commission at this stage doesn't find any reason to approve any additional capitalisation for FY 2017-18 in line with the approach adopted in MYT Order dated 05.04.2016. Additional capitalisation, if any, shall be considered on actual basis subject to prudence check. The additional capitalisation approved by the Commission is given in Table below:

Table 4.11: Additional Capitalisation as approved for MB-II for FY 2016-17 and FY 2017-18 (Rs. Crore)

Particulars	Claimed		Approved Now	
	FY 2016-17	FY 2017-18	FY 2016-17	FY 2017-18
Land	0.02	0.00	0.02	0.00
Building	2.18	4.57	2.18	0.00
Major Civil Works	14.29	307.67	14.29	0.00
Plant & Machinery	5.70	0.00	5.70	0.00
Vehicles	0.15	0.25	0.15	0.00
Furniture and Fixtures	0.04	0.00	0.04	0.00
Office Equipment & Other Items	0.23	0.00	0.23	0.00
MB-II	22.62	312.49	22.62	0.00

4.3.4 Depreciation

A. Old Nine Generating Stations

Regulation 28 of the UERC Tariff Regulations, 2015 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 UERC Tariff Regulations, 2015 are applicable from 01.04.2016. Further, UERC Tariff Regulations, 2011, is applicable for the period 1.4.2013 to 31.03.2016. Hence, till FY 2012-13, the Petitioner has calculated depreciation based on Tariff Regulations 2004. The Petitioner has claimed depreciation considering the applicable regulations.

The Commission in accordance with Regulation 28 of UERC Tariff Regulations, 2015 has computed the depreciation for the second 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 7 out of 9 stations have already depreciated 90% of the original cost. Depreciation allowed till date for Khodri and MB-I LHPs have not reached 90%, the Commission has computed the accumulated depreciation till 31.03.2016 to determine the remaining depreciable value for each LHP. The Commission for computing the accumulated depreciation till 31.03.2016 has considered the depreciation rate of 2.38% as considered in previous Tariff Orders. Further, in accordance with UERC Tariff Regulations, 2015 and considering the life of 35 years from the COD, the Commission has equally divided the

remaining depreciable value as on 01.04.2016 on the remaining useful life of each LHP.

- (ii) **Depreciation on additional capitalisation:** In accordance with the UERC Tariff Regulations, 2015 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 upto 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 at by applying the depreciation rates as specified in UERC Tariff Regulations, 2015 corresponding to 12 years. The Commission has spread over the above difference in the remaining period upto 12 years of such asset addition. Further, in case where the asset life has crossed 12 years from the year of addition, the remaining depreciable value as on 31st March of the year closing has been spread over the balance life.

In line with the above approach, the Commission has computed the depreciation for 9 LHPs for FY 2017-18. The summary of Depreciation Charges for FY 2017-18 as approved by the Commission is shown in the Table below:

Table 4.12: Depreciation Charges as approved by the Commission for 9 LHPs for FY 2017-18 (Rs. Crore)

Name of the Generating Stations	Approved in MYT Order dt. 05.04.2016			Claimed	Approved in this Order		
	On opening GFA as on Jan 14, 2000	On Additional Capitalization	Total		On opening GFA as on Jan 14, 2000	On Additional Capitalization	Total
Dhakrani	0.00	0.59	0.59	0.63	0.00	0.62	0.62
Dhalipur	0.00	1.45	1.45	1.69	0.00	1.53	1.53
Chibro	0.00	1.47	1.47	3.95	0.00	1.64	1.64
Khodri	0.59	0.82	1.41	2.84	0.59	0.85	1.44
Kulhal	0.00	0.66	0.66	1.24	0.00	0.70	0.70
Ramganga	0.00	0.28	0.28	0.80	0.00	0.28	0.28
Chilla	0.00	0.79	0.79	2.08	0.00	1.89	1.89
MB-I*	2.53	3.87	6.40	5.96	2.53	3.93	6.46
Khatima	0.00	4.40	4.40	7.19	0.00	7.08	7.08
Total	3.12	14.33	17.44	26.38	3.12	18.51	21.63

*Including DRB claim

B. Maneri Bhali-II

As regards the depreciation for MB-II for FY 2017-18 of the second Control Period, the Commission in accordance with the UERC Tariff Regulations, 2015 has computed the balance depreciable value for MB-II by deducting the cumulative depreciation as admitted by the

Commission upto 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 at by applying the depreciation rates as specified in UERC Tariff Regulations, 2015 corresponding to 12 years. The Commission has spread over the above difference in the remaining period upto 12 years from COD of MB-II.

In line with the above approach, the Commission has computed the depreciation for MB-II for FY 2017-18. The total depreciation for MB-II for FY 2017-18, accordingly, works out as shown in the Table below:

Table 4.13: Depreciation Charges as Approved by the Commission for MB-II for FY 2017-18 of Second Control Period (Rs. Crore)

Particular	Approved in MYT Order dt. 05.04.2016	Claimed	Approved in this Order
Depreciation	58.81	67.41	60.51

4.3.5 Return on Equity

A. Old Nine Generating Stations

Regulation 26 of the UERC Tariff Regulations, 2015 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.

(2) Return on equity shall be computed on at the base rate of 15.50% 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."

The Petitioner has submitted that it has claimed RoE in accordance with the aforesaid Regulations at the rate of 16.50% for Chibro, Khodri, Ramganga & MB-I and at the rate of 15.50% for Dhakrani, Dhalipur, Kulhal, Chilla & Khatima on post tax basis. The Petitioner further submitted that it may be allowed to recover Income Tax as per Regulations 34 of UERC Tariff Regulations, 2015 which stipulates 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 Commission has allowed RoE at the rate of 16.50% for Chibro, Khodri, Ramganga & MB-I and at the rate of 15.50% for Dhakrani, Dhalipur, Kulhal, Chilla & Khatima as per Regulation 26 of UERC Tariff Regulations, 2015. Further, pending finalisation of the Transfer Scheme and in view of equity erosion due to de-capitalisation of Rs. 2.03 Crore in FY 2014-15 in Khatima LHP of the Petitioner, the Commission has allowed RoE on the provisional value of the opening equity of Rs. 150.58 Crore. As regard RoE on additional Capitalisation, the Commission has considered a 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. Further, with regard to recovery of income tax paid the Commission is of the view that the Regulation 34 of UERC Tariff Regulations, 2015 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 actual in accordance with the Regulations 34 of UERC Tariff Regulations, 2015.

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 & MB-I and at the rate of 15.50% for Dhakrani, Dhalipur, Kulhal, Chilla & Khatima in accordance with the provisions of UERC Tariff Regulations, 2015. The summary of the Return on Equity approved for 9 LHPs for FY 2017-18 is shown in the Table given below:

Table 4.14: Return on Equity for Nine Old LHPs for FY 2017-18 (Rs. Crore)

Name of the Generating Stations	Approved in MYT Order dt. 05.04.2016			Claimed	Approved in this Order		
	On Transferred Asset as on 14.01.2000	On Additional Capitalisation	Total		On Transferred Asset as on 14.01.2000	On Additional Capitalisation	Total
Dhakrani	0.58	0.59	1.16	1.10	0.58	0.59	1.17
Dhalipur	0.95	1.53	2.48	2.39	0.95	1.53	2.48
Chibro	4.35	1.4	5.75	8.03	4.35	1.56	5.92
Khodri	3.66	0.73	4.39	5.70	3.66	0.76	4.42
Kulhal	0.81	0.69	1.5	1.88	0.81	0.69	1.51
Ramganga	2.48	0.28	2.76	3.24	2.48	0.28	2.76
Chilla	5.81	0.8	6.6	7.71	5.81	1.88	7.69
Maneri Bhali-I	5.43	4.39	9.82	8.55	5.43	4.31	9.74
Khatima	0.33	4.13	4.46	6.66	0.24	7.33	7.57
Total	24.40	14.52	38.92	45.26	24.30	18.94	43.24

B. Maneri Bhali-II

As discussed above, the Commission has considered the Capital Cost as on COD of Rs. 1885.50 Crore as approved by the Commission in its Order dated 05.04.2016. As per the financing considered by the Commission of the total approved Capital Cost of Rs. 1885.50 Crore and additional capitalisation of Rs. 259.44 Crore till FY 2015-16, Rs. 631.37 Crore [30% of (Rs.1885.40+Rs.259.44-Rs.40.37)] have been funded through equity as already discussed in Chapter 3 of this Order.

With regard to additional capitalisation of Rs. 22.62 Crore considered in FY 2016-17, the funding has been considered in the debt equity ratio of 70:30. The total equity, thus, infused at the beginning of FY 2017-18 works out to Rs. 638.16 Crore. Out of it, Rs. 351.39 Crore had come through PDF. The Commission has not allowed the Return on Equity on the contribution from PDF while approving AFC of the station for the Petitioner for FY 2017-18 for reasons recorded in the respective Orders of the Commission. UJVN Ltd. in its Petition submitted that it has considered Return on Equity on full equity including the amount invested out of PDF in view of the Appeal filed with the Hon'ble APTEL in matter of RoE on PDF for MB-II.

The Commission had 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 in the State. Though UJVN Limited has filed an Appeal on this issue 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 Return on Equity for MB-II project.

The Commission has, therefore, considered the equity of Rs. 286.77 Crore eligible for return. The Commission has computed the RoE at the rate of 16.50% as specified in UERC Tariff Regulations, 2015. The summary of the Return on Equity approved for MB-II for FY 2017-18 is shown in the Table given below:

Table 4.15: Return on Equity for MB-II for FY 2017-18 (Rs. Crore)

Particular	Approved in MYT Order dated 05.04.2016	Claimed	Approved in this Order
Return on Equity	43.63	108.79	47.32

4.3.6 Interest on Loans

A. Old Nine Generating Stations

Regulation 27 of the UERC Tariff Regulations, 2015 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 1.4.2016 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2016 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.

...”

As also discussed in Chapter 3 of this Order, the Commission has computed the weighted average interest rate based on the outstanding loans for UJVN Ltd. except for loans taken for new projects that are yet to achieve COD. The interest rate based on the above works out to 11.53% in case of Khatima LHP and 11.84% for other 8 LHPs. Thus, the Commission has considered the interest rate of 11.53% in case of Khatima LHP and 11.84% for other 8 LHPs for computing the interest expenses. In case of MB-II station as the actual loan has been availed for the project, therefore, the interest has been computed on the basis of loans availed for the project. For calculating the interest expense for FY 2015-16, the Commission has considered the interest rate of 12.12% for MB-II. For repayment purpose, the Commission has considered repayment equal to depreciation in accordance with the UERC Tariff Regulations, 2015.

Based on the above considerations and the UERC Tariff Regulations, 2015 the Commission has calculated the interest expense for 9 LHPs for FY 2017-18 as shown in the Table below:

Table 4.16: Interest on Loan for Nine Old LHPs for FY 2017-18 (Rs. Crore)

Name of the Generating Stations	Approved in MYT Order dt. 05.04.2016	Revised Projections	Approved in this Order				
			Opening Loan	Loan Addition	Repayment	Closing Loan	Interest
Dhakrani	0.84	1.73	7.26	0.00	0.62	6.65	0.82
Dhalipur	2.14	4.47	19.81	22.82	7.08	35.55	1.93
Chibro	1.47	6.87	15.02	0.00	1.64	13.38	1.68
Khodri	0.16	3.88	2.42	0.00	1.44	0.97	0.20
Kulhal	1.04	2.69	9.00	0.00	0.70	8.30	1.02
Ramganga	0.12	1.29	1.16	0.00	0.28	0.89	0.12
Chilla	0.17	4.55	16.25	33.20	1.89	47.56	1.81
Maneri Bhali-I*	4.70	5.61	40.93	0.00	6.48	34.44	4.46
Khatima	7.28	11.22	106.31	8.40	7.08	107.63	11.85
Total	17.93	42.31	218.16	64.42	27.11	255.37	23.91

*Including DRB

B. Maneri Bhali-II

As discussed in the preceding paras, the Commission has computed the weighted average interest rate of 12.12% based on the outstanding loans for the project up to 31.03.2016. The Commission for computing interest for MB-II station for FY 2017-18 has considered the above mentioned interest rate.

The Commission based on the closing loan for MB-II as on 31.03.2016 has computed the interest expenses for FY 2017-18. The Commission in accordance with UERC Tariff Regulations, 2015 has considered the repayment for each year of the Control Period equal to the depreciation allowed for that year.

Based on the above considerations and the UERC Tariff Regulations, 2015, the Commission has calculated the interest expense for MB-II for the second Control Period as shown in the Table below:

Table 4.17: Interest on Loan for MB-II for FY 2017-18 of second Control Period (Rs. Crore)

Particular	Approved in MYT Order dated 05.04.2016	Claimed	Approved in this Order
Interest on Loan	79.39	86.24	87.48

4.3.7 Operation and Maintenance expenses

Regarding the Operation and Maintenance expenses, Regulation 48(2) of the UERC Tariff Regulations, 2015 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 2014-15, the operation and maintenance expenses for the base year of FY 2014-15 shall be fixed at 2.0% of the capital cost as admitted by the Commission 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) *Post determination of base O&M Expenses for the base year, i.e. FY 2014-15, the O&M expenses for the nth year and also for the year immediately preceding the Control Period, i.e. 2015-16 shall be approved based on the formula given below:-*

$$O\&M_n = R\&M_n + EMP_n + A\&G_n$$

Where –

- O&Mn – Operation and Maintenance expenses for the nth year;
- EMPn – Employee Costs for the nth year;
- R&Mn – Repair and Maintenance Costs for the nth year;
- A&Gn – Administrative and General Costs for the nth year;

The above components shall be computed in the manner specified below:

$$EMPn = (EMPn-1) \times (1+Gn) \times (1+CPIinflation)$$

$$R\&Mn = K \times (GFA\ n-1) \times (1+WPIinflation) \text{ and}$$

$$A\&Gn = (A\&Gn-1) \times (1+WPIinflation) + \text{Provision}$$

Where -

- EMPn-1 – Employee Costs for the (n-1)th year;
- A&G n-1 – 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 2% of the capital cost admitted by the Commission.

- CPIinflation – is the average increase in the Consumer Price Index (CPI) for immediately preceding three years;
- WPIinflation – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three years;
- GFAn-1 – Gross Fixed Asset of the Generating Company for the n-1th year;

- *G_n is a growth factor for the nth year. Value of G_n 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 in case of a existing generating station governed by Government pay structure, the Commission may consider allowing a separate provision in Employee expenses towards the impact of VIIth Pay Commission.

Provided that repair and maintenance expenses determined shall be utilised towards repair and maintenance works only.

- (d) *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_k) for a particular year (Kth year) which shall be calculated using the following formula:*

$$EF_k = 0.55 \times WPI_{\text{Inflation}} + 0.45 \times CPI_{\text{Inflation}}$$

- (e) *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 include Employee expenses, R&M expenses and A&G expenses. In accordance with Regulation 48 (2) of the UERC Tariff Regulations, 2015, the O&M expenses for the FY 2017-18 shall be determined by the Commission taking into account actual O&M expenses of the previous years and any other factors considered appropriate by the Commission.

A. Old Nine Generating Stations

4.3.7.1 Employee expenses

The Commission had approved the employee expenses of Rs. 209.88 Crore for FY 2017-18 in its MYT Order dated 05.04.2016. The Petitioner, in its Petition, has proposed the employee expenses for FY 2017-18 as Rs. 214.59 Crore as per the UERC Tariff Regulations, 2015 considering the actual employee expenses for FY 2015-16.

The Commission has computed the employee expenses in accordance with the UERC Tariff

Regulations, 2015. In accordance with the UERC Tariff Regulations, 2015, the Gn (growth factor) is to be considered in the computation of employee expenses. The Commission, in the approval of the Business Plan for the second Control Period from FY 2016-17 to FY 2018-19, based on the approved HR Plan computed the Gn factors of 1.91% and 0.00% for FY 2016-17 and FY 2017-18 respectively. In line with the same, the Petitioner has proposed the Gn factors of 1.91% and 0.00% for FY 2016-17 and FY 2017-18 respectively. The Commission has considered the closing no. of employees for FY 2015-16 as the opening no. of employees for FY 2016-17. In the MYT Order dated 05.04.2016, the Commission had approved the recruitment of 207 no. of employees in FY 2016-17. In this regard, the Commission sought for actual number of employees recruited/retired in FY 2016-17 till November 2016 and projections for employees to be recruited/retired during December, 2016 to March, 2017 and in FY 2017-18. In response, the Petitioner has submitted the recruitment of 51 no. of employees in FY 2016-17 till November 2016, 329 no. of employees during December, 2016 to March, 2017 and 142 no. of employees during FY 2017-18. Further, the Petitioner has submitted retirement of 96 no. of employees in FY 2016-17 till November 2016, 49 no. of employees during December, 2016 to March, 2017 and 97 no. of employees during FY 2017-18. During the TVS, the Commission sought information relating to the number of employees, likely to join by 31.03.2017 as compared to 329 no. of employees submitted in the Petition with details of status of recruitment. Further, the Commission directed the Petitioner to submit the breakup of employees joining in O&M division, new projects, SHPs and solar projects along with the status of recruitment proposed during FY 2017-18. In response, the Petitioner submitted the breakup details of employees recruited in FY 2016-17 as follows:

Table 4.18: Recruitment details claimed by Petitioner for FY 2016-17 (Rs. Crore)

O&M for LHPs	121
Lakhwar Vyasi	98
New Projects + SHPs	100
Solar Power Projects	10
Total for FY 2016-17	329

Further, the Petitioner submitted that 142 no. employees would be recruited in FY 2017-18.

In light of the above and the past performance of the Petitioner in meeting the recruitment targets, the Commission has not considered the proposed recruitment in Lakhwar Vyasi, new projects, SHPs and solar power projects in FY 2016-17. Accordingly, the Commission has approved the recruitment of 121 no. of employees in FY 2016-17 and 142 no. of employees in FY 2017-18.

Further, the Commission has considered the retirement of 142 no. of employees attributable to LHPs as submitted by the Petitioner for FY 2016-17 and 97 no. of employees in FY 2017-18. Accordingly, the Commission has approved the Gn factors of 0% for FY 2016-17 and 1.09% for FY 2017-18. However, if the actual addition to number of employees is lower than the number of employees 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.

In accordance with UERC Tariff Regulations, 2015, CPI inflation which is the average increase in the Consumer Price Index (CPI) for the preceding three years is to be considered. The Commission has calculated the annual growth in values of CPI (overall) based on average of preceding three full years upto FY 2015-16 as 7.21%.

The Commission has considered the normative employee expenses approved in the true up for FY 2015-16 for projecting the employee expense for FY 2016-17 and FY 2017-18 in accordance with the UERC Tariff Regulations, 2015. The normative employee expenses have been projected for truing up of FY 2015-16 under the MYT framework accordingly, to bring efficiency in controllable expenses, norm should be followed unless sufficient reasons warrant any deviations in the same. Accordingly, the Commission has considered the normative expenses worked out for FY 2015-16 for projecting the employee expenses for subsequent years.

In its MYT Order, the Commission had considered the impact of Seventh Pay Commission at the rate of 20% of the approved net employee expenses and had allowed certain provision to the Petitioner for FY 2016-17 to FY 2018-19. However, since the Pay Commission has not yet been approved by the State Government for the Petitioner, it is likely that the same would be allowed during FY 2017-18. The Commission directed the Petitioner to submit the impact of the Seventh Pay Commission considering the Orders of the State Government. The Petitioner has submitted detailed computations of the impact of Seventh Pay Commission as follows:

Table 4.19: Financial Year-wise Impact of Recommendations of VII th Pay Commission as Submitted by the Petitioner considering GoU Orders

Particulars	FY 2015-16 (Rs. Crore)	FY 2016-17 (Rs. Crore)	Total (Rs. Crore)
Arrear	4.00	13.4	17.4
Addition liability@ 19.08%	0.76	2.56	3.32
Total	4.76	15.96	20.72

It is observed from the impact of pay revision submitted above, that the impact of pay

revision for the Petitioner is around 15% as against 20% approved by the Commission in its MYT Order dated 05.04.2016. Accordingly, the Commission has considered 15% towards the impact of the VII Pay Commission for FY 2016-17 as submitted by UJVN Ltd. to estimate the net salary for FY 2016-17 which has been escalated in accordance with the Regulations considering the growth factor and CPI inflation to arrive at the employee expenses for FY 2017-18. The Commission has already allowed Rs. 32.15 Crore to the Petitioner for FY 2016-17 which would be available with the Petitioner and the same can be utilised for payment of arrears to the employees. **However, the Petitioner is directed to maintain separate details of the amount paid as arrears to its employees on account of implementation of the recommendations of VII Pay Commission.** The Commission would carry out the truing up for FY 2016-17 and FY 2017-18 based on the actual impact of VII Pay Commission including arrears and no sharing of gains and losses on this account would be allowed. The normative employee expenses approved by the Commission for FY 2017-18 are as shown in the Table below:

Table 4.20: Employee Expenses for 9 LHPs for FY 2017-18 (Rs. Crore)

Name of the Generating Stations	Approved in MYT Order	Revised Projections	Approved in this Order
Dhakrani	12.36	14.75	10.11
Dhalipur	13.86	10.91	15.26
Chibro	43.76	47.34	42.19
Khodri	23.09	22.97	23.30
Kulhal	9.04	7.87	8.99
Ramganga	29.16	33.74	28.31
Chilla	35.81	36.16	30.83
Maneri Bhali-I	27.55	26.63	22.54
Khatima	15.26	14.25	12.53
Total	209.88	214.59	194.06

4.3.7.2 R&M expenses

The Commission had approved the R&M expenses of Rs. 65.73 Crore for FY 2017-18 in its MYT Order dated 05.04.2016. As against the same, the Petitioner has proposed R&M expenses of Rs. 75.96 Crore. The Petitioner submitted that R&M expenses have been computed as per UERC Tariff Regulations, 2015.

The Commission has determined the R&M expenses for FY 2017-18 in accordance with UERC Tariff Regulations, 2015. The Commission has computed the percentage of actual R&M expenses upon actual opening GFA for each year of FY 2012-13 to FY 2014-15. Thereafter, the

Commission has considered the average of such percentages as K factor as approved in the MYT Order dated 05.04.2016. The Commission has considered the opening GFA for FY 2017-18. The Commission has considered the WPI inflation of 1.83% which is the average increase in the Wholesale Price Index (WPI) for FY 2013-14 to FY 2015-16. The Commission has computed R&M Expenses for the second Control Period as per the methodology stated above using the following formulae.

$$R\&M_n = K \times (GFA_{n-1}) \times (1+WPI_{inflation})$$

With regards to the generating station undergoing RMU works or planned for RMU works in the second Control Period the Commission in its Regulation 48(2) of UERC Tariff Regulations, 2015 had stated that for projects whose Renovation and Modernisation works has been carried out, the R&M expenses for the nth year (FY 2017-18) shall not exceed 2% of the capital cost admitted by the Commission. The Commission further observes that as per the details submitted by the Petitioner only RMU of Khatima is completed in FY 2016-17. Further with regard to Dhakrani, Dhalipur, Chilla and MB-I, the RMU works is projected to be carried out either in FY 2017-18 or in FY 2018-19. With regard to Khatima, the Commission has considered allowable R&M Expenses for FY 2017-18 equal to 2% of the opening GFA of that year. With regard to other generating stations, wherein the RMU works shall be completed beyond FY 2016-17, the Commission on the provisional basis has considered R&M expenses for FY 2017-18 based on the methodology provided in the Regulations. However, the Commission shall determine the same during the Annual Performance Review and sharing of any gain or loss on account of such re-consideration shall not be allowed.

Based on above, the R&M expenses approved by the Commission for FY 2017-18 is as shown in the Table below:

Table 4.21: R&M Expenses for 9 LHPs for FY 2017-18 (Rs. Crore)

Name of the Generating Stations	Approved in MYT Order	Revised Projections	Approved in this Order
Dhakrani	8.12	9.50	7.88
Dhalipur	8.99	9.36	8.71
Chibro	9.97	15.09	9.93
Khodri	3.41	4.10	3.33
Kulhal	3.55	4.91	3.45
Ramganga	1.58	2.67	1.53
Chilla	11.59	14.48	13.06
Maneri Bhali-I	16.54	12.87	15.90
Khatima	1.98	2.97	3.31
Total	65.73	75.96	67.11

4.3.7.3 A&G expenses

The Commission had approved the A&G expenses of Rs. 22.18 Crore for FY 2017-18 in its MYT Order dated 05.04.2016. The Petitioner, in its Petition, has proposed the A&G expenses for FY 2017-18 as Rs. 42.29 Crore as per the UERC Tariff Regulations, 2015 and considering the actual A&G expenses for FY 2015-16.

Further, the Petitioner in its Petition has submitted that it is planning to implement ERP, however, it has not considered provisioning on account of ERP implementation. With regard to status of ERP implementation, the Petitioner submitted that M/s Wipro was awarded consultancy work for "Formulation/Implementation of Integrated IT/ERP solution". M/s Wipro has completed the first Stage of this assignment, i.e. Study and preparation of DPR. The DPR prepared by M/s Wipro was approved by BoD in its meeting held on 28.10.2016. Further, in this regard, the Petitioner submitted that RFP for selection of System Integrator was published on 5.10.2016. The Pre bid meeting was held on 17.10.2016. The amendments to RFP in view of pre bid queries have been uploaded on the tender portal on 27.10.2016. The Petitioner further submitted that total expected initial capital expenditure is Rs. 18.84 Crore in implementation of integrated ERP solution and post implementation annual recurring operational expenses would be to the tune of Rs. 8.0-9.0 Crore. Accordingly, the Petitioner submitted that the above proposed capital expenditure along with the post implementation annual operational expenses to be incurred for implementation of Integrated ERP solution may kindly be considered while approving the annual fixed charges for FY 2016-17 and 2017-18.

With regard to implementation of ERP package, it is observed that the Petitioner in its earlier Petition for MYT and Business Plan for the Control Period FY 2016-17 to FY 2018-19 had claimed one time expenditure of Rs. 15.00 Crore for each year on account of ERP implementation, however, in this current Petition it has claimed an amount of Rs. 18.84 Crore as capital expenditure and Rs. 29.06 Crore as operational expenditure spreading upto year 2020-21. In this regard, the Commission sought justification for contradictory claims made in its Petition along with a copy of DPR in support of the amounts claimed for implementation and operation of ERP package. Further, the Commission sought details of in-house human resource required for implementation of ERP in its organisation at each stage, i.e. project initiation, project execution and post execution. In response, the Petitioner submitted that the projection in the Petition for MYT & Business Plan for Control

Period FY 2016-17 to FY 2018-19 were tentative costs based on market survey and older ERP implementations done in other similar utilities. The Petitioner further submitted that in May 2016, M/s Wipro Ltd. was formally engaged as consultant for “Formulation & Implementation of Integrated IT/ERP Solution in UJVN Limited”. M/s Wipro Ltd. submitted the DPR in September, 2016 which was approved by the Board in its meeting held on 28th Sep, 2016. The capital expenditure of Rs. 18.83 Crore and operational expenditure of Rs. 29.06 Crore (excluding taxes) spreading upto year 2020-21 for ERP Implementation and O&M, respectively have been derived from DPR. In this regard, the Petitioner has also submitted the copy of DPR for implementation of ERP. Further, the Petitioner also submitted the details of in-house human resource required for implementation of ERP in its organisation at each stage, i.e. project initiation, project execution and post execution.

Further, the Commission directed UJVN Ltd. to submit that how ERP implementation shall be sustainable and whether UJVN Ltd. has taken steps towards training man power for maintaining such system once implemented. In response, UJVN Ltd. submitted that ERP product (SAP) will be under Annual Technical Support (ATS) from the OEM from the day of procurement. After implementation, the product will be under O&M contract by System Integrator for initial period of 3 years which will be subsequently extended in the successive years. UJVN Ltd. further submitted that ERP solution will be hosted on a third party data centre on annual rental charges. Regarding training of manpower for maintaining ERP system, UJVN Ltd. submitted that user training to UJVN Ltd. officials will be imparted by System Integrator (SI) as part of the implementation process. In this regard, UJVN Ltd. is in the process of establishing an organisation wide computer network (LAN and WAN) along with required IT infrastructure. Such infrastructure will be monitored by IT staff for which the UJVN Ltd. has already requested for approval of 31 new posts for IT support from the State Government.

The Commission has considered the approved normative A&G expenses trued up for FY 2015-16 for projecting the A&G expenses for FY 2017-18. The Commission has considered the WPI inflation of 1.83% which is the average increase in the Wholesale Price Index (WPI) for FY 2013-14 to FY 2015-16.

Thereafter, in accordance with the UERC Tariff Regulations, 2015, the A&G expenses for FY 2015-16 excluding filing fees has been escalated by appropriate WPI inflation to arrive at A&G

expenses for the FY 2016-17 and FY 2017-18. The Commission has then added the filing fee amount as incurred for FY 2015-16 which shall be further trued up on the basis of actuals.

The Regulations provide for Provision in A&G expenses towards cost for initiatives or other one-time expenses. The Petitioner has proposed ERP implementation in the second Control Period. The Commission is of the view that Capital Cost of such initiatives doesn't fall under A&G expenses and should be capitalised as such works are of capital nature which are to be incurred as onetime expenses. The Commission taking cognisance of the need of such system grants in-principle approval for the scheme. The expenses on account of the same shall be considered on the basis of actual subject to prudence check.

The normative A&G expenses approved by the Commission for FY 2017-18 is as shown in the Table below:

Table 4.22: A&G Expenses for 9 LHPs for FY 2017-18 (Rs. Crore)

Name of the Generating Stations	Approved in MYT Order	Revised Projections	Approved in this Order
Dhakrani	1.28	2.18	0.55
Dhalipur	1.51	2.46	0.91
Chibro	4.93	9.44	3.46
Khodri	2.47	5.39	1.56
Kulhal	0.89	1.82	0.47
Ramganga	3.30	7.46	2.44
Chilla	3.84	6.53	2.53
Maneri Bhali-I	2.78	5.05	1.45
Khatima	1.19	1.97	0.49
Total	22.18	42.29	13.86

4.3.7.4 O&M expenses

Based on above discussions, the O&M expenses approved by the Commission for FY 2017-18 is as shown in the Table below:

Table 4.23: O&M Expenses for 9 LHPs for FY 2017-18 (Rs. Crore)

Name of the Generating Stations	Approved in MYT Order	Revised Projections	Approved in this Order
Dhakrani	21.75	26.43	18.54
Dhalipur	24.36	22.72	24.88
Chibro	58.66	71.87	55.58
Khodri	28.97	32.46	28.19
Kulhal	13.48	14.59	12.92
Ramganga	34.04	43.87	32.28
Chilla	51.23	57.17	46.42
Maneri Bhali-I	46.87	44.55	39.89
Khatima	18.43	19.18	16.34
Total	297.79	332.84	275.03

B. Maneri Bhali-II

The Petitioner in its APR Petition for projecting the O&M Expenses for MB-II for FY 2017-18 has considered actual O&M expenses of FY 2015-16 based on the audited accounts and escalated the same with appropriate CPI and WPI Indices, K-Factor and Gn to derive the O&M expenses for FY 2017-18 as discussed in above paras for 9 LHPs.

The Commission has adopted the same approach as illustrated in case of 9 LHPs and has, accordingly, approved the O&M expenses for MB-II for FY 2017-18 as shown below:

Table 4.24: O&M Expenses Approved by the Commission for MB-II for FY 2017-18 (Rs. Crore)

Particulars	Approved in MYT Order dated 05.04.2016	Claimed	Approved in this Order
Employee Expenses	25.92	26.20	23.67
R&M Expenses	26.76	24.93	26.35
A&G Expenses	5.20	12.45	5.53
Total	57.88	63.57	55.56

4.3.8 Interest on Working Capital**A. Old Nine Generating Stations**

The Petitioner has submitted that the interest on working capital for FY 2017-18 has been proposed in accordance with Regulation 33 of UERC Tariff Regulations, 2015.

Regulation 33 of UERC Tariff Regulations, 2015 specifies as follows;

“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 is made.

...

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

(iii) Receivables equivalent to two months of the annual fixed charges”

The Petitioner has further submitted that it has considered the rate of interest on working capital equal to SBI PLR of 14.05% in accordance with the Regulations. The Petitioner further submitted documentary proof towards the rate of interest on working capital considered.

The Commission has determined the interest on working capital for FY 2017-18 in accordance with the aforesaid Regulations and is as discussed below.

4.3.8.1 One Month O&M Expenses

The annual O&M expenses approved by the Commission is Rs. 275.03 Crore for FY 2017-18. Based on the approved O&M expenses, one month's O&M expenses work out to Rs. 22.92 Crore for FY 2017-18.

4.3.8.2 Maintenance Spares

The Commission has considered the maintenance spares as 15% of O&M expenses in accordance with UERC Tariff Regulations, 2015, which work out to Rs. 41.25 Crore for FY 2017-18.

4.3.8.3 Receivables

The Commission has approved the receivables for two months based on the approved ARR of Rs. 359.20 Crore for FY 2017-18, which works out to Rs. 59.87 Crore for FY 2017-18.

Based on the above, the total working capital requirement of the Petitioner for FY 2017-18 works out to Rs. 124.04 Crore. The Commission has considered the rate of interest on working capital as 14.05% equal to State Bank Advance Rate (SBAR) as on the date of filing of the MYT Petition and, accordingly, the interest on working capital works out to Rs. 17.43 Crore for FY 2017-18. The interest on working capital approved by the Commission for FY 2017-18 is as shown in the Table below:

Table 4.25: Interest on Working Capital Approved by the Commission for 9 LHPs for FY 2017-18 (Rs. Crore)

Generating Stations	1 month O&M Expenses	Maintenance Spares@15% of O&M	2 months Receivables	Total Working Capital	Interest on Working Capital		
					Approved in MYT Order	Claimed	Approved
Dhakrani	1.55	2.78	3.61	7.93	1.30	1.60	1.11
Dhalipur	2.07	3.73	5.24	11.05	1.53	1.51	1.55
Chibro	4.63	8.34	10.66	23.62	3.48	4.59	3.32
Khodri	2.35	4.23	5.66	12.24	1.76	2.17	1.72
Kulhal	1.08	1.94	2.74	5.76	0.84	0.98	0.81
Ramganga	2.69	4.84	5.55	13.08	1.94	2.65	1.84
Chilla	3.87	6.96	9.70	20.54	3.07	3.63	2.89
MB-I	3.32	5.98	9.54	18.85	3.06	3.05	2.65
Khatima	1.36	2.45	7.16	10.97	1.41	1.71	1.54
Total	2.92	41.25	59.87	124.04	18.39	21.89	17.43

B. Maneri Bhali-II

As regards the interest on working capital for MB-II, the Commission has computed the same based on the UERC Tariff Regulations, 2015 and considering the prevailing State Bank Advance Rate (SBAR) of 14.05% as on the date on filing the MYT Petition. The summary of the interest on working capital for MB-II for first Control Period is shown in the Table below:

Table 4.26: Interest on Working Capital approved by the Commission for MB-II for FY 2017-18 (Rs. Crore)

Generating Stations	1 month O&M Expenses	Maintenance Spares@15% of O&M	2 months Receivables	Total Working Capital	Interest on Working Capital		
					Approved in MYT Order	Claimed	Approved
MB-II	4.63	8.33	42.66	55.62	7.63	9.95	7.81

4.3.9 Non-Tariff Income

A. Old Nine Generating Station

Regulation 46 of UERC Tariff Regulations, 2015 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. 22.03 Crore for FY 2017-18 as approved by the Commission in MYT Order dated 05.04.2016. The Commission in this regard observes that most of the 9 LHPs are under RMU which involves replacement of old and obsolete equipment which will be eventually disposed off as it gets de-capitalised. **The Petitioner in this regard is directed to ensure 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 provisionally accepts the Non Tariff Income projected by the Petitioner for FY 2017-18. The same shall, however, be trued up based on the actual audited accounts for the year.

Table 4.27: Non-Tariff Income for 9 LHPs for FY 2017-18 (Rs. Crore)

Name of the Generating Stations	Approved in MYT Order	Revised Projections	Approved in this Order
Dhakrani	0.62	0.62	0.62
Dhalipur	0.91	0.91	0.91
Chibro	4.20	4.20	4.20
Khodri	2.01	2.01	2.01
Kulhal	0.50	0.50	0.50
Ramganga	3.96	3.96	3.96
Chilla	2.47	2.47	2.47
M Bhali I	5.96	5.96	5.96
Khatima	1.40	1.40	1.40
Total	22.03	22.03	22.03

B. Maneri Bhali-II

The Petitioner has proposed a non-tariff income of Rs. 2.73 Crore for FY 2017-18 as approved in the MYT Order dated 05.04.2016. The Commission provisionally accepts the same for the FY 2017-18. The same shall, however, be trued up based on the actual audited accounts for the year.

Table 4.28: Non-Tariff Income for MB-II for FY 2017-18 of second Control Period (Rs. Crore)

Name of the Generating Station	Approved in MYT Order dated 05.04.2016	Claimed	Approved in this Order
MB-II	2.73	2.73	2.73

Further, as discussed in Truing Up section and the Commission's Order dated 21.10.2009, the provision of the Regulations permitting adjustment of non-tariff income from AFC is not in

consonance with the 1972 Agreement with HP as the components of cost of generation specified in Schedule-VIII of The Electricity (Supply) Act, 1948 considers only the cost components and does not provide for adjustment of any kind of revenue. Therefore, in order to have conformity with the provisions of the said agreement, the Commission has not considered any adjustment of proportion of non-tariff income for HPSEB and has considered the entire amount of the above said nontariff income for adjustment in UPCL's share of AFC.

4.3.10 Annual Fixed Charges, Capacity Charge and Energy Charge Rate (ECR) for FY 2017-18

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 FY 2017-18 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, 2015 specify 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:

$$PAFM = 10000 \times \sum_{i=1}^N DCi / \{N \times IC \times (100 - Aux)\} \%$$

Where,

AUX = Normative auxiliary energy consumption in percentage

DCi = Declared capacity (in ex-bus MW) for the ith 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 second Control Period for 9 LHPs as approved by the Commission is shown in the Tables below:

Table 4.29: Approved AFC of 9 LHPs of UJVN Ltd. for FY 2017-18

Name of the Generating Station	Depreciation (Rs. Cr.)	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.)	Gross AFC (UPCL) (Rs. Cr.)	Non-Tariff Income (Rs. Cr.)	Net AFC (UPCL) (Rs. Cr.)	Gross/ Net AFC (HPSEB) (Rs. Cr.)
Dhakrani	0.62	0.82	1.11	18.54	1.17	22.27	16.70	0.62	16.08	5.57
Dhalipur	1.53	1.93	1.55	24.88	2.48	32.36	24.27	0.91	23.36	8.09
Chibro	1.64	1.68	3.32	55.58	5.92	68.13	51.10	4.20	46.90	17.03
Khodri	1.44	0.20	1.72	28.19	4.42	35.97	26.98	2.01	24.97	8.99
Kulhal	0.70	1.02	0.81	12.92	1.51	16.96	13.57	0.50	13.07	3.39
Ramganga	0.28	0.12	1.84	32.28	2.76	37.27	37.27	3.96	33.31	-
Chilla	1.89	1.81	2.89	46.42	7.69	60.70	60.70	2.47	58.23	-
MB-I	6.46	4.46	2.65	39.89	9.74	63.20	63.20	5.96	57.24	-
Khatima	7.08	11.85	1.54	16.34	7.57	44.38	44.38	1.40	42.98	-
Total	21.63	23.91	17.43	275.03	43.24	381.23	338.16	22.03	316.13	43.07

The summary of Capacity Charge and Energy Charge Rate (ECR) for 9 LHPs for FY 2017-18 is as given in the Tables below:

Table 4.30: Approved Capacity Charge and Energy Charge Rate for 9 LHPs for FY 2017-18

Name of the 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	16.08	8.04	116.84	0.688	5.57	2.78	38.95	0.715
Dhalipur	23.36	11.68	143.00	0.817	8.09	4.05	47.67	0.849
Chibro	46.90	23.45	555.75	0.422	17.03	8.52	185.25	0.460
Khodri	24.97	12.48	256.16	0.487	8.99	4.50	85.39	0.527
Kulhal	13.07	6.53	122.26	0.534	3.39	1.70	30.57	0.555
Ramganga	33.31	16.66	308.82	0.539	-	-	-	-
Chilla	58.23	29.11	664.57	0.438	-	-	-	-
MB-I	57.24	28.62	392.23	0.730	-	-	-	-
Khatima	42.98	21.49	233.23	0.921	-	-	-	-
Total	316.13	158.06	2792.86	0.566	43.07	21.54	387.81	0.555

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 FY 2017-18. The Commission to arrive at the Net AFC for MB-II has adjusted the Non-Tariff Income from the AFC of MB-II. The summary of Annual Fixed Charge, Capacity Charge and Energy Charge rate for MB-II for the second Control Period is given in the Table below:

Table 4.31: Approved AFC, Capacity Charge and Energy Charge Rate for MB-II for FY 2017-18

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)
60.51	87.48	7.81	55.56	47.32	258.68	2.73	255.95	127.98	1550.44	0.83

Subject to the provisions of the Regulations, the secondary energy rate shall be equal to 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.

5 Directives

5.1 Compliance to the Directives Issued in Order dated April 05, 2010.

5.1.1 Performance Improvement Measures

The Commission in Tariff Order dated 21.10.2009 and its subsequent Tariff Orders gave directions to the Petitioners on the performance improvement measures by conducting a benchmarking study of its plants with other utilities like NHPC, SJVNL etc. and explore further scope of improvement in technical losses and manpower rationalisation including incentive mechanism.

In compliance to the above, the Petitioner had submitted the benchmarking study Report and had also submitted the action taken as well as action plan on the basis of benchmarking study specifically with regard to manpower deployment & rationalization and reduction in planned maintenance days. Accordingly, the Commission in its MYT Order dated 05.04.2016 had directed the Petitioner as under:

“In this regard, the Commission directs the Petitioner to submit details of the measures taken by it towards manpower deployment, rationalisation and data to support reduction in planned maintenance days within 3 months from date of this Order.”

In compliance to the above direction, the Petitioner has submitted its compliance report vide its letter dated 30.07.2016.

Further, during the TVS meeting held on 09.01.2017, the Commission sought information on the performance improvement measures implemented by UJVNL Ltd. on the basis of benchmarking study. In response, the Petitioner had submitted that it has already reduced downtime on annual maintenance from 60 days to 45 days and is further planning to reduce it below 35 days by maintaining proper spares inventory in order to reduce the downtime. In this regard, the Commission in aforementioned TVS meeting had asked the Petitioner to take steps on various fronts to improve its performance in addition to the reduction in downtime towards annual maintenance and directed it to submit the status of implementation of recommendations mentioned in the benchmarking study report with respect to annual maintenance period.

In compliance to the above direction, the Petitioner in its reply dated 23.01.2017 has submitted the status of implementation of recommendations mentioned in the benchmarking study report with respect to annual maintenance period. However, on perusal of the planned outages/maintenance days proposed by the Petitioner for FY 2017-18, it has been observed that still the planned outages/maintenance days for various LHPs for FY 2017-18 have not been reduced to the optimum levels.

The Commission is of the view that UJVN Ltd. being a commercial entity should focus on reducing its down-time by reducing its planned maintenance periods by adopting best practices of other generating companies such as NHPC, SJVNL etc. **Therefore, the Commission again directs the Petitioner to submit details of the measures to support reduction in planned maintenance days within 3 months from date of this Order.**

5.1.2 Transfer Scheme

The Commission in its Tariff Order dated 05.04.2010 and in its subsequent Orders gave suitable directions to expedite finalisation of 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 compliance to the above direction, the Petitioner had submitted the Quarterly Progress Report vide letter dated 04.08.2015 stating that a Consultant was appointed to determine the value of assets and liabilities proposed to be transferred from UPJVNL to UJVN Ltd. and also to finalise the transfer scheme with UPJVNL, the final outcome of the same has not been brought before the Commission. Therefore, the Commission in its MYT Order dated 05.04.2016 had directed the Petitioner as under:

“...the Commission again directs UJVN Ltd. that till the time transfer scheme is finalised it should continue to submit the updated quarterly progress report to the Commission.”

In compliance to the above direction, the Petitioner has submitted the Quarterly Progress Report for the first quarter vide its letter dated 15.07.2016 and second quarter vide its letter dated

22.11.2016 in which the Petitioner has submitted that “... there is no disagreement on the value of current assets and current liabilities but UPJVNL emphasized mainly on acceptance of LIC Loan of Rs. 352.59 Crore, GPF trust liabilities of Rs. 42.63 Crores and CWIP of Rs. 128.55 Crores on account of Interest of Loan etc which has already been disagreed by UJVNL and informed to them. ” Further, with regard to LIC loan of Rs 352.59 Crore, the Petitioner has submitted that since the amount of loan transferred to the State of Uttarakhand was not utilized for MB-II HEP, as such GoU has not consented to accept the said liability and decided to contest the transfer of the said loan to GoU in the APEX Court. Simultaneously the matter is taken up by Govt. of Uttarakhand with Central Govt. for review of LIC loan allocation. Moreover, with regard to Remittances of GPF liabilities of Rs. 135.78 Crore, the Petitioner has submitted that approval for filing the writ Petition has been granted by UJVNL Employee Trust (GPF) and drafting of the writ Petition is under process.

To this the Commission is of the view that the matter of transfer scheme has been pending for quite a long time and it is in the interest on any commercial organization to resolve such issues as early as possible. In this regard, **the Commission directs the Petitioner to rigorously follow-up with the concerned authorities for finalization of transfer scheme alongwith issues of GPF trust and LIC loan and submit updated quarterly progress report to the Commission.**

5.2 Compliance to directives issued in Order dated 10.05.2011

5.2.1 Colony Consumption

In compliance of the directions issued in the previous Tariff Orders, the Petitioner vide letter dated 29.07.2015 submitted that energy meters have been installed for all the connections to the respective colonies and thus 100% metering has been ensured.

Accordingly, the Commission in its MYT Order dated 05.04.2016 directed the Petitioner as follows:

“The Commission has taken note of the same and directs the Petitioner to ensure proper accounting of the energy consumed by the employees and furnish the annual details alongwith the tariff Petition.”

In compliance to this the Petitioner vide its reply letter dated 07.12.2016 has submitted the energy account statement for all the 10 LHPs and DDD Dakpathar. Since, 100% metering of its employees has been done, therefore, **the Petitioner is directed to ensure the meter reading of each employee on monthly basis and keep proper record of the same and submit the colony-wise**

consumption of the employees alongwith the next tariff filing.

5.2.2 Income from electricity distribution to Sundry Consumers

The Commission in its Tariff Order dated 10.05.2011 observed that the Petitioner is maintaining distribution system in three of its Plant colonies and supplying power to sundry consumers in these colonies. Since, sale of power to other consumers by a generating company is not permissible under the Act, therefore, the Commission in its subsequent Tariff Orders directed the Petitioner to handover the distribution of other consumers to UPCL. In absence of any progress in the matter, the issue was taken up during the 6th Co-ordination Forum Meeting held on 06.01.2015, in which the Commission directed both the Managing Directors to resolve the matter on top priority and asked Secretary, Energy, GoU to monitor the progress of the same. The Commission accordingly in its APR Order dated 11.04.2015 directed the Petitioner as follows:

"In this regard, the Commission further directs the Petitioner to submit a quarterly status of the progress till the entire handing over of distribution business is completed."

The Commission had further reviewed the issue during a joint meeting held with UPCL and UJVN Ltd. on 28.10.2015, wherein the Commission had directed that:

"... UJVN Ltd. and UPCL to nominate atleast 02 Officers not below the rank of DGM/SE from their Organization & submit their joint report for ensuring the compliance of the Commission's directions latest by 30.11.2015"

Thereafter, both the utilities i.e. the Petitioner and UPCL nominated its Officers for ensuring the compliance, however, despite the above steps of the utilities it was observed that entire handing over/taking over of distribution business had not taken place, even after sufficient time was provided to both the utilities. Further, UPCL in its submission had stated that UJVN Ltd. did not provide the documents pertaining to the sundry consumer's viz. Application form, Security deposit, verification details etc. while, the Petitioner in its submission had stated that UPCL had never informed for providing such documents. Accordingly, the Commission in its MYT Order dated 05.04.2016 had directed the Petitioner as follows:

"In this regard, the Commission is of the view that sufficient time has already been provided to both the utilities, therefore, directs the Petitioner and UPCL to comply with the directions of the Commission in all respect by 30.05.2016 and submit compliance report in the matter by 15.06.2016,

failing which appropriate action shall be initiated against both the utilities in accordance with the provisions of the Act/Regulations.

In compliance to this the Petitioner vide its letter dated 26.07.2016 submitted the status report which was not found satisfactory by the Commission. The Commission during the TVS held on 09.01.2017 directed UJVN Ltd. to submit the current status of handing over of distribution business to UPCL. In response, UJVN Ltd. in its reply dated 23.01.2017 submitted the status of handing over of distribution business to UPCL.

On examination, it has been observed that despite several directions of the Commission in this regard, the Petitioner and UPCL have failed to comply with the provisions of the Act/Regulations and also failed to comply with the directions of the Commission issued from time to time which is evident from its submission dated 23.01.2017. Taking a lenient view and giving final opportunity to the Petitioner and UPCL, **the Commission directs both the utilities i.e. UJVN Ltd. & UPCL to complete the handing over/taking over of distribution business in all respect by 30.06.2017 and submit compliance report in the matter by 15.07.2017, failing which the appropriate action shall be initiated against the Managing Directors and concerned Nodal Officers responsible for the same in accordance with the provisions of the Act/Regulations.**

5.3 Compliance to the Directives Issued in MYT Order dated 06.05.2013

5.3.1 Design Energy

With respect to the design energy of 9 LHPs, earlier the Petitioner in its first MYT Petition submitted that the DPRs for existing 9 LHPs were not available with it and therefore, expressed its inability to submit the same. The Commission, accordingly, directed the Petitioner in its MYT Order dated 06.05.2013 as follows:

"...the Commission directs UJVN Ltd. to arrange the Detailed Project Report for each of its hydro generating stations and submit the same to the Commission along with first Annual Performance Review (APR) Petition for the Control Period."

In response, the Petitioner submitted that since the DPRs of the 9 LHPs were not available with UJVN Ltd., it had requested the Head of Department, Irrigation Department, Uttarakhand vide letter No. 1240 & 1906 dated 10.06.2013 & 26.08.2013 respectively and Engineer-in-Chief & Head of Department, Irrigation Department-Uttar Pradesh vide letter no. 1247/UJVNL/D(O)/Q-5

dated 11.06.2013, to provide copies of original DPRs of the Power Stations of UJVN Ltd., however, no response was received. In this regard, the Commission in its APR Order dated 10.04.2014, accordingly, directed as follows:

“The Commission directs the Petitioner to pursue the above matter with appropriate authorities to arrange the DPRs for each of its hydro generating stations and submit the quarterly progress report to the Commission.”

In compliance to the above directive of the Commission, the Petitioner vide letter no. 455 dated 27.08.2014 has submitted the Quarterly Progress Report. The Petitioner had submitted that the efforts for searching of the DPRs were in progress. The Commission accordingly in its APR Order dated 11.04.2015 directed the Petitioner as follows:

“The Commission in this regard again directs the Petitioner to pursue the above matter with appropriate authorities to arrange the DPRs for each of its hydro generating stations and submit the quarterly progress report to the Commission.”

The Petitioner has not submitted any status report for the same. Accordingly, the Commission in its MYT Order dated 05.04.2016 had directed the Petitioner as follows:

“The Commission in this regard, 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 by August, 2016 positively.”

In compliance to this the Petitioner vide its letter no. 4087 dated 27.08.2016 has submitted the DPRs for two of its Hydro Power Stations, namely Chibro and Khodri LHPs with the comment that *“...we are not certain whether the DPRs are final editions or not...”* **In this regard, 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 by 30.09.2017 positively.**

5.4 Directives specifically issued in Meeting dated 04.09.2013

The Commission has given various directives in the meeting dated 04.09.2013 as reproduced below:

“The Commission directed the Petitioner to check whether RMU activity is economically viable or not. Further, the Commission directed UJVN Ltd. to calculate plant wise per MW cost of RMU works already completed, currently underway and to carry out benchmarking study with other utilities in the Country for the same.

The Commission also directed UJVN Ltd. to submit DPR of RMU for Khatima for Commission's review.

The Commission directed UJVN Ltd. to prepare and submit a quarterly progress report for RMU to the Commission. The Commission also directed UJVN Ltd. to incorporate measures in order to reduce the plant maintenance.”

In response, the Petitioner in its APR Petition for FY 2014-15 submitted that the plant wise per MW cost of RMU works of the Power Stations of UJVN Ltd. as follows:

<i>“Mohammadpur (9.3MW) (completed)</i>	<i>: 8.230 Crore</i>
<i>Pathri (20.4 MW) (underway)</i>	<i>: 5.552 Crore</i>
<i>Khatima (41.4 MW) (underway)</i>	<i>: 6.202 Crore”</i>

The Petitioner had also submitted the RMU report for Khatima LHP. However, the details of RMU in other utilities was not submitted as adequate data was not available by then. Further, on the basis of some data received from OHPC, the Petitioner submitted the per MW cost of RMU as follows:

<i>“Balimala (360 MW)</i>	<i>: 1.85 Crore</i>
<i>Chiplima (24 MW)</i>	<i>: 4.02 Crore</i>
<i>Burla (75 MW)</i>	<i>: 4.31 Crore”</i>

In regard to the above submissions, the Petitioner further submitted that:

“...no final conclusion can be drawn from above as the scope of work of RMU governs the cost. In case of complete replacement of E&M equipment the cost shall be more than cost of refurbishment. Inclusion of civil works may further affect the final cost of RMU. The Petitioner submitted that it has been noted that cost of RMU per MW decreases with increase in installed capacity of the power house.”

The Petitioner in its APR Petition for FY 2014-15 further submitted the second quarterly

progress report for quarter ending 31.12.2013.

In this regard, the Commission in its APR Order dated 10.04.2014 directed the Petitioner as follows:

“The Commission directs the Petitioner to carry out the above study and submit the report to the Commission within six months from the date of this Order.”

The Petitioner in its APR Petition for FY 2015-16 submitted that UJVN Ltd. is making all efforts to get the relevant information from other similar organizations. The desired information as per availability with other organizations shall be submitted tentatively within a period of six months, i.e. by June 2015. The Commission, accordingly, in its APR Order dated 11.04.2015 directed the Petitioner as follows:

“The Commission further directs the Petitioner to submit the report on comparison of its RMU costs with RMU Costs of other Hydel generating stations by June 30, 2015.”

In compliance to the above, the Petitioner vide letter dated 03.07.2015 submitted that it had requested other Utilities in the Country namely NEEPCO, OHPCL, NHPC, BBMB, HPSEB, UPJVNL, KSEB, J&K State Power Development Corporation, APGENCO, TSGENCO, DVC, KPCL for providing information regarding RMU activities including cost. However, only NEEPCO and APGENCO responded in the matter. Further, APGENCO informed that they had not carried out extensive RMU works so far, while, NEEPCO informed that it has taken up the R&M of two Dam based high head projects namely Kopli Power Station (4x50 MW) and Khandong Power Station (2x25 MW).

Besides above, the Petitioner referred a discussion held with the expert group of CBIP stating that it was deliberated in the meeting that the cost of RMU works would depend on the extent of works alongwith other factors and as such benchmarking of the cost of RMU projects cannot be done. The Petitioner further submitted that UJVN Ltd. had been making all its efforts in preparing a report in the matter on the basis of information received from various Utilities.

In this regard, the Commission agreed that the cost of RMU works would depend on the extent of works involved in the scope, however, as seen from Petitioner's earlier RMU proposals, it was observed that the cost of most of the Projects seemed to be inflated therefore, the Commission in its MYT Order dated 05.04.2016 had directed the Petitioner as follows:

“...the Commission is of the view that the Petitioner should continue its endeavour and directs the Petitioner to submit a report on comparison of its RMU costs with RMU Costs of other Hydel generating stations by 30.06.2016.”

Further, in this regard, the Petitioner vide its letter dated 15.07.2016 has submitted its reply and submitted that *“...establishment of benchmarking system is not possible as on date on account of shortage of data...”*. However, the Commission is of the view that the Petitioner should continue its endeavour and submit a report on comparison of its RMU costs with RMU Costs of other similar Hydel Generating Stations based on the data available by 30.09.2017.

5.4.1 Status of upcoming projects

The Commission in its previous Tariff Orders had been directing the Petitioner to submit quarterly progress report on the upcoming projects.

In compliance to the above, the Petitioner submitted the quarterly progress report from time to time. In line with the same the Petitioner is **directed to submit the quarterly progress report on status of all upcoming projects without fail.**

5.4.2 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 for the ensuing year for each and every Plant. In line with the same the Commission further directs the Petitioner **to submit annual budget for future financial years by 30th of April of the respective financial year.**

5.5 Compliance to the Directives Issued in Tariff Order dated 11.04.2015

5.5.1 View of State Advisory Committee

The Commission in APR Order dated 11.04.2015 had stated that it agrees with the views of State Advisory Committee members that UJVN Ltd. has been continuously raising same issues in its ARR and Tariff Petitions on which the Commission has already made its decision and given its ruling in the previous Tariff Orders. The Commission had accordingly directed the Petitioner that:

“...not to raise such issues again in the subsequent ARR and Tariff Petitions on which the Commission has already taken the decision and given its ruling in the previous Tariff Orders, failing which, the Commission may reject the Petition upfront.”

The Petitioner in its Petition for tariff determination for the Control Period FY 2016-17 to FY 2018-19 had again claimed return on PDF amount despite the above directions. Since the Commission had already given its ruling in its previous Tariff Orders and, accordingly, the Commission had not considered the same. Accordingly, the Commission in its MYT Order dated 05.04.2016 had re-directed the Petitioner as follows:

“Hence the Commission again directs the Petitioner not to raise such issues again in the subsequent ARR and Tariff Petitions on which the Commission has already taken the decision and given its ruling in the previous Tariff Orders.”

In compliance to the above directive, the Petitioner has submitted that it had filed review Petition on 09.09.2015 against the Tariff Order dated 11.04.2015 before the Commission on several issues including disallowance of Return on Equity (RoE) on the amount invested out of Power Development Fund (PDF) for construction of MB-II HEP along with all necessary documentary support. In this regard, the Commission vide its Order 22.01.2016 had rejected the issue of RoE on investments made out of PDF. Subsequently, the Petitioner has filed appeals before the Hon'ble Appellate Tribunal for Electricity (APTEL), however, no stay has been granted by Hon'ble APTEL. Despite the repeated directions issued in the matter in the Commission's previous Tariff Orders, and pending decision of the Hon'ble APTEL on the Petitioner's Appeal, raising the issue in the instant Petition is not appropriate. **Hence the Commission further directs the Petitioner not to raise such issues again and again in the subsequent ARR and Tariff Petitions on which the Commission has already taken the decision and given its ruling in the previous Tariff Orders, till final decision of the Hon'ble APTEL in the matter.**

5.6 Compliance to the Directives Issued in Tariff Order dated 05.04.2016

5.6.1 Achieving FRL of 1108 m for MB-II and other related works

The Commission in its MYT Order dated 05.04.2016 had stated that the works of increasing the reservoir level of Joshiyara Barrage from 1104 m to 1108 m should be taken on top priority

alongwith other related works which are essentially to be carried out for attaining the design energy generation of the MB-II HEP and, therefore, the Commission had directed the Petitioner as follows:

“...the Commission directs the Petitioner to complete all works which are causing hindrances in achieving the reservoir level upto 1108 m and other related works which restrict the generation capacity as well as the design energy generation of MB-II HEP by the end of FY 2016-17.”

In compliance to the above direction, the Petitioner has submitted that works which were causing hindrances in achieving the reservoir level upto 1108 M and other related works which were restricting the generation capacity as well as the Design Energy generation of MB-II HEP have been completed and the District Administration, Uttarkashi vide letter No. 226/8-11(2009-10) dated 15.10.2016 has allowed the Petitioner for attaining the FRL of 1108M.

Based on the above, the Commission is of the view that the plant will now achieve its Design Energy.

5.7 New Directives Issued

5.7.1 Financial Relief towards restoration of damage caused due to Natural Calamity

As discussed in Chapter 3 of this Order, the Commission is of the view that out of the total additional capitalisation claimed by the Petitioner for the year around Rs. 40.37 Crore of additional capitalisation was carried out to restore the damage caused due to natural calamity which occurred in FY 2013-14. The Petitioner has claimed these expenses from the Government of Uttarakhand as relief. The Commission has, therefore, considered the funding of the said additional capitalisation for FY 2015-16 as grant and **directs the Petitioner to pursue the matter with the GoU and submit the quarterly status Report to the Commission (Refer para 3.1.2.5).**

5.7.2 Details of various offices and projects of UJVN Ltd.

UJVN Ltd. is directed to submit the following details within one month from the date of Order.

- 1) Detail of various offices of UJVN Ltd. and activities being run by them and number of staff in each office.**
- 2) Details of various projects being run/taken up by UJVN Ltd. and number of employees in each such projects (Refer para 3.1.2.7.4).**

5.7.3 *RMU works of Khatima LHP*

As discussed in Chapter 4 of this Order, the Petitioner has submitted that it has incurred capitalisation of Rs. 49.77 Crore in FY 2016-17 (upto December 2016) and Rs. 49.66 Crore in January 2017 under RMU and other civil works in case of Khatima LHP. The Commission in its investment approval dated 17.05.2015 has given in-principle approval of Rs. 256 Crore towards RMU works subject to prudence check. The Commission is of the view that the amount so far claimed till FY 2016-17 is well within the approval however, since the final completion cost is yet to be finalised, the Commission shall carry out detailed prudence check of RMU expenses once audited cost is available during the truing up of FY 2016-17. Accordingly, **the Commission directs 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. The Petitioner is also directed to submit the details of scrap available on de-capitalisation of old plant and machinery and expected time frame in which same will be disposed (Refer para 4.3.3.2).**

5.7.4 *Impact of VII th Pay Commission*

As discussed Chapter 4 of this Order, the Commission has considered 15% towards the impact of the VII Pay Commission for FY 2016-17 as submitted by UJVN Ltd. to estimate the net salary for FY 2016-17 which has been escalated in accordance with the Regulations considering the growth factor and CPI inflation to arrive at the employee expenses for FY 2017-18. The Commission has already allowed Rs. 32.15 Crore to the Petitioner for FY 2016-17 which would be available with the Petitioner and the same can be utilised for payment of arrears to the employees. In this regard, **the Commission directs the Petitioner to maintain separate details of the amount paid as arrears to its employees on account of implementation of the recommendations of VII Pay Commission (Refer para 4.3.7.1).**

5.7.5 *Non Tariff Income*

The Commission in this regard observes that most of the 9 LHPs are under RMU which involves replacement of old and obsolete equipment which will be eventually disposed off as it gets de-capitalised. In this regard, **the Commission directs 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 (Refer para 4.3.9).

The approved AFC for FY 2017-18 shall be deemed to be recoverable in accordance with the mechanism specified in UERC Tariff Regulations, 2015. The Tariffs approved in this Order shall be applicable from 01.04.2017 and shall continue to apply till further Orders of the Commission.

**(Subhash Kumar)
Chairman**

6 Annexure

6.1 Annexure 1: Public Notice



UJVNL LIMITED
 (An Uttarakhand Govt. Enterprise)
 "UJJWAL", GMS Road, Maharani Bagh, Dehradun-248006
 Telephone-0135-2763508, 2763808 Fax 0135-2763507
 CIN No- U40101UR2001SGC025866 Website: www.uttarakhandjalvidyut.com

PUBLIC NOTICE

Inviting Comments on Petition filed by UJVNL Limited before the Uttarakhand Electricity Regulatory Commission for Determination of Generation Tariff for its 10 large hydro generating stations for FY 2017-18

Salient Points of the ARR/Tariff Petition

1. UJVNL Limited, a Government owned generating company, has filed the petitions for the determination of generation tariff for the FY 2017-18 Annual Performance Review of FY 2016-17 for its 10 large hydro generating stations before the Uttarakhand Electricity Regulatory Commission. Through the above petitions, UJVNL Ltd. has also proposed truing up of its expenses for FY 2015-16 for its 9 old hydro generating stations & ManeriBhali-II HEP. The salient features of the tariff petitions filed by UJVNL Ltd. for its 10 large hydro generating stations are given in the Table below:

AFC (₹ Crore)						
Station	FY 2015-16 (True-up)		FY 2016-17 (APR)		FY 2017-18 (ARR)	
	Approved (T.O. Dt. 11.04.2015)	Claimed	Approved (T.O. Dt. 05.04.2016)	Revised Estimated by UJVNL Ltd.	Approved	Claimed
Dhakrani	12.06	20.39	18.82	23.90	25.03	30.87
Dhalipur	18.37	16.99	20.05	19.93	31.03	31.87
Chibro	53.04	59.22	61.42	74.48	66.63	91.11
Khodri	28.39	28.42	32.19	36.71	34.67	45.05
Kulhal	11.06	11.66	12.71	13.82	17.03	20.89
Ramganga	30.09	35.01	32.58	43.18	35.17	47.89
Chilla	43.98	52.57	55.76	66.75	59.41	72.67
MB-I	53.01	45.22	48.88	50.86	64.88	61.76
Khatima	13.92	16.63	23.75	32.05	34.58	44.56
MB-II	218.98	306.08	249.71	337.08	244.60	333.23
Total	482.90	592.19	555.87	698.77	613.03	779.89

2. In addition to the approved AFC for FY 2016-17, the Commission has allowed recovery of ₹ (-) 34.43 Crore on account of true up of past years.

3. In addition, to the claim for FY 2017-18 (including carrying cost) UJVNL Ltd. has proposed ₹ 89.05 Crore towards true up for FY 2015-16 to be recovered from UPCL in FY 2017-18.

4. UJVNL Ltd. has proposed an increase of about 66.64% for FY 2017-18 (which includes the truing up impact of FY 2015-16). In case the entire claim of UJVNL Ltd. is accepted by the Commission, an additional hike of around 6.25% in consumer tariff shall be required over and above the hike proposed by UPCL.

5. Detailed proposals as submitted by UJVNL Ltd. can be seen free of cost on any working day in 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.

6. The proposals filed by UJVNL Ltd. are also available at the website of the Commission (www.uerc.gov.in) and at the UJVNL Ltd.'s website (www.ujvnl.com). 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 'Vidyut Niyamak Bhawan', Near I.S.B.T., P.O. Majra, Dehradun-248171 or through e-mail to 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 31.01.2017

RO No.: 876/UJVNL Dated: 09.12.2016

"Avoid wasteful use of Electricity"

6.2 Annexure 2: List of Respondents

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Munish Talwar	-	M/s Asahi India Glass Ltd.	Integrated Glass Plant, Village-Latherdeva Hoon, Manglaur-Jhabrera Road, P.O. Jhabrera, Tehsil Roorkee, Haridwar, Uttarakhand
2.	Dr. V.K. Garg	Chairman	M/s South Asia Forum for Energy Efficiency	A-24/E, DDA Flats, Munirka, New Delhi-110067
3.	Sh. Pankaj Gupta	President	Industries Association of Uttarakhand	Mohabewala Industrial Area, Dehradun-248110

6.3 Annexure 3: List of Participants in Public Hearings**List of Participants in Hearing at Almora on 18.02.2015**

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Girish Joshi	Principal (Retd.)	-	Mohalla Dubkiya, Distt. Almora-263601, Uttarakhand
2.	Sh. G.L. Verma	Ex Navy Officer	-	Johari Bazaar, Distt. Almora, Uttarakhand
3.	Sh. Shankar Dutt Pandey	Incharge-District Information Officer	-	Mall Road, Distt. Almora, Uttarakhand
4.	Sh. Akhtar Hussain	Sabhasad	-	District Panchayat Awaas, Chaughan Pata, Distt. Almora, Uttarakhand
5.	Sh. N.C. Joshi	Ex. Warrant Officer	-	S/o Late Sh. T.D. Joshi, Buxi Khola, PO & Distt. Almora-263601, Uttarakhand
6.	Sh. Amar Singh Karki	-	-	Mohalla-Makedi, PO & Distt. Almora, Uttarakhand
7.	Sh. Krishna Singh Latwal	-	-	Village-Dewali, PO-Lodhiya, Distt. Almora, Uttarakhand
8.	Sh. Pratap Singh Satyal	General Secretary	M/s Day Care Centre	Thana Bazaar, Distt. Almora, Uttarakhand
9.	Sh. Pooran Chandra Tiwari	Central General Secretary	Uttarakhand Lok Vahini	"Tiwari Sadan", Talla Galli, Jakhandevi, Distt. Almora, Uttarakhand
10.	Dr. R.S. Shahi	Retd. Director (Medical & Health)	-	Near Chief Medical Officer (CMO) Office, Pandey Khola, Distt. Almora, Uttarakhand
11.	Sh. Shyam Lal Sah	District President	Prantiya Udyog Vyapaar Pratinidhi Mandal	Kachhari Bazaar, Distt. Almora, Uttarakhand
12.	Sh. Anand Singh Bagadwal	President	Almora Urban Co-operative Bank	Lala Bazaar, Distt. Almora, Uttarakhand

List of Participants in Hearing at Almora on 18.02.2015

Sl. No.	Name	Designation	Organization	Address
13.	Sh. Manish Kumar Joshi	-	-	Talla Joshi Khola, Distt. Almora, Uttarakhand
14.	Sh. D.S. Bisht	-	-	Bansal Gali, Lala Bazaar, Distt. Almora, Uttarakhand
15.	Sh. Hari Krishna Khatri	-	-	52 Seedi, Dharanaula Marg, Distt. Almora-263601, Uttarakhand
16.	Sh. Khajaan Mishra	-	-	Bakshi Khola, Distt. Almora, Uttarakhand
17.	Sh. T.S. Karakoti	-	-	Karakoti Niwas, Near Shankar Bhawan, East Pokhar Khali, Distt. Almora-263601, Uttarakhand
18.	Sh. K.B. Pandey	-	-	Talla Tilakpur, Sunari Naula, Distt. Almora, Uttarakhand
19.	Sh. Sanjay Kumar Agrawal	Director & Secretary	Shri Karuna Jan Kalyan Samiti	Sanjay Bhawan, Malla Joshi Khola, Distt. Almora, Uttarakhand
20.	Sh. Kailash Gurrani	-	-	Gurrani Khola, Distt. Almora-263601, Uttarakhand
21.	Prof. Arun K. Pant	-	-	Laxmi Niwas, Cement Kothi, Rani Dhara, Distt. Almora, Uttarakhand
22.	Sh. Prakash Chandra Joshi	President	Nagar Palika	Distt. Almora, Uttarakhand
23.	Sh. P.C. Tiwari	President	Uttarakhand Parivartan Party	Devki Niwas, Dharanaula, Distt. Almora-263601, Uttarakhand
24.	Sh. Anand Singh Ary	President	M/s Day Care Centre	Thana Bazaar, Distt. Almora, Uttarakhand
25.	Ms. Rekha Dhasmana			BSNL Colony, Quarter No. 4, Type-4, Makedi, Dhara Naula, Distt. Almora, Uttarakhand

List of Participants in Hearing at Rudrapur on 22.02.2017

Sl. No.	Name	Designation	Organization	Address
1.	Dr. Ganesh Upadhyaya	-	-	Village and P.O. Shatipuri No. 2, Distt. Udham Singh Nagar
2.	Sh. Sudhir Shahi	-	-	Village Pratappur, Tehsil-Rudrapur, Distt. Udham Singh Nagar
3.	Sh. Avendra Kumar	-	-	Village-Indrapur, P.O. Pratappur, Distt. Udham Singh Nagar

List of Participants in Hearing at Rudrapur on 22.02.2017

Sl. No.	Name	Designation	Organization	Address
4.	Sh. Navneet Mishra	-	-	Village-Indrapur, P.O. Pratappur, Distt. Udham Singh Nagar
5.	Sh. Indrasan Yadav	-	-	Village-Indrapur, P.O. Pratappur, Distt. Udham Singh Nagar
6.	Sh. S.K. Garg		M/s BST Textile Mills Pvt. Ltd.	Plot 9, Sector 9, IIE, SIDCUL, Pantnagar, Distt. Udham Singh Nagar
7.	Sh. Jagdish Singh	-	-	Village-Dharampur, P.O. Chattarpur, Distt. Udham Singh Nagar
8.	Sh. Kunwar Pal Singh	-	-	Fauji Matkota, Bhurarani, Rudrapur, Distt. Udham Singh Nagar
9.	Sh. Sushil Kumar	-	-	Plot No. 14-B, Sector-9, SIDCUL, Pantnagar, Distt. Udham Singh Nagar
10.	Sh. R.S. Yadav	Vice President (HR & Admn.)	India Glycols Ltd.	A-1, Industrial Area, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar
11.	Sh. R.K. Singh	Head (CPED & E)	M/s Tata Motors Ltd.	Plot No. 1, Sector 11, Integrated Industrial Estate, SIDCUL, Pantnagar-263153, Distt. Udham Singh Nagar
12.	Sh. Virat Seth	-	M/s Tata Motors Ltd.	Plot No. 1, Sector 11, Integrated Industrial Estate, SIDCUL, Pantnagar-263153, Distt. Udham Singh Nagar
13.	Sh. Devesh Pant	-	M/s Tata Motors Ltd.	Plot No. 1, Sector 11, Integrated Industrial Estate, SIDCUL, Pantnagar-263153, Distt. Udham Singh Nagar
14.	Sh. Shakeel A. Siddiqui	Sr. General Manager (Finance)	M/s Kashi Vishwanath Textile Mill (P) Ltd.	5 th KM Stone, Ramnagar Road, Kashipur-244713, Distt. Udham Singh Nagar
15.	Sh. Rakesh Sood	-	M/s Galwalia Ispat Udyog Pvt. Ltd.	Narain Nagar Industrial Estate, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar
16.	Sh. Akash Jain	-	M/s Roop Polymers Ltd.	Plot No. 19, Sector-9, IIE SIDCUL, Pantnagar, Distt. Udham Singh Nagar
17.	Sh. Sanjay Adhlakha	-	M/s Ambashakti Glass India Pvt. Ltd.	Plot. No. 41, Sector-3, SIDCUL, Pantnagar, Distt. Udham Singh Nagar

List of Participants in Hearing at Rudrapur on 22.02.2017

Sl. No.	Name	Designation	Organization	Address
18.	Sh. Deepak Kumar	-	M/s Nestle India Ltd.	Pantnagar, SIDCUL Industrial Area Road, Distt. Udham Singh Nagar-263153
19.	Sh. Teeka Singh Saini	Former State General Secretary	Kisan Congress	33, Katoratal, Kashipur, Distt. Udham Singh Nagar
20.	Sh. Balkar Singh Fauji	-	-	Village-Raipur Khurd, P.O. Kashipur, Distt. Udham Singh Nagar
21.	Sh. Kuldeep Singh	-	-	Village-Dhakia Kalan, PO-Dhakia No. 1, Tehsil-Kashipur, Distt. Udham Singh Nagar-244713
22.	Sh. Tushar Agarwal	-	M/s BTC Industries Ltd.	Village-Kishanpur, P.O. Deoria, Tehsil-Kichha, Distt. Udham Singh Nagar
23.	Sh. Arunesh Kumar Singh	-	M/s Perfect Dynamics Auto Pvt. Ltd.	Fulsunga, P.O. Transit Camp, Rudrapur, Distt. Udham Singh Nagar
24.	Sh. Dinesh Johsi	-	M/s Sanjay Technoplast Pvt. Ltd.	Pant Nagar Plant : Khata No. 182, Khasra No. 301 Min., Village-Fulsunga, Tehsil-Kichha, Rudrapur, Distt. Udham Singh Nagar-263153
25.	Sh. Vijendra Singh	-	M/s Sanjay Technoplast Pvt. Ltd.	Pant Nagar Plant : Khata No. 182, Khasra No. 301 Min., Village-Fulsunga, Tehsil-Kichha, Rudrapur, Distt. Udham Singh Nagar-263153
26.	Sh. Sukkha Singh	-	-	Village & P.O.-Chattarpur, Rudrapur, Distt. Udham Singh Nagar
27.	Sh. Prateek Agrawal	-	M/s Shrishti Steel Industries (P) Ltd.	Station Road, Kashipur, Distt. Udham Singh Nagar
28.	Sh. Dheerendra Kumar Singh	-	M/s Omega Icewill Pvt. Ltd	Plot No. 37, Sector-4, IIE, Pantnagar, SIDCUL, Rudrapur, Distt. Udham Singh Nagar
29.	Sh. R.B. Biradar	Sr. General Manager	M/s Radico Khaitan Ltd.	A-1, A-2, B-3, Industrial Area, Bazpur, Distt. Udham Singh Nagar
30.	Dr. R.P. Singh	Executive Director	M/s Tarai Foods Ltd.	Sandhu Farms, P.O. Box No. 18, Rudrapur-263153, Distt. Udham Singh Nagar
31.	Sh. Manish Goyal	-	M/s BST Textile Mills Pvt. Ltd.	Plot 9, Sector-9, Rudrapur, Distt. Udham Singh Nagar

List of Participants in Hearing at Rudrapur on 22.02.2017

Sl. No.	Name	Designation	Organization	Address
32.	Sh. S. Sinha	-	M/s Endurance Technologies Ltd.	Plot-03, Sector-10, IIE, Pantnagar, Distt. Udham Singh Nagar-263153
33.	Sh. Harish Pant	-	M/s Endurance Technologies Ltd.	Plot-03, Sector-10, IIE, Pantnagar, Distt. Udham Singh Nagar-263153
34.	Sh. Rajiv Kumar	-	M/s Endurance Technologies Ltd.	Plot-03, Sector-10, IIE, Pantnagar, Distt. Udham Singh Nagar-263153
35.	Sh. Amit Goyal	-	M/s Ashok Layland Ltd.	Plot No. 1, Sector 12, IIE, Pantnagar, Distt. Udham Singh Nagar-263153
36.	Sh. Rameshwar Dayal	-	M/s Ashok Layland Ltd.	Plot No. 1, Sector 12, IIE, Pantnagar, Distt. Udham Singh Nagar-263153
37.	Sh. Ashok Bansal	-	M/s Rudrapur Solvents Pvt. Ltd.	Rudrapur-Kichha Road, Lalpur, Distt. Udham Singh Nagar
38.	Sh. Ajit Dandavate	-	M/s Bajaj Auto Ltd.	Plot No. 2, Sector-10, SIDCUL, Pantnagar, Rudrapur, Distt. Udhamsingh Nagar
39.	Sh. Prem Maurya	-	-	Village & P.O. Chattarpur, Rudrapur, Distt. Udham Singh Nagar-263153
40.	Sh. Umesh Sharma	-	M/s Voltas Ltd.	Plot No. 2-5, Sector-8, IIE, Pantnagar Industrial Area, Rudrapur, Distt. Udhamsingh Nagar-263153
41.	Sh. Ram Kumar Agarwal	-	M/s Umashakti Steels (P) Ltd.	Village-Vikrampur, Bannakheda Road, Bazpur, Distt. Udham Singh Nagar
42.	Sh. Sushil Kumar Tulsyan	-	M/s Umashakti Steels (P) Ltd.	Village-Vikrampur, Bannakheda Road, Bazpur, Distt. Udham Singh Nagar
43.	Sh. Naresh Ghai	-	M/s AICA Laminates India (P) Ltd.	Plot No. 23-26 & 45-48, Sector-5, SIDCUL, Pantnagar, Distt. Udham Singh Nagar
44.	Sh. Kuldeep Singh	-	M/s Kumaon Garhwal Chamber of Commerce & Industry Uttarakhand	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt. Udhamsingh Nagar.
45.	Sh. Vijay Mishra	Manager (HR)	M/s Eminent Power Friends Equipment Co. Pvt. Ltd.	Plot No-14-A & 15, Sector-4, IIE, SIDCUL, Pantnagar-263153, Distt. Udham Singh

List of Participants in Hearing at Rudrapur on 22.02.2017

Sl. No.	Name	Designation	Organization	Address
				Nagar
46.	Sh. D.N. Maurya	-	-	Chattarpur, Rudrapur, Distt. Udham Singh Nagar-263153
47.	Sh. Shiv Ji Maurya	-	-	Village & P.O. Chattarpur, Rudrapur, Distt. Udham Singh Nagar
48.	Sh. J.K. Patel	-	M/s SIDCUL Welfare Association	SIDCUL Area, Pantnagar, Rudrapur, Distt. Udham Singh Nagar
49.	Sh. Manoj Tyagi	-	-	-
50.	Sh. Jagri Singh	-	-	Village-Bagwara, P.O. Garinegi, Tehsil-Jaspur, Distt. Udham Singh Nagar
51.	Sh. Gurbachan Singh	-	-	Village & P.O. Kunda, Tehsil-Jaspur, Distt. Udham Singh Nagar
52.	Sh. Shital Singh	-	-	S/o Sh. Singara Singh, Village-Jagatpur Patti, P.O. Shivrajpur, Tehsil-Jaspur, Distt. Udham Singh Nagar
53.	Sh. Didaar Singh	-	-	S/o Karam Singh, Village-Jagatpur Patti, P.O. Shivrajpur, Tehsil-Jaspur, Distt. Udham Singh Nagar
54.	Sh. Harish Bhatt	-	-	Village & P.O. Chattarpur, Rudrapur, Distt. Udham Singh Nagar
55.	Sh. Rajeev Gupta	-	M/s Kashi Vishwanath Steels Pvt. Ltd.	Narain Nagar Industrial Estate, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar.
56.	Sh. Sanjeev Jindal	-	M/s Uttarakhand Ispat Pvt. Ltd.	Pipaliya Industrial Area, Bazpur, Distt. Udham Singh Nagar.
57.	Sh. Vikash Kumar	-	-	Plot No. 13, Sector-2, Rudrapur, Distt. Udham Singh Nagar.

List of Participants in Hearing at Dehradun on 02.03.2017

Sl. No.	Name	Designation	Organization	Address
1.	Sh. K.S. Kukreja	-	-	1/9, Govind Garh, Dehradun
2.	Sh. Pankaj Gupta	President	M/s Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun
3.	Sh. Rajiv Agarwal	Sr. Vice-President	M/s Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun
4.	Sh. R.L. Khanduri	-	M/s Flex Foods Ltd.	Lal Tappar Industrial Area, P.O. Resham Majri, Haridwar Road, Dehradun-248140
5.	Sh. Sandeep Sahni	President	Uttarakhand Hotel Association	Hotel Brentwood, Kulri, The Mall, Mussoorie-248179, Dehradun
6.	Sh. Ram Kumar	Sr. Vice President	Mussoorie Hotel Association	Hotel Vishnu Palace, Library Chowk, Mussoorie-248179, Dehradun
7.	Sh. G.C. Madhwal	-	-	147/28, Kalidas Road, Hathibarkala, Dehradun
8.	Sh. Gulshan Rai	-	Sh. Ganesh Roller Floor Mills	Mohabbewala Industrial Area, Subhash Nagar, Dehradun-248001
9.	Sh. Vishvamisra Gogiya	-	-	36, Panchsheel Park, Chakrata Road, Dehradun
10.	Sh. K.G. Behl	-	-	8A, Nemi Road, Dalanwala, Dehradun
11.	Sh. Arvind Jain	Member	Tarun Kranti Manch (Regd.)	6-Ramleela Bazaar, Dehradun
12.	Sh. Anoop Nautiyal	-	-	69, Vasant Vihar, Dehradun
13.	Sh. V. Viru Bisht	-	-	Village-Mohanpur, Post Off.-Premnagar, Dehradun-248007
14.	Sh. G.D. Madhok	-	-	146/1, Rajendra Nagar, Street No. 9, Kaulagarh Road, Dehradun
15.	Sh. Munish Talwar	Head-Electrical & Instrumentation	M/s Asahi India Glass Ltd.	Integrated Glass Plant, Village-Latherdeva Hoon, Manglaur-Jhabrera Road, P.O. Jhabrera, Tehsil Roorkee, Distt. Haridwar
16.	Sh. Manish Garg	-	M/s Madhu Gupta & Company	51/510, New Hyderabad, Lucknow, Uttar Pradesh
17.	Sh. Sushil Tyagi	-	-	34, Phase-1, THDC Colony, Pathri Bagh, Dehradun
18.	Sh. Mahesh Sharma	President	M/s Uttarakhand Industrial Welfare Association	Off. G-31, UPSIDC, Industrial Area, Selaqui, Dehradun, Uttarakhand
19.	Sh. Vikas Kumar	-	M/s Cavendish	Village-Kheri Mubarakpur, Laksar,

List of Participants in Hearing at Dehradun on 02.03.2017

Sl. No.	Name	Designation	Organization	Address
			Industries Ltd.	Haridwar, Uttarakhand
20.	Sh. Manish Garg	-	M/s Galwalia Ispat Udyog Pvt. Ltd.	Narain Nagar Industrial Estate, Bazpur Road, Kashipur-244713, Distt. Udham Singh Nagar.
21.	Dr. Mahesh Bhandari	President	Doon Residential Welfare Front	6, Municipal Road, Dehradun
22.	Sh. Avdhash Kaushal	-	-	68/1, Rajpur Road, Dehradun
23.	Sh. Surendra Nautiyal	-	-	Lower Nehru Gram, P.O.-Nehru Gram, Dehradun
24.	Sh. K.S. Pundir	-	-	Shantikunj, Lane No.-1A, Lower Nathanpur, Dehradun
25.	Sh. Sanjay Chaurasiya	-	M/s Hindustan National Glass & Industries Ltd.	Post Off.-Virbhadra, Rishikesh-249202, Uttarakhand
26.	Sh. K.L. Sundriyal	-	-	4(4/3), New Road, Near Hotel Relax, (Amrit Kauri Road), Dehradun
27.	Sh. Akash Agarwal		Arunachal Pradesh Power Ltd.	Sector-1, B-15, Noida, Uttar Pradesh
28.	Thakur Sh. R.S. Kaintura	-	-	4/19, Lane No. 03, P.O. Road Clement Town, Dehradun
29.	Sh. Vijay Singh Verma	-	-	Village-Delna, P.O. Jhabrera, Haridwar-247665, Uttarakhand
30.	Sh. Dharam Pal Goyal	-	-	S/o Sh. Ram Kumar, Gyan Vihar, Gurudwara Road, Doiwala, Dehradun
31.	Sh. Umesh Sharma Kau	Hon'ble MLA	-	Brahma Niwas, Ajabpur Kalan, Dehradun
32.	Sh. P.C. Thapliyal	-	-	90, Vijay Park, Dehradun
33.	Sh. Man Singh	General Manager (Engg.)	M/s Vista Alps Industries Ltd.	Haridwar Unit-II, Plot No. 1 B, Sector-10, Integrated Industrial Estate, SIDCUL, Distt. Haridwar
34.	Sh. Rajendra Singh	-	-	91, Dharampur, Dehradun
35.	Sh. Shekhera Nand Maindolia	-	-	150, Divya Vihar, Danda Dharampur, Dehradun.
36.	Sh. Shakti Singh Bartwal	-	-	Shri Sidhh Vihar, Lane No.-04, Lower Nehrugram, Dehradun

List of Participants in Hearing at Tehri on 03.03.2017

Sl. No.	Name	Designation	Organization	Address
1	Sh. Prem Singh Bangai	Advocate	-	Chamber No. 2, Court Compound, New Tehri, Tehri Garhwal, Uttarakhand
2	Sh. Shiv Singh Negi	President	Consumer Welfare Committee (Regd.)	Block No. 9/2, Type-3, New Tehri, Tehri Garhwal, Uttarakhand
3	Sh. Sumer Singh	Pradhan	-	Village-Khatyada, Vikas Khand-Narendra Nagar, P.O.-Rani Chaudi, Tehri Garhwal, Uttarakhand
4	Sh. Sandeep Singh	-	-	Near Main Post Office, Moldhar, New Tehri, Tehri Garhwal, Uttarakhand
5	Sh. Ashish Chauhan	-	M/s Golu Bakers	Gaja, Tehri Garhwal, Uttarakhand

6.4 Annexure 4: Provision Claimed in R&M Expenses for 9 LHPs

Amount Towards Provision Claimed in R&M Expenses for 9 LHPs

Vr. No.	Date/ Month	Name of Firm/Contractor	Amount in Rs.	A/c Head	Remarks
Chilla					
A-1	Mar.16 F	Provision of Expenses of G. Head 74.00 in A/c of 16(F)	25890300.00	74.131	Gogoal, Fifertech Adhoc, Linker, EE Erection and etc
A-18	Mar.16	Rev of Provision of Expenses 74	-8429722.00	74.131	Rev of Provision of Expenses 74
		Sub-total (in Rs.)	17460578.00		
		Sub-total (in Rs. Crore)	1.75		
Ramganga					
A-12	03/16 (F)	Provision of expenses for the year 2015-16.	12740.00	74.207	Office building
A-12	03/16 (F)	Provision of expenses for the year 2015-16.	36440.00	74.213	Residential buildings
A-12	03/16 (F)	Provision of expenses for the year 2015-16.	73864.00	74.216	Inspection House building
A-13	03/16 (F)	Provision of expenses for the year 2015-16 (Staff Related).	2790.00	74.216	Inspection House building
A-12	03/16 (F)	Provision of expenses for the year 2015-16.	10674.00	74.599	Misc. line work
A-13	03/16 (F)	Provision of expenses for the year 2015-16 (Staff Related).	2000.00	74.603	Jeeps
A-12	03/16 (F)	Provision of expenses for the year 2015-16.	109472.00	74.607	Other Vehicles
A-12	03/16 (F)	Provision of expenses for the year 2015-16.	1500.00	74.800	Office Equipments
A-12	03/16 (F)	Provision of expenses for the year 2015-16.	3500.00	74.805	Photostat Machine
A-12	03/16 (F)	Provision of expenses for the year 2015-16.	5000.00	74.900	R&M Computers
		Sub-total (in Rs.)	257980.00		
		Sub-total (in Rs. Crore)	0.03		
Khatima					
A-09	03-2016F	Provision of O&M Expenditure Upto 04-2016 to till date	95783.00		
A-09	03-2016F	Provision of O&M Expenditure Upto 04-2016 to till date	76644.00		
A-09	03-2016F	Provision of O&M Expenditure Upto 04-2016 to till date	10960.00		
		Sub-total (in Rs.)	183387.00		
		Sub-total (in Rs. Crore)	0.02		
Chibro					
A-14	Mar-16	Provision for the F.Y. 2015-2016	208987.00	74.603	Provision for F.Y. 2015-2016
		Sub-total (in Rs.)	208987.00		
		Sub-total (in Rs. Crore)	0.02		

Amount Towards Provision Claimed in R&M Expenses for 9 LHPs

Vr. No.	Date/ Month	Name of Firm/Contractor	Amount in Rs.	A/c Head	Remarks
Dhakrani					
A-3	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	281426.00	74.216	Stock
A-3	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	17727.00	74.301	Stock
A-3	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	495975.00	74.213	Stock
A-3	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	1329679.00	74.105	Stock
A-3	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	259776.00	74.111	Stock
A-3	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	10431.00	74.113	Stock
A-3	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	96057.00	74.116	Stock
A-3	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	825815.00	74.123	Stock
A-3	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	277854.00	74.128	Stock
A-3	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	1383345.00	74.133	Stock
A-3	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	129064.00	74.160	Stock
A-3	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	207807.00	74.603	Stock
A-3	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	96696.00	74.804	Stock
		Sub-total (in Rs.)	5411652.00		
		Sub-total (in Rs. Crore)	0.54		
Dhalipur					
A-4	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	791599.00	74.213	Stock
A-4	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	2790100.00	74.105	Stock
A-4	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	152988.00	74.111	Stock
A-4	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	932000.00	74.128	Stock
A-4	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	158078.00	74.133	Stock
A-4	March-2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	6259.00	74.603	Stock
		Sub-total (in Rs.)	4831024.00		
		Sub-total (in Rs. Crore)	0.48		

Amount Towards Provision Claimed in R&M Expenses for 9 LHPs

Vr. No.	Date/ Month	Name of Firm/Contractor	Amount in Rs.	A/c Head	Remarks
Kulhal					
A-4	March- 2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	9650.00	74.401	Stock
A-4	March- 2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	3129873.00	74.111	Stock
A-4	March- 2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	4682.00	74.116	Stock
A-4	March- 2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	103982.00	74.160.	Stock
A-4	March- 2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	448717.00	76.190 IV	Stock
A-4	March- 2016 (F)	Provision for liabilities of Sj-3 on 31.03.2016 of Dhakrani Units	31521.00	74.603	Stock
		Sub-total (in Rs.)	3728425.00		
		Sub-total (in Rs. Crore)	0.37		
Grand Total for 9 LHPs (Rs. Crore)			3.21		

6.5 Annexure 5: Provision in R&M Expenses of MB-II LHP

Amount Towards Provision in R&M Expenses of MB-II LHP

Vr. No.	Date/ Month	Name of Firm/Contractor	Amount in Rs.	A/c Head	Remarks
MB-II					
A-105	Mach-16 (F)	M/s Gogoal Hydro Pvt. Ltd., Haridwar	200000.00	74.128	Provision (AMC of Dharasu Power House)
A-106	Mach-16 (F)	M/s Gogoal Hydro Pvt. Ltd., Haridwar	2600000.00	74.128	Provision (AMC of Dharasu Power House)
A-107	Mach-16 (F)	M/s Gogoal Hydro Pvt. Ltd., Haridwar	2750000.00	74.128	Provision (AMC of Dharasu Power House)
A-112	Mach-16 (F)	M/s APS Hydro Pvt. Ltd.	854170.00	74.128	Provision (Maintenance contract of hydro-mech. and electro mech. works of MB-II, Dharasu Power House)
A-116	Mach-16 (F)	M/s Shyam Electricals, Barethi	53475.00	74.128	Provision (General cleaning of Dharasu Power House)
A-117	Mach-16 (F)	M/s Shyam Electricals, Barethi	31432.00	74.128	Provision (Gardening & cleaning of Dharasu Power House)
A-123	Mach-16 (F)	M/s Bhartiya Elemech Corporation, Haridwar	141543.00	74.128	Provision (Repair of seating arrangement of MIV bypass valve of U#1 & U#4)
A-125	Mach-16 (F)	M/s Gogoal Hydro Pvt. Ltd., Haridwar	3100000.00	74.128	Provision (AMC of Dharasu Power House)
A-110	Mach-16 (F)	M/s EE, Erection Division, Roorkee	2446050.00	74.401	Provision (Repairing & overhauling of wire rope pulley & replacement of broken / damaged bearing)
A-122	Mach-16 (F)	M/s ION Exchange India	5725.00	74.8	Provision (hiring of service of service engineers for RO water system)
A-120	Mach-16 (F)	M/s Jetking Computers, Joshiyara, Uttarkashi	33783.00	74.808	Provision (AMC of computer hardware & software system)
		Sub-total (in Rs.)	12216178.00		
Grand Total for MB-II LHP (Rs. Crore)			1.22		