

# **Order on Approval of Business Plan and Multi Year Tariff**

**For**

**UJVN Ltd.**

**For**

**First Control Period**

**(FY 2013-14 to FY 2015-16)**

**May 06, 2013**

**Uttarakhand Electricity Regulatory Commission**

**1<sup>st</sup> Floor, Institution of Engineers (I) Building**

**Near ISBT, Saharanpur Road, Clement Town, Dehradun - 248002**



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**Before**

**UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**

**Petition Nos.: 06/2013 and 09/2013 to 18/2013**

**In the Matter of:**

Petition filed by UJVN Ltd. for approval of its Business Plan for the first Control Period from FY 2013-14 to FY 2015-16,

**AND**

**In the Matter of:**

Petition filed by UJVN Ltd. for determination of Generation Multi Year Tariff for its 10 large generating stations for the first Control Period from FY 2013-14 to FY 2015-16.

**BY**

**In the Matter of:**

UJVN Ltd.

UJJWAL, Maharani Bagh, GMS Road, Dehradun.

.....Petitioner

**Coram**

<b>Shri Jag Mohan Lal</b>	<b>Chairman</b>
<b>Shri C. S. Sharma</b>	<b>Member</b>
<b>Shri K. P. Singh</b>	<b>Member</b>

**Date of Order: May 06, 2013**

Section 64 (1) read with Section 61 and 62 of the Electricity Act, 2003 (hereinafter referred to as "Act") requires 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 compliance to the above

provisions of the Act and Regulation 9 (1) and Regulation 11 (1) of UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011, Uttarakhand Jal Vidyut Nigam Limited (hereinafter referred to as “UJVN Ltd.” or “Generating Company” or “Petitioner”) filed separate Petitions for the approval of the Business Plan for the first Control period from FY 2013-14 to FY 2015-16 (Petition No.06/2013 hereinafter referred to as “Business Plan Petition”) on November 27, 2012 and Multi Year Tariff Petitions (Petition Nos. 09/2013 to 18/2013 hereinafter referred to as the “MYT Petitions”) for its ten Large Hydro-generating Stations (LHPs), on November 27, 2012. UJVN Ltd. in its Business Plan Petition submitted the Capital Investment Plan, Financing Plan, and the trajectory of the performance parameters for the first Control Period. UJVN Ltd. in its MYT Petitions submitted the detailed computations of Annual Fixed Charges (AFC) for its different generating stations for the first Control Period from FY 2013-14 to FY 2015-16 as per the Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2011 (UERC Tariff Regulations, 2011). Along-with above MYT Petitions, the Petitioner also submitted the audited results for FY 2008-09, FY 2009-10 and FY 2010-11 and requested for final true up of its expenses for FY 2008-09, FY 2009-10 and FY 2010-11 for the 9 LHPs (i.e. excluding Maneri Bhali – II) and for FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11 for Maneri Bhali-II as per the UERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2004 (UERC Tariff Regulations, 2004).

The Business Plan Petition filed by UJVN Ltd. had certain infirmities/ deficiencies and hence, the same was returned to UJVN Ltd. vide Commission’s letter no. UERC/6/TF/UJVNL Business Plan/2012/1256 dated December 17, 2012. UJVN Ltd. through its letter dated January 5, 2013 sought time extension till February 28, 2013 to submit the amended Business Plan. The Commission vide its letter no. UERC/6/TF/UJVNL ARR/2012/1375 dated January 8, 2013 informed UJVN Ltd. that considerable time extension had already been allowed to it to file the complete Business Plan and the time extension sought by it would inordinately delay the process of tariff determination and directed the Petitioner to submit the Business Plan Petition latest by January 25, 2013, failing which the Commission would proceed in the matter as deemed appropriate by it based on the information available with it. On the same day additional deficiencies observed in the Business Plan Petition submitted, were also intimated to UJVN Ltd. vide Commission’s letter no. UERC/6/TF/UJVNL ARR/2012/1375 dated January 8, 2013 and

UJVN Ltd. was asked to rectify the said infirmities so that the Petition may be admitted by the Commission. UJVN Ltd. vide its letter dated January 24, 2013 submitted the revised Business Plan Petition along with the information sought by the Commission.

The above revised Business Plan Petition was not approved by the Board of Directors of UJVN Ltd, however, as the considerable time extension has already been granted to UJVN Ltd. for submission of its complete Business Plan, the Commission through its Order dated February 1, 2013 provisionally admitted the Business Plan Petition with the condition that UJVN Ltd. would furnish the BoD approval within 15 days of the date of the Order and would furnish any further information/clarifications as deemed necessary by the Commission during the course of the proceedings, failing which the Business Plan Petition filed by the Petitioner would be treated as deemed returned.

The MYT Petitions filed by UJVN Ltd. also had certain infirmities/ deficiencies. The Commission, accordingly, vide its letter no. UERC/6/TF/UJVNL ARR-13-14/2012/1240 dated December 13, 2012 and letter no. UERC/6/TF/UJVNL ARR-13-14/2012/1376 dated January 8, 2013 directed UJVN Ltd. to rectify these infirmities/deficiencies and submit certain additional information as was necessary for the admission of the MYT Petitions. UJVN Ltd. vide its letter dated January 2, 2013 and January 21, 2013 rectified the infirmities and submitted most of the information as sought by the Commission for the admission of the MYT Petitions. Based on the additional submissions made by UJVN Ltd. the Commission through its Order dated February 1, 2013 provisionally admitted the MYT Petitions, with the condition that UJVN Ltd. would furnish any further information/clarifications as deemed necessary by the Commission during the course of the proceedings, failing which the MYT Petitions filed by the Petitioner would be treated as deemed returned.

This Order, accordingly, relates to the Business Plan Petition and the Multi Year Tariff (MYT) Petitions filed by UJVN Ltd. for approval of Business Plan and determination of Annual Fixed Charges (AFC) and Tariffs for its 10 LHPs for the first Control Period from FY 2013-14 to FY 2015-16 as well as true up for the FY 2008-09, FY 2009-10 and FY 2010-11, and is based on the original as well as all the subsequent submissions made by UJVN Ltd. during the course of the proceedings.

Tariff determination being the most vital function of the Commission, it has been the practice of the Commission in the past many Tariff Orders, to detail the procedure and explain the principles adopted by it in the determination of tariffs. Accordingly, in the present Order also, in line with past practices, the Commission has attempted to detail the procedure and principles followed by it while approving the Business Plan and determining the AFC and tariff of the medium and large generating Stations of UJVN Ltd. The tariff so decided for UJVN Ltd. is to be recovered from the beneficiaries, viz. UPCL and HPSEB, where UPCL holds a larger share in the generation. As most of the AFC for UJVN Ltd. is paid by UPCL, hence 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 Tariff for UPCL, so that UPCL is able to honour the payment liability towards purchase of energy from the LHPs 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 – Petitioner’s Submissions and Proposals

Chapter 3 – Stakeholders’ Responses & Petitioner’s Comments

Chapter 4 – Commission’s Approach

Chapter 5 – Commission’s Analysis, Scrutiny and Conclusion on Business Plan

Chapter 6 – Commission’s Analysis, Scrutiny and Conclusion on Truing up and MYT.

Chapter 7 – Commission’s Directives



# 1 Background and Procedural History

As mentioned earlier, in accordance with provisions of the Act and Regulation 9 (1) and Regulation 11(1) of the UERC Tariff Regulations, 2011, Generating Companies are required to submit the Business Plan and the MYT Petitions for determination of the generation tariff for supply of electricity to a distribution company. As per the Regulations 9 (1) and 9 (3) of the UERC Tariff Regulations, 2011 the Business Plan Petition is required to be submitted on or before May 31, 2012 and the same is to be get approved by the Commission prior to filling of the MYT Petitions. UJVN Ltd. vide its letter no. 3081MD/UJVNL/U-6 dated May 30, 2012 requested the Commission to extend the date for submission of the Business Plan up to August 31, 2012. The Commission vide its letter UERC/6.TF/149/2012-13/457 dated June 7, 2012 had allowed the extension of time to UJVN Ltd. for filling the Business Plan by August 31, 2012. However, UJVN Ltd. did not submit the Business Plan by August 31, 2012 and vide its letter no. 5014-MD/UJVNL/U-6 dated September 1, 2012 requested for further extension till September 30, 2012. The Commission allowed the further extension for UNVN Ltd. to submit the Business Plan by September 30, 2012 vide its letter no. UERC/6/TF/149/2012-13/2012/840 dated September 6, 2012. However, in spite of the repeated extensions allowed by the Commission, UJVN Ltd. delayed the submission of the Business Plan Petition and the same was submitted on November 27, 2012 along with the MYT Petitions.

Further, as per the Regulation 11 (1) of UERC Tariff Regulations, 2011 the MYT Petitions are required to be filed latest by November 30, 2012. Though, the Business Plan for the first Control Period has not been approved so far, UJVN Ltd. submitted the MYT Petitions for determination of Tariff for its 10 LHPs, namely Dhakrani, Dhalipur, Chibro, Khodri, Kulhal, Ramganga, Chilla, Maneri Bhali-I, Maneri Bhali-II and Khatima for first Control Period from FY 2013-14 to FY 2015-16 on November 29, 2012 i.e. before November 30, 2012.

As the Business Plan Petition and the MYT Petitions have been submitted at the same time at end of November, 2012, the Commission is of the view that in case the Petition for Business Plan is processed first and after approval of Business Plan by the Commission, the Petitioner is asked to submit the revised MYT Petition, it would cause undue delay in the Tariff determination process for the first Control Period by around 6-8 months.

The Hon'ble ATE in its Judgment in OP No. 1 of 2011 dated November 11, 2011 has directed the State Commissions to ensure the timely determination of Tariff for the utilities. The relevant excerpts from the mentioned Judgement are reproduced below:

*"65. In view of the analysis and discussion made above, we deem it fit to issue the following directions to the State Commissions:*

*...*

*(ii) It should be the endeavour of every State Commission to ensure that the tariff for the financial year is decided before 1st April of the tariff year. For example, the ARR & tariff for the financial year 2011-12 should be decided before 1st April, 2011. The State Commission could consider making the tariff applicable only till the end of the financial year so that the licensees remain vigilant to follow the time schedule for filing of the application for determination of ARR/tariff.*

*(iii) In the event of delay in filing of the ARR, truing-up and Annual Performance Review, one month beyond the scheduled date of submission of the petition, the State Commission must initiate suo-moto proceedings for tariff determination in accordance with Section 64 of the Act read with clause 8.1 (7) of the Tariff Policy.*

*..."*

In view of the above Judgment, and to ensure the timely Tariff Determination, the Commission, perforce is processing the Business Plan Petition and MYT Petition simultaneously and, accordingly, the Commission has decided to club the Petitions for approval of Business Plan and Multi Year Tariff and is issuing this single Order on approval of Business Plan and Multi Year Tariff. However, Commission would like to caution the petitioner that such delays in future filing of APR and truing up petition during this control period would be dealt with as per Hon'ble APTEL's directions. Furthermore, this would be treated as non-compliance of relevant provisions of various regulations and may entail appropriate punitive action against the petitioner.

Electricity generated from the above 10 LHPs of UJVN Limited 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 scheme, has share in five of these generating Stations, viz. Dhakrani (25%), Dhalipur (25%), Chibro (25%), Khodri (25%) and Kulhal (20%).

Through above Petitions, UJVN Ltd. also submitted the audited financial results for the FY 2008-09, FY 2009-10 and FY 2010-11 and requested the Commission for final truing up of AFC for 9 of its LHPs (i.e. excluding Maneri Bhali-II). For Maneri Bhali-II, the Petitioner has requested for the truing up for FY 2007-08 to FY 2010-11 based on the revised audited Capital Cost.

The Business Plan Petition and the MYT Petitions were admitted by the Commission provisionally vide two separate Order dated February 1, 2013 with the condition that the UJVN Ltd. shall furnish any further information/clarifications as deemed necessary by the Commission during the processing of the Petition and provides such information and clarifications to the satisfaction of the Commission within the time frame as may be stipulated by the Commission failing which the Petition would be treated as deemed returned on the due date for last information sought by the Commission and the Commission would proceed to dispose-off the matter as it deems fit based on the information available with it. The Commission, through its above Admittance Orders dated February 1, 2013 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 the Generating Company, also 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	07.02.2013
2	Dainik Jagran	07.02.2013
3	The Times of India	07.02.2013

Through above notice, stakeholders were requested to submit their objections/ suggestions/ comments latest by March 15, 2013 (copy of the notices are enclosed at **Annexure 1&2**). The Commission received in all 5 numbers of objections/suggestions/comments in writing on the Petitions filed by UJVN Ltd. for the first Control Period from FY 2013-14 to FY 2015-16. The list of stakeholders who have submitted their objections/suggestions/comments in writing is enclosed at **Annexure-3**.

The Commission, on its own has also sent copies of salient points of tariff proposals to members of the State Advisory Committee and the State Government. The salient points 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 organized a meeting with the members of the Advisory Committee on April 3, 2013, wherein, detailed deliberations were held with the members of the Advisory Committee on various issues in the Business Plan and MYT Petitions filed by UJVN Ltd. as well as other licensees for the first Control Period from FY 2013-14 to FY 2015-16.

Further, for interaction with all stakeholders and public at large, the Commission also organized 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	Ranikhet	March 14, 2013
2	Rudrapur	March 15, 2013
3	Dehradun	March 18, 2013
4	New Tehri	March 20, 2013

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

The objections/suggestions/comments, as received from the stakeholders through mail as well as during the course of public hearing were sent to the Petitioner for its response. The issues raised by the stakeholders and Petitioner's response on the same are detailed in Chapter 3 of this Order. In this context, it is mentioned that while finalizing this Order, the Commission has, as far as possible, tried to address the issues raised by the stakeholders.

Meanwhile, based on further scrutiny of the Business Plan Petition and the MYT Petitions, the Commission vide its letter nos. UERC/6/TF/UJVNL ARR-13-14/2012/1240 dated December 13, 2012 UERC/6/TF/UJVNL ARR-13-14/2012/1376 dated January 8, 2013 and UERC/6/TF/UJVNL ARR/2012/1375 dated January 8, 2013, sought following additional information/clarifications from the Petitioner:

**Business Plan Petition**

- Clarification on data discrepancies in various figures in the MYT Petitions vis-à-vis the Annexures submitted.
- Year-wise details of Capital expenditure, Capitalisation and funding of RMU schemes, up to the start of first Control Period, during the first Control Period and beyond the first Control Period.

- Details of the Manpower Planning for the first Control Period.
- Computation of the Design Energy and NAPAF for the first Control Period in workable excel sheet.
- Details of the CEA's concurrence along with the approved Capital Cost and completion time schedule as approved by CEA for the upcoming projects.
- Details of the likely sources of funding for meeting the Capital Expenditure requirement for the upcoming projects and RMU works.
- Copy of Memorandum of Agreement signed between PFC and UJVN Ltd. for financing the RMU works of old HEPs.
- Details of the increase in generation after the completion of RMU work for each LHP.

#### **MYT Petitions**

- Clarification on data discrepancies in various figures in the MYT Petitions vis-à-vis the formats and Annexure submitted.
- Submission of the compliance report to the directions issued by the Commission in its previous Orders.
- Submission of the revised formats with the details of the current year (FY 2012-13) and all the forms filled in with proper linkages and computations.
- Details of direct and indirect/common Operation & Maintenance expenses and their allocation to each Station in the workable excel sheet.
- Basis of and computations for considering pre tax return of 23.098% for computing return of equity.
- Submission of the projections of Non-Tariff Income for its Generating Stations for the first Control Period.
- Submission of the projections of O&M expenses for the first Control Period in accordance with the methodology specified in the Regulation 52 of UERC Tariff Regulations, 2011.
- Details of the projections of Employee Expenses, R&M Expenses and A&G Expenses separately for Maneri Bhali II for first Control Period.
- Details of the Capacity Index achieved for each of its Generating Station during the years FY 2008-09, FY 2009-10 & FY 2010-11.

- Details of the actual Energy billed (MU) from each of its Generating Station for the years FY 2008-09, FY 2009-10 & FY 2010-11.
- Justification for the higher Auxiliary losses for Dhakrani, Dhalipur and Chibro LHPs.

The Commission also conducted a Technical Validation Session (TVS) with the officers of UJVN Ltd. on February 19, 2013, for further deliberations on certain critical issues related to Business Plan and MYT Petitions filed by UJVN Ltd. for the first Control Period from FY 2013-14 to FY 2015-16. Minutes of above Technical Validation Session were sent to UJVN Ltd. vide Commission's letter no. UERC/6/TF/UJVNL ARR & Business Plan-13-14/2013/1586 dated February 21, 2013, for its response.

Most of the information as desired by the Commission above was submitted by UJVN Ltd. vide its letter no. 31 MD/UJVNL/U-6 dated 2 January, 2013. On further examination of the Petition, certain other additional information was sought by the Commission vide its letter no. UERC/6/TF/UJVNL ARR-13-14/2013/1505 dated 6 February, 2013 and reply to same was submitted by UJVN Ltd. vide its letter no. 1103 MD/UJVNL/U-6 dated 21 February, 2013. Commission further asked some more queries vide its letter no. UERC/6/TF/UJVNL ARR & Business Plan-13-14/2013/1710 dated 12 March, 2013 and reply to same was submitted by UJVN Ltd. Vide letter no. 1875/MD/UJVNL/U-6 dated 28 March, 2013. The second Technical Validation Session (TVS) was held with the Petitioner's officers on April 3, 2013, for further deliberations on replies submitted. The Commission has considered various subsequent information submitted by UJVN Ltd. and discussed them at appropriate places in this Order along with the Commission's views on the same.

## **2      Petitioner's Submissions and Proposals**

This Chapter gives a brief summary of the UJVN Ltd. original submissions for the approval of the Business Plan and determination of AFC and Multi Year Tariff for 10 large hydro generating Stations for the first Control Period from FY 2013-14 to FY 2015-16. The contents of this Chapter are based on the original submissions of the Petitioner and do not incorporate changes in information and data as submitted subsequently by the Petitioner. Additional submissions made by UJVN Ltd. have been considered by the Commission under Chapter 5 and Chapter 6, i.e. Commission's Analysis, Scrutiny and Conclusion on Business Plan and Commission's Analysis, Scrutiny and Conclusion on True up and MYT Petition.

The Petitioner has filed the Business Plan Petition for the approval of its Business Plan and 10 separate MYT Petitions for the determination of tariff for 10 large hydro generating Stations for the first Control Period from FY 2013-14 to FY 2015-16 on November 27, 2012. Through its MYT Petitions, UJVN Ltd. has also requested for truing up of AFC and tariffs for FY 2008-09, FY 2009-10 and FY 2010-11 for 9 of its LHPs (i.e. excluding Maneri Bhalli-II), and truing up of AFC and tariff for FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11 for Maneri Bhalli-II, based on the audited financial results.

### **2.1      Business Plan**

The Petitioner in its Business Plan has submitted the capital investment plan and the trajectory of the performance parameters for the first Control Period. Petitioner in its Business Plan has submitted the capital expenditure separately for the upcoming and the existing projects.

The brief details of the upcoming projects as submitted by the Petitioner in its Business Plan are as given below:

**Table 2.1: Details of the upcoming projects as submitted by Petitioner**

S.No.	Name of Project	Estimated Potential (MW)	District	River/ Tributary	Expected Commissioning Year
1	Vyasi	120	Dehradun	Yamuna	2016
2	Lakhwar	300	Dehradun	Yamuna	2018
3	Bowla Nandprayag	300	Chamoli	Alaknanda	2019
4	Tamak lata	250	Chamoli	Dhauliganga	2019
5	Nand Pyayag Langasu	100	Chamoli	Alaknanda	2020
6	Sirkari Bhyol Rupsiabagar	210	Pithoragarh	Goriganga	2021
7	Sela Urthing	230	Pithoragarh	Dhauliganga	2023
8	Kishau	660	Dehradun	Tons	2024
9	Pala Maneri	480	Uttarkashi	Bhagirathi	On hold
10	Bhairon Ghati	381	Uttarkashi	Bhagirathi	On hold
11	Taluka Sankri	140	Uttarkashi	Tons	2026*
12	Rishiganga I	70	Chamoli	Rishiganga	2026*
13	Rishiganga - II	35	Chamoli	Rishiganga	2026*
	<b>Total</b>	<b>3276</b>			

*\*Subject to clearance from Wildlife Board and MOEF*

Petitioner submitted that in addition to above Large Hydroelectric Projects, a number of Small Hydroelectric Projects are as in various stages of implementation requiring substantial capital investments during the Control Period FY 2013-14 to FY 2015-16.

The Petitioner in its Business Plan Petition submitted that there are various bottlenecks in the development of the hydro projects and therefore the State could not harness the full potential of Hydro power due to various reasons, notably among them are the inordinate delay in various clearances for the up-coming hydro projects, suspension / closure of 480 MW Pala Maneri and 381 MW Bhairon Ghati projects of UJVN Ltd., 600 MW Lohari Nag Pala project of NTPC Ltd. by Govt. of India and cancellation of already issued environment clearance to some Hydroelectric projects. Because of these factors the development of hydro power projects in the State is not taking place at desired pace.

Petitioner submitted that due to the above mentioned reasons, the State Government is also exploring alternatives to hydro power and is looking forward for the Gas and Coal based Power Projects in future for which considerable steps are being taken up at State and Central level.



Petitioner further submitted that it has also taken various initiatives for the development of the solar power projects in the State. Petitioner submitted that it had placed an order for installation of 100 kWp Solar Photo Voltaic Power Plant at Ujjwal, Dehradun with M/s Central Electronics Limited, a Public Sector Enterprise under DSIR of Ministry of Science & Technology, Government of India, on December 23, 2011. Petitioner submitted that the Solar Photo Voltaic of 100 kWp capacity Power Plant at "Ujjwal", Dehradun has been commissioned in the month of December, 2012. Total cost of installation of 100 kWp Solar Photo Voltaic Power Plant at Ujjwal is Rs. 2.73 Crores, out of which Rs. 2.34 Crore has been sanctioned by MNRE. Petitioner submitted that the DPRs for installation of 50 kWp and 80 kWp Solar Photo Voltaic (SPV) Power Plants at Ganga Bhawan and Yamuna Bhawan have also been submitted to MNRE for Central Finance Assistance (CFA) for funding these projects. Petitioner submitted that in addition to the above it is also exploring the possibilities of solar projects at various Hydro Electric Projects and their Power Channels.

### 2.1.1 Capital Expenditure and Capitalisation Plan for upcoming projects

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

**Table 2.2: Capital Expenditure and capitalisation plan of the upcoming projects (Rs. Crore)**

Project	Particulars	upto 31.03.2013	FY 2013- 14	FY 2014- 15	FY 2015- 16	after 31.03.2016	Total
Vyasi	Capital Expenditure	104.00	100.00	200.00	200.00	332.23	936.23
	Capitalization	-	-	-	-	936.23	936.23
Lakhwar	Capital Expenditure	242.00	80.00	200.00	250.00	818.23	1,590.23
	Capitalization	-	-	-	-	1,590.23	1,590.23
Kishau	Capital Expenditure	-	-	10.00	100.00	4,399.00	4,509.00
	Capitalization	-	-	-	-	4,509.00	4,509.00
Sirkari	Capital Expenditure	-	-	-	5.00	888.63	893.63
	Capitalization	-	-	-	-	893.63	893.63
Bowala Nand Prayag	Capital Expenditure	-	5.00	100.00	200.00	2,702.24	3,007.24
	Capitalization	-	-	-	-	3,007.24	3,007.24
Nand Prayag Langasu	Capital Expenditure	-	-	5.00	100.00	1,296.19	1,401.19
	Capitalization	-	-	-	-	1,401.19	1,401.19
Tamak Lata	Capital Expenditure	-	-	2.00	50.00	1,001.45	1,053.45
	Capitalization	-	-	-	-	1,053.45	1,053.45

Petitioner submitted that the two hydro projects namely Pala Maneri and Bhairon Ghati on the Bhagirathi River are currently on hold due to environmental issues. Whereas, Taluka Sankri, Rishiganga - I, Rishiganga - II and Sela Urthing are still under planning phase and hence no capital

expenditure will be incurred during the first Control Period. Petitioner proposed the debt-equity ratio for funding the above projects as 70:30 except Lakhwar Hydro Generating Station for which the debt-equity ratio has been proposed as 73:27.

### 2.1.2 Capital Expenditure and Capitalisation Plan for existing projects

Petitioner in its Business Plan Petition has proposed capital expenditure for the Renovation Modernisation and Up-rating (RMU) works of its existing hydro projects. The year wise phasing of the Capital Expenditure and capitalisation for RMU works as proposed by Petitioner during the first Control Period shown in the table below:

**Table 2.3: Capital Expenditure and capitalisation plan for existing projects for first Control Period (Rs. Crore)**

Project	Particulars	upto 31.03.2013	FY 2013-14	FY 2014-15	FY 2015-16	after 31.03.2016	Total
Chibro	Capital Expenditure	-	-	-	27.73	157.15	184.88
	Capitalisation	-	-	-	-	184.88	184.88
Khodri	Capital Expenditure	-	-	-	25.44	144.19	169.63
	Capitalisation	-	-	-	-	169.63	169.63
Dhakrani	Capital Expenditure	-	-	17.46	23.28	75.67	116.41
	Capitalisation	-	-	-	38.8	77.61	116.41
Dhalipur	Capital Expenditure	-	-	17.52	23.36	75.93	116.81
	Capitalisation	-	-	-	38.94	77.87	116.81
Kulhal	Capital Expenditure	-	-	17.81	23.74	77.17	118.72
	Capitalisation	-	-	-	39.57	79.15	118.72
Maneri Bhali- I	Capital Expenditure	-	18.93	25.25	44.18	37.87	126.23
	Capitalisation	-	-	42.08	42.08	42.08	126.23
Chilla	Capital Expenditure	-	-	33.7	128.06	175.24	337
	Capitalisation	-	-	-	-	337	337
Khatima	Capital Expenditure	49.40	84.28	60.82	25.94	-	220.44
	Capitalisation	-	-	146.96	73.48	-	220.44
Ramganga	Capital Expenditure	-	39.01	81.44	119.8	214.97	455.22
	Capitalisation	-	-	151.74	151.74	151.74	455.22
Maneri Bhali- II	Capital Expenditure	25.00	100.00	91.23	-	-	216.23
	Capitalisation	25.00	100.00	91.23	-	-	216.23

In addition to the above capital expenditure and capitalisation, Petitioner also submitted the details of the capital expenditure for the Refurbishment and Rehabilitation works under the DRIP (Dam Rehabilitation and Improvement Project) Scheme, closure works of civil & hydro mechanical structures for Yamuna Hydel Scheme Stage-I (Part-I&II) & Stage-IV and closure of Chilla HEP for special repair of power channel, submerged parts of structures & hydro-mechanical components of Virbhadrha barrage, Pashulok, Rishikesh.

**Table 2.4: Capital Expenditure for Refurbishment and Rehabilitation works under the DRIP Scheme and closure works (Rs. Crore)**

Sr. No.	Name of Work	Amount	FY14	FY15	Sources
1	Refurbishment of Asan Barrage, at Dhalipur (Dehradun)	5.35	2.14	3.21	<b>Grant under DRIP Scheme</b>
2	Refurbishing of Ichari Dam, at Ichari, Koti (Dehradun)	22.38	8.95	13.43	
3	Rehabilitation Work of Virbhadrha Barrage, Pashulok, Rishikesh.	6.26	2.50	3.75	
4	Refurbishment of Dakpathar Barrage, at Dakpathar (Dehradun)	6.72	2.69	4.03	
5	Refurbishment of Maneri Dam at Maneri, Uttarakashi	4.53	1.81	2.72	
6	Special Closure Works of Civil & Hydro Mechanical Structures for Yamuna Hydel Scheme Stage-I (Part-I&II) & Stage-IV.	16.73	16.73		<b>Debt Equity ratio of 70:30</b>
7	Closure of Chilla HEP for Special Repair of Power Channel, Submerged Parts Of Structures & Hydro-Mechanical Components of Virbhadrha Barrage, Pashulok, Rishikesh.	6.45	6.45		
	<b>Total</b>	<b>68.42</b>	<b>41.28</b>	<b>27.14</b>	

Petitioner submitted that the works proposed to be funded under DRIP Scheme will be carried out only if approved by DRIP authorities. Similarly the Closure works will be carried out after obtaining approval from Govt. of Uttarakhand. The fund to be provided under DRIP will be in the form of grant to UJVN Ltd. and so the capital cost of such projects has also not been included in the capital expenditure plan proposed in this Business Plan.

### **2.1.3 Outage Plan during the first Control Period**

Petitioner in its Business Plan Petition submitted the outage plan for the first Control Period as shown in the Table below:

**Table 2.5: Outage Plan for the first Control Period**

Project	Unit No.	FY 2013-14	FY 2014-15	FY 2015-16
Chibro	Unit I	Nov to Dec (Annual Maintenance)	Nov to Dec (Annual Maintenance)	Nov to Mar (RMU)
	Unit II	Dec to Jan (Annual Maintenance)	Dec to Jan (Annual Maintenance)	Dec to Jan (Annual Maintenance)
	Unit III	Jan to Mar (Annual Maintenance)	Jan to Mar (Annual Maintenance)	Jan to Mar (Annual Maintenance)
	Unit IV	Jan to Feb (Annual Maintenance)	Jan to Feb (Annual Maintenance)	Jan to Feb (Annual Maintenance)
Khodri	Unit I	Nov to Dec (Annual Maintenance)	Nov to Dec (Annual Maintenance)	Nov to Mar (RMU)
	Unit II	Dec to Jan (Annual Maintenance)	Dec to Jan (Annual Maintenance)	Dec to Jan (Annual Maintenance)
	Unit III	Jan to Mar (Annual Maintenance)	Jan to Mar (Annual Maintenance)	Jan to Mar (Annual Maintenance)
	Unit IV	Jan to Feb (Annual Maintenance)	Jan to Feb (Annual Maintenance)	Jan to Feb (Annual Maintenance)
Dhakrani	Unit I	Nov to Dec (Annual Maintenance)	Oct to Mar (RMU)	Apr to Jun (RMU) & Dec to Jan (Annual Maintenance)
	Unit II	Dec to Jan (Annual Maintenance)	Nov to Dec (Annual Maintenance)	Oct to Mar (RMU)
	Unit III	Feb to Mar (Annual Maintenance)	Dec to Jan (Annual Maintenance)	Jan to Feb (Annual Maintenance)
Dhalipur	Unit I	Nov to Dec (Annual Maintenance)	Oct to Mar (RMU)	Apr to Jun (RMU) & Dec to Jan (Annual Maintenance)
	Unit II	Jan to Feb (Annual Maintenance)	Nov to Dec (Annual Maintenance)	Oct to Mar (RMU)
	Unit III	Jan to Mar (Annual Maintenance)	Dec to Jan (Annual Maintenance)	Jan to Feb (Annual Maintenance)
Kulhal	Unit I	Nov to Dec (Annual Maintenance)	Oct to Mar (RMU)	Apr to Jun (RMU) & Dec to Jan (Annual Maintenance)
	Unit II	Jan to Feb (Annual Maintenance)	Nov to Dec (Annual Maintenance)	Oct to Mar (RMU)
	Unit III	Jan to Mar (Annual Maintenance)	Dec to Jan (Annual Maintenance)	Jan to Feb (Annual Maintenance)
Maneri Bhali - I	Unit I	Nov to Mar (RMU)	Apr to Mar (RMU)	Dec (Annual Maintenance)
	Unit II	July & Jan (Annual Maintenance)	July, Aug & Jan (Annual Maintenance)	Jul to Mar (RMU)
	Unit III	July, Aug & Feb (Annual Maintenance)	July, Nov & Dec (Annual Maintenance)	Jul & Jan (Annual Maintenance)
Chilla	Unit I	Nov to Dec (Annual Maintenance)	Nov to Mar (RMU)	Apr to Mar (RMU)
	Unit II	Dec to Jan (Annual Maintenance)	Dec to Jan (Annual Maintenance)	Dec to Jan (Annual Maintenance)
	Unit III	Jan to Mar (Annual Maintenance)	Jan to Mar (Annual Maintenance)	Jan to Mar (Annual Maintenance)
	Unit IV	Mar (Annual Maintenance)	Apr & Mar (Annual Maintenance)	Apr & Mar (Annual Maintenance)
Khatima	Unit I	Apr to Mar (RMU)	Nov to Dec (Annual Maintenance)	Nov to Dec (Annual Maintenance)

**Table 2.5: Outage Plan for the first Control Period**

Project	Unit No.	FY 2013-14	FY 2014-15	FY 2015-16
	Unit II	Dec (Annual Maintenance)	Apr & Jan (RMU)	Jan to Feb (Annual Maintenance)
	Unit III	Jan to Feb (Annual Maintenance)	Jan to Mar (RMU)	Apr to Oct (RMU) & Feb to Mar (Annual Maintenance)
Ramganga	Unit I	Jul to Sep (Annual Maintenance)	Jul to Feb (RMU)	Jul to Aug (Annual Maintenance)
	Unit II	Aug to Oct (Annual Maintenance)	Aug to Oct (Annual Maintenance)	Jun to Feb (RMU)
	Unit III	Jun to Aug (Annual Maintenance)	Jun to Aug (Annual Maintenance)	Jun to Aug (Annual Maintenance)
Maneri Bhali – II	Unit I	Nov to Jan (Annual Maintenance)	Nov to Jan (Annual Maintenance)	Nov to Jan (Annual Maintenance)
	Unit II	Nov to Jan (Annual Maintenance)	Nov to Jan (Annual Maintenance)	Nov to Jan (Annual Maintenance)
	Unit III	Jan to Mar (Annual Maintenance)	Jan to Mar (Annual Maintenance)	Jan to Mar (Annual Maintenance)
	Unit IV	Jan to Mar (Annual Maintenance)	Jan to Mar (Annual Maintenance)	Jan to Mar (Annual Maintenance)

### 2.1.4 Design Energy

The Petitioner in its Business Plan Petition has submitted that the Design Energy for all Power Stations (except Ramganga and Maneri Bhali- II HEPs) has been computed considering two approaches as explained below:

- **Approach I: On the basis of Average of 10 daily discharges:**

The data for each 10 daily discharge of the year is selected on the basis of 90% dependability. Correspondingly the Design Energy is calculated on the basis of discharge data, rated parameters of the machines at 95% of the installed capacity after accounting for average uncontrollable energy losses computed based on the actual data available for the previous years.

- **Approach II: On the basis of Maximum possible plant generation**

Petitioner submitted that in view of the limited data size, it has also considered an alternate approach of computing Design Energy on the basis of actual gross generation and generation lost on account of various operational & hydrological reasons since FY 2000-01, for which the data is available. The loss of generation (possible additional generation lost by UJVN Ltd.) is on account of (i) Equipment break down (ii) Flushing and Choking (iii) System Conditions (iv) Flood passing and other reasons. Petitioner submitted that it computes on a daily basis, the generation opportunity missed by it on account of these reasons. Thus the maximum energy that the Power Station could

possibly have generated (with 100% Unit availability and with no generation loss on account of any reason) is the actual gross generation plus the generation loss suffered by it. Petitioner submitted that this is an equally good approach for an existing plant for computing Design Energy when compared with the method of computing Design Energy on the basis of river discharge data as it is based on existing unit efficiencies instead of their design values, impact of other design related issues and operational restrictions imposed on the plant. Accordingly, the Petitioner has considered the maximum possible plant generation of the 90% dependable year and has computed the Design Energy after reducing the average uncontrollable energy losses computed based on the actual data available for the previous years.

As regard Ramganga HEP the Petitioner submitted that, this project utilizes the water discharge from Ramganga reservoir for power generation and since this is irrigation based Power Station, the water released from the reservoir is as per irrigation requirement in the downstream areas of Uttar Pradesh. Petitioner submitted that for run off the river plants an alternate approach of computing Design Energy on the basis of maximum possible generation has been considered. However, this approach is not being considered for the Ramganga Power Station as generation from the plant is regulated on the basis of the irrigation requirements and is not entirely governed by the plant availability. Petitioner has computed the Design Energy for the Ramganga Hydro Station on the basis of 10 daily discharge data of 90 % dependable year. Petitioner further, submitted that for Ramganga Hydro Station it has not considered any generation loss as there is no spilling of water.

As regard Maneri Bhali –II, Petitioner submitted that as this plant has been commissioned in March 2008 only, there is no reasonable sample size available, Design Energy cannot be computed with the above explained approaches. Petitioner submitted that, as per the DPR the Design Energy of Maneri Bhali –II is 1566 MU, but this Design Energy was calculated considering total installed capacity of Power Station and attainment of full barrage level of 1108 m. Petitioner submitted that due to restriction of reservoir level of 1104 m at Joshiyara Barrage instead of designed maximum level of 1108 m, the peaking capacity of the plant has reduced. However after completion of required essential civil works at barrage and modification of Tail Race Channel (TRC), it is expected that Power Station will be able to attain its Design Energy. Petitioner submitted that due to

restriction of barrage level and improper evacuation of water through TRC, presently the capacity of the plant has been restricted to 280 MW. Petitioner requested that till the proposed civil works are completed, Design Energy of Maneri Bhali Stage II HEP for the first Control Period be considered as average of annual generation of past four years i.e. 1232.52 MU. Petitioner submitted that, after completion of Civil works at barrage and modification of TRC of Power Station, UJVN Ltd. shall approach the Commission for revision in Design Energy of Maneri Bhali- II HEP.

The design energy as submitted by Petitioner following the above approaches is shown in the Table below:

**Table 2.6: Design Energy proposed for the first Control Period (MU)**

Station	Design Energy		
	Approach I	Approach II	Proposed for the first Control Period
Dhakrani	586.00	628.18	628.18
Dhalipur	311.20	301.15	301.15
Chibro	122.50	119.38	119.38
Khodri	190.70	182.23	182.23
Kulhal	123.94	127.55	127.55
Ramganga	370.61	394.05	394.05
Chilla	778.90	718.98	718.98
Maneri Bhali-I	233.70	152.57	152.57
Khatima	256.70		256.70
Maneri Bhali-II	1232.52		1232.52
<b>Total</b>			<b>4113.31</b>

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

As regard the run of river plants, Petitioner in its Business Plan Petition submitted that it has computed the Normative Annual Plant Availability Factor (NAPAF) based on the principle prescribed by the Commission for run of the river plants. However, the Petitioner proposed to consider the NAPAF computed on the basis of the actual running hours, reserve hours, forced outage hours and planned outage hours for previous years.

As regard the Ramganga HEP, Petitioner submitted that it is a Storage and Pondage type Power Station and it runs strictly in accordance with the requirement of UP Irrigation Department. Petitioner submitted that though the Commission prescribed principles for Storage and Pondage type power station it has not prescribed principles for irrigation need based Power Station. Petitioner requested the Commission to prescribe principles for determination of NAPAF for such

Power Stations. Petitioner submitted that in the absence of the principle for such plants, it has considered the principles for Storage and Pondage type Power Station to determine NAPAF after considering the impact of control of UP Irrigation department on plant operations.

Petitioner submitted that as per the principles prescribed, Ramganga HEP has head variation between Full Reservoir Level (FRL) and Minimum Draw Down Level (MDDL) of more than 8%, and the NAPAF should be computed based on the month wise peaking capability as provided by the project authorities in the DPR (approved by CEA or the State Govt.). However, in the absence of the DPR Petitioner computed NAPAF based on the month wise peaking capability on the basis of actual running data available with UJVN Ltd. Petitioner submitted that the NAPAF computed as per the above methodology is coming out to be 19% and it does not capture the scenario when plant is available for generation but cannot be scheduled because water discharges are not within the control of UJVN Ltd.

Further, the Petitioner submitted that the actual average plant availability for Ramganga HEP computed on the basis of availability of units for generation (though not scheduled) during last five years (2007-12) has been 84.65% and the NAPAF of 19% as calculated above as per the prescribed methodology does not represent the operational efficiency of the plant. Petitioner thus, requested to prescribe principles for determination of NAPAF for Ramganga Power Station and requested that till the time such principles are notified NAPAF for Ramganga may be taken as 85%.

The proposed NAPAF for 10 LHPs for the first Control Period is as shown in the Table below:

**Table 2.7: Normative Annual Plant Availability Factor (NAPAF) proposed for the first Control Period**

Station	Normative Annual Plant Availability Factor (NAPAF)
Dhakrani	75%
Dhalipur	84%
Chibro	83%
Khodri	82%
Kulhal	88%
Ramganga	73%
Chilla	78%
Maneri Bhali-I	78%
Khatima	85%
Maneri Bhali-II	75%



The Petitioner vide communication dated April 08, 2013 made additional submissions with regards to NAPAF further downward revising the proposed NAPAF. As these submissions were made after holding the public hearing by the Commission, no cognisance is being taken of these additional submissions.

### 2.1.6 Auxiliary Consumption and Transformation Losses

Petitioner in its Business Plan Petition computed the Auxiliary consumption and Transformation losses based on the average of the actual Auxiliary consumption and Transformation losses for previous years. Petitioner submitted that based on the above, the Auxiliary Consumption and Transformation losses for the Maneri Bhali - I, Khodri, Chilla and Maneri Bhali -II during the first Control Period are expected to be under the normative Auxiliary consumption as specified by the UERC Tariff Regulations, 2011. Petitioner submitted that for other HEPs, Auxiliary consumption and Transformation losses which are currently higher than the limit prescribed by the Commission are likely to achieve the specified norms on completion of the RMU works. The Auxiliary consumption and the transformation losses as submitted by the Petitioner based on the actual Auxiliary consumption and Transformation losses for previous years is as given below:

**Table 2.8: Auxiliary consumption and Transformation losses for LHPs**

Station	Aux. Consumption	Transformation Losses
Dhakrani	0.20%	1.40%
Dhalipur	0.20%	0.50%
Chibro	1.19%	7.70%
Khodri	0.27%	1.66%
Kulhal	0.30%	2.80%
Ranganga	0.30%	0.70%
Chilla	0.10%	0.90%
Maneri Bhali-I	0.30%	0.50%
Khatima	0.46%	1.16%
Maneri Bhali-II	0.35%	0.31%

## 2.2 MYT Petition

The AFC claimed by the Petitioner for its different generating Stations for the first Control Period from FY 2013-14 to FY 2015-16 vis-à-vis AFC approved by the Commission for the FY 2012-13 is as given below:

**Table 2.9: AFC Claimed by UJVN Ltd. for first Control Period from FY 2013-14 to FY 2015-16 (Rs. Crore)**

Station Name	AFC Approved by the Commission for FY 2012-13	AFC Projected by the UJVN Ltd. for FY 2013-14	AFC Projected by the UJVN Ltd. for FY 2014-15	AFC Projected by the UJVN Ltd. for FY 2015-16
Dhakrani	9.09	13.22	14.06	14.95
Dhalipur	13.76	20.09	21.35	22.70
Chibro	39.16	58.89	62.41	66.16
Khodri	24.12	31.53	33.22	34.97
Kulhal	8.37	12.21	12.96	13.75
Ramganga	22.54	28.38	30.03	31.84
Chilla	38.23	54.44	57.19	60.08
Maneri Bhali-I	38.12	49.74	52.36	55.14
Khatima	12.00	14.09	15.01	16.02
Maneri Bhali-II	280.70	449.67	452.95	456.46

Similarly, the AFC claimed by the Petitioner based on audited results for the FY 2008-09, FY 2009-10 and FY 2010-11 vis-à-vis numbers approved by the Commission are as below:

**Table 2.10: AFC for 9 LHPs for FY 2008-09, FY 2009-10 and FY 2010-11 claimed by UJVN Ltd. (Rs. Crore)**

Station Name	AFC Approved by the Commission	AFC Claimed by UJVN Ltd. based on audited accounts#	AFC Approved by the Commission	AFC Claimed by UJVN Ltd. based on audited accounts#	AFC Approved by the Commission	AFC Claimed by UJVN Ltd. based on audited accounts#
	FY 2008-09		FY 2009-10		FY 2010-11	
Dhakrani	6.36	6.46	8.81	13.16	9.14	12.42
Dhalipur	9.40	8.67	13.12	13.03	13.59	14.52
Chibro	27.44	25.83	33.40	32.60	35.00	36.00
Khodri	17.50	16.93	21.36	21.32	22.33	23.31
Kulhal	6.25	5.76	8.36	8.31	8.43	9.00
Ramganga	15.79	16.97	18.27	23.17	19.07	22.69
Chilla	25.52	28.00	30.94	34.84	31.78	40.28
Maneri Bhali-I	25.32	28.66	30.69	40.03	31.75	35.19
Khatima	7.26	7.78	10.12	9.90	10.49	10.00
Maneri Bhali-II	282.65	353.47	307.78	423.95	295.80	448.40

#Net AFC after subtracting Non-Tariff Income.

For Maneri Bhali-II, against the AFC approved by the Commission for FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11, UJVN Ltd. has further claimed the AFCs as detailed below based on the revised capital cost of MB-II.

**Table 2.11: AFC Approved vis-à-vis AFC Claimed by UJVN Ltd. for MB-II (Rs. Crore)**

Financial Year	AFC Approved by the Commission	AFC Claimed by UJVN Ltd. based on revised Capital Cost
FY 2007-08	11.25	15.88
FY 2008-09	282.65	353.47
FY 2009-10	307.78	423.95
FY 2010-11	295.80	448.40

### 2.2.1 Installed Capacity

The total installed capacity of the 10 large generating Stations of UJVN Ltd. is 1252.15 MW. Though HPSEB also has its share in 5 of these generating Stations, most of this capacity is allocated to UPCL as per details given below:

**Table 2.12: Installed Capacity and Firm Capacity Allocation to UPCL and HPSEB**

Station	Capacity	UPCL's Capacity Allocation		HPSEB's Capacity Allocation	
	MW	%	MW	%	MW
Dhakrani	33.75	75%	25.31	25%	8.44
Dhalipur	51.00	75%	38.25	25%	12.75
Chibro	240.00	75%	180.00	25%	60.00
Khodri	120.00	75%	90.00	25%	30.00
Kulhal	30.00	80%	24.00	20%	6.00
Ramganga	198.00	100%	198.00	-	-
Chilla	144.00	100%	144.00	-	-
Maneri Bhali-I	90.00	100%	90.00	-	-
Khatima	41.40	100%	41.40	-	-
Maneri Bhali-II	304.00	100%	304.00	-	-
<b>Total (MW)</b>	<b>1252.15</b>		<b>1134.96</b>		<b>117.19</b>

### 2.2.2 Capacity Index

For recovery of full capacity charges for previous years, UJVN Ltd. has not sought any deviation in the normative capacity index and has considered the same normative capacity index as specified under the UERC Tariff Regulations, 2004 for storage type and run of the river stations with pondage. For Maneri Bhali-II, in line with the provisions of the above Regulations, the Petitioner has considered a normative capacity index of 80% only during the first year of commercial operation i.e. FY 2008-09 and 85% for the subsequent years. The capacity index as submitted by UJVN Ltd. for different generating Stations for Truing up of previous years are given in the Table below:

**Table 2.13: Normative Capacity Index proposed by the Petitioner**

Name of the Generating Station	Capacity (MW)	FY 2008-09	FY 2009-10	FY 2010-11
Dhakrani	33.75	90%	90%	90%
Dhalipur	51.00	90%	90%	90%
Chibro	240.00	85%	85%	85%
Khodri	120.00	85%	85%	85%
Kulhal	30.00	90%	90%	90%
Ramganga	198.00	85%	85%	85%
Chilla	144.00	90%	90%	90%
Maneri Bhali-I	90.00	85%	85%	85%
Khatima	41.40	90%	90%	90%
Maneri Bhali-II	304.00	80%	85%	85%

### 2.2.3 Design Energy and NAPAF

Regulation 54 of the UERC Tariff Regulations, 2011 specifies a methodology for recovery of the fixed charges of hydro generating stations for first Control Period from FY 2013-14 to FY 2015-16 by allowing recovery of the Annual Fixed costs to the extent of 50% on the availability of the hydro station while the balance is allowed to be recovered through the energy charges. For determination of the Energy charges it is imperative to determine the Design Energy and NAPAF of Hydro Generating Stations. For 9 LHPs (excluding Maneri Bhali -II) the Design Energy and NAPAF proposed by the Petitioner in its MYT Petitions is same as proposed in its Business Plan Petition the same have been summarised above in Section 2.1.4 and Section 2.1.5 respectively.

### 2.2.4 Projected Gross Generation

The Petitioner in its MYT Petition has projected the Station-wise gross generation during first Control Period from FY 2013-14 to FY 2015-16, the projected Gross Generation as considered by the Petitioner is given in the Table below:

**Table 2.14: Proposed Generation**

Name of the Generating Station	Expected Generation (MU)		
	FY 2013-14	FY 2014-15	FY 2015-16
Dhakrani	119.38	119.38	119.38
Dhalipur	182.23	182.23	182.23
Chibro	628.18	628.18	628.18
Khodri	301.15	301.15	301.15
Kulhal	127.55	127.55	127.55
Ramganga	256.70	256.70	256.70
Chilla	718.98	718.98	718.98
Maneri Bhali-I	394.05	394.05	394.05
Khatima	152.57	152.57	152.57
Maneri Bhali-II	1233.91	1233.91	1233.91

This expected generation has been treated as Primary Energy by the Petitioner for computation of the Energy Charge Rate.

### 2.2.5 Auxiliary Energy Consumption and Transformation Losses

The Petitioner in its MYT Petition has considered the auxiliary consumption including transformation losses in accordance with Regulation 51 (2) of UERC Tariff Regulations, 2011. Accordingly, it has considered auxiliary consumption including transformation losses as 0.7% for surface HEP Stations with rotating exciters, 1% for surface HEP Stations with static excitation system and 1.2% for underground HEP Stations with static excitation system. The Station-wise Auxiliary Consumption including Transformation Losses for first Control Period from FY 2013-14 to FY 2015-16 as projected by the Petitioner are given in the Table below:

**Table 2.15: Auxiliary consumption including Transformation losses for first Control Period**

Name of the Generating Station	Aux. Consumption		
	FY 2013-14	FY 2014-15	FY 2015-16
Dhakrani	0.70%	0.70%	0.70%
Dhalipur	0.70%	0.70%	0.70%
Chibro	1.20%	1.20%	1.20%
Khodri	1.00%	1.00%	1.00%
Kulhal	0.70%	0.70%	0.70%
Ramganga	0.70%	0.70%	0.70%
Chilla	1.00%	1.00%	1.00%
Maneri Bhali-I	0.70%	0.70%	0.70%
Khatima	0.70%	0.70%	0.70%
Maneri Bhali-II	1.00%	1.00%	1.00%

### 2.2.6 Total Saleable Units

After deducting from the projected gross generation, the above mentioned figures of Auxiliary Consumption (including Transformation losses), the Petitioner has computed total saleable units to be for first Control Period as shown in the following Table:

**Table 2.16: Total saleable energy as projected by Petitioner for first Control Period  
(FY 2013-14, FY 2014-15, FY 2015-16)**

Name of the Generating Station	Gross Primary Energy	Aux. Consumption		Saleable Primary Energy
	MU	%	MU	MU
Dhakrani	119.38	0.70%	0.84	118.54
Dhalipur	182.23	0.70%	1.28	180.95
Chibro	628.18	1.20%	7.54	620.64
Khodri	301.15	1.00%	3.01	298.14
Kulhal	127.55	0.70%	0.89	126.66
Ramganga	256.70	0.70%	1.80	254.90
Chilla	718.98	1.00%	7.19	711.79
Maneri Bhali-I	394.05	0.70%	2.76	391.29
Khatima	152.57	0.70%	1.07	151.50
Maneri Bhali-II	1233.91	1.00%	12.34	1221.57
<b>Total</b>	<b>4114.70</b>			<b>4075.98</b>

## 2.2.7 Capital Cost and Additional Capitalisation

### 2.2.7.1 Capital Cost

Petitioner in its MYT Petitions submitted that it has already informed along with detailed explanation to the Commission in the previous tariff petitions for various financial years from FY 2006-07 to FY 2012-13 that there has been limited transfer of historical data from UPJVNL to UJVN Ltd. Despite the Petitioner's repeated follow-up, complete technical details are yet to be received. Certain essential documents such as the Detailed Project Reports, CEA clearances or Project Completion Reports have also not been provided. UJVN Ltd. is therefore not in a position to provide details regarding the break-up of original cost of fixed assets and those approved by a competent authority on COD.

Petitioner submitted that the Transfer Scheme between UPJVNL & UJVN Ltd. is still not finalized. This matter has also been appraised to GoU from time to time. GoU had notified the value of GFA for the purpose of RoE provisionally by notification dated March 07, 2008. Petitioner submitted that the Commission has considered the amount of Rs. 2.21 Crore for additional capitalization on the date of commissioning of Maneri Bhali-I HEP. Petitioner submitted that the value of the Gross Fixed Assets (GFA) for 9 LHPs, as considered by the Commission in its Tariff Order dated April 4, 2012 is Rs. 506.17 Crore.

Petitioner submitted that in view of the facts stated above and pending finalisation and notification of the Transfer Scheme, the value of opening GFA of Rs. 506.17 Crore determined by the Commission for 9 LHPs (excluding Maneri Bhali- II) which are transferred to UJVN Ltd. by UPJVNL may be considered for the purpose of this Tariff Order.

The Commission in the Order dated December 30, 2009 had directed the Petitioner to conduct an Independent audit of the capital cost of Maneri Bhali-II within six months of the issue of the Order. The Petitioner in its Petition for tariff determination for FY 2011-12 submitted that the independent audit has been carried out by M/s. Sumit Sabharwal and Associates, Chartered Accountant. For Maneri Bhali-II the Petitioner submitted that the capital cost depicted in the auditor report was Rs. 1894.81 Crore as shown in the audited balance sheet for FY 2007-08. However, since the audit report did not provide complete details as per the scope of work as required by the Commission and as per Petitioner's own submissions, some of the Capital works related to Maneri Bhali-II were still to be completed, the Commission, therefore, couldn't carry out a thorough prudence check of Capital Cost in its Tariff Order for FY 2011-12. The Commission subsequent to the Tariff Order dated May 10, 2011 vide its letter No. 549/UERC/6/TF/11 dated July 28, 2011 directed UJVN Ltd. to constitute a Expert committee to examine in details the reasons for time and cost over-run, impact of time over-run on Capital Cost and for proper identification of various factors leading to time and cost over-runs into controllable and un-controllable factors. The Committee was constituted by the Petitioner on August 10, 2011. The Commission in its Order dated April 4, 2012 again directed the Petitioner to submit the report of the Expert Committee based on views expressed by the Commission in its earlier Tariff Order dated May 10, 2011 to ascertain the Capital Cost of MB-II Project, within three months from the date of the said Order.

Petitioner in its Petition stated that it has already submitted the High-Level Committee Report before the Commission vide its letter number 3487/MD/UJVNL/U-6 dated June 25, 2012. Petitioner submitted that the, the report of High-level Committee states as under:

“

*... On examination of the Books of Account, relevant records, correspondences exchanged and various note issued by Competent Authorities from time to time and report dated September 13, 2010 of*

independent Auditor M/s Sumit Sabharwal and Associates Chartered Accountants, the Committee observed as follows:

1) That delay on completion of the works were mainly due to adverse geological conditions unforeseen events and various technological changes that took place with efflux of time during the concurrency of the project.

2) That no cost overrun resulted due to delay in completion of the works. However, due to time overrun the interest during the construction period (IDC) increase by Rs. 105.76 Crore along with other financial expenses mainly withdrawal of AG & SP subsidy and Guarantee fee.

....

It is evident from the bar charts that in certain periods, delays attributable to different reasons, whether controllable or uncontrollable were occurring concurrently. However, it is also clear that the delay is on the critical path were uncontrollable, which are entirely attributable to the reasons as per geology and other extraneous causes such as extra time required to restart the underground works after 10 years, collapses, huge quantity of slush due to seepage etc. and not attributable to the Contractors and Irrigation Department”

The Petitioner further submitted that in view of the above, the capital cost of Maneri Bhali-II as on March 15, 2008 claimed earlier as Rs. 1894.81 Crore has been enhanced by Rs. 63.32 Crore as detailed below:

**Table 2.17: Capital Cost of Maneri Bhali-II claimed by the Petitioner (Rs. Crore)**

S. No.	Particulars	Amount
1	Capital Cost actually incurred up to the COD	1894.81
2	Add: Adjustment on account of guarantee fee payable to GoU pertaining to the period prior to COD	18.81
3	Add: Adjustment on account of DRB amount paid but not capitalised	44.51
	<b>Total as on 15 March, 2008</b>	<b>1958.13</b>

The Petitioner submitted that the enhancement in the capital cost is due to the following reasons:

1. Guarantee fee on outstanding PFC loan amount at the commencement of the financial year is payable to GoU @ 1%. Such guarantee fee is payable at the beginning



of the financial year. In case of deferment in payment of such guarantee fee, the applicable rate is 2% as per GoU Orders in this regard. Prior to CoD, i.e. March 15, 2008 such guarantee fee was paid subsequent to the financial year in which it became due. The Petitioner submitted that it requested GoU to waive off the additional 1% guarantee fee, however, the Petitioner's request was not accepted by GoU and hence, provision of the same has been made in the accounts for FY 2009-10. Since the amount pertains to the period prior to COD, i.e. March 15, 2008 the same has been added to the capital cost as on COD i.e. March 15, 2008.

2. DRB (Dispute Resolution Board) had awarded an amount of Rs. 69.60 Crore in favour of M/s Hydel Construction Co. Pvt. Ltd. one of the contractors of Maneri Bhali-II project in the FY 2003-04. An amount of Rs. 44.51 Crore (net) paid on account of the said award was not capitalised in accordance to the Accounting Standard -16. Since, the above referred amount of Rs. 44.51 Crore was incurred for Maneri Bhali-II project out of project specific funds, hence, the same has been included in the capital cost as on March 15, 2008.

The Petitioner has considered capital cost of Rs. 1958.13 Crore for Maneri Bhali-II as on March 15, 2008.

The Capital costs for different generating Stations, as claimed by the Petitioner are given in the Table below:

**Table 2.18: Original Capital Cost of different generating stations claimed by the Petitioner (Rs. Crore)**

Name of the Generating Station	Approved by the Commission	Claimed by UJVN Ltd.
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
Maneri Bhali I	111.93	111.93
Khatima	7.19	7.19
Maneri Bhali II	1741.72	1958.13
<b>Total</b>	<b>2247.89</b>	<b>2464.30</b>

### 2.2.7.2 Additional Capitalisation

UJVN Ltd. has submitted that the Audited Balance Sheets of FY 2008-09, FY 2009-10 and FY 2010-11 are available and the additional capitalisations for FY 2008-09, FY 2009-10 and FY 2010-11 have been claimed, accordingly. As regards the additional capitalisation for FY 2011-12, UJVN Ltd. has considered the provisional balance sheet for FY 2011-12. UJVN Ltd. submitted that as the Commission has considered only the actual capital cost incurred / accrued in its earlier tariff orders it has not claimed the additional capitalisation for the first Control Period from FY 2013-14 to FY 2015-16. UJVN Ltd. has also not considered the addition in GFA for 9 LHPs excluding Maneri Bhali-II for FY 2012-13.

As regards the additional capitalisation, UJVN Ltd. submitted that in order to ensure the efficiency and safety as well as continuous operation of the plants, the additional capitalisation was required to be incurred and requested the Commission to allow the same. UJVN Ltd. further referred to Regulation 16(2) of the Tariff Regulations, 2004, which explicitly permit additional works/service, which may become necessary for efficient and successful operation of the plant.

As regards the allocation of additional capitalisation, UJVN Ltd. submitted that accounts are maintained centrally for the various HEPs and in certain instances one-to-one correlation of the accounting divisions is not possible with individual Stations. UJVN Ltd. has allocated additional capital expenses incurred by accounting divisions for more than one Station on the basis of the following:

- **Head Office/ Corporate Office:** 80% of the additional capital expenses have been apportioned on 9 HEPs excluding Maneri-Bhali-II which, further, have been allocated to each LHP on the basis of the installed capacity.
- **General Manager Office/ DGM/ Civil Division:** Allocated on LHPs within the control of the concerned GM/DGM which, further, has been allocated to each LHP on the basis of the installed capacity.

UJVN Ltd. has submitted the plant-wise additional capital expenditure and asset addition in FY 2008-09, FY 2009-10, FY 2010-11 and FY 2011-12 on actual basis as per its audited/provisional accounts, which is given in the Table below:

**Table 2.19: Proposed Additional Capitalisation for 9 LHPs (Rs. Crore)**

Stations	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Claimed for truing up	Claimed for truing up	Claimed for truing up	Claimed for truing up
Dhakrani	0.12	0.10	0.21	0.02
Dhalipur	0.18	0.15	0.32	0.04
Chibro	1.78	1.17	0.77	1.32
Khodri	3.52	2.81	1.04	0.31
Kulhal	0.11	0.09	0.19	0.02
Ramganga	0.48	0.25	0.23	0.33
Chilla	0.33	0.23	18.58	-0.08
Maneri Bhali-I	0.48	1.52	20.33	-0.81
Khatima	0.19	0.05	0.05	0.02
<b>Total</b>	<b>7.20</b>	<b>6.38</b>	<b>41.71</b>	<b>1.17</b>

The Petitioner submitted that as per observations of the Commission, it is maintaining proper asset books of various components of Additional Capitalisation. The breakup of components of Additional Capitalisation as presented in the table below:

**Table 2.20: Breakup of proposed additional capitalisation for 9 LHPs (Rs. Crore)**

Particulars	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
	Claimed for truing up	Claimed for truing up	Claimed for truing up	Claimed for truing up
Land	0.00	0.00	0.00	0.00
Building	0.00	0.22	0.06	0.00
Major civil works	0.00	0.05	16.54	0.00
Plant & Machinery	5.41	4.61	23.23	1.50
Vehicles	0.21	0.26	0.26	0.02
Furniture & Fixtures	0.56	0.24	0.53	0.32
Office Equipment	1.03	1.00	1.14	0.31
<b>Total</b>	<b>7.20</b>	<b>6.38</b>	<b>41.76</b>	<b>2.16</b>
Other Transfer or Scrap	0.00	0.00	-0.05	-0.99
<b>Net Total</b>	<b>7.20</b>	<b>6.38</b>	<b>41.71</b>	<b>1.17</b>

As regards additional capitalisation of Maneri Bhali-II, UJVN Ltd. has submitted that the Audited Balance Sheets of FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11 are available and the additional capitalisations for FY 2007-08, FY 2008-09, FY 2009-10 and FY 2010-11 have been claimed accordingly. As regards the additional capitalisation for FY 2011-12, UJVN Ltd. has considered the provisional balance sheet for FY 2011-12.

As regards the apportionment for allocating certain expenses that are incurred by the accounting divisions that serves more than one Station, UJVN Ltd. submitted that 10% of the total additional capital expenses incurred by such accounting divisions serving more than one Station,

e.g. Head Office/ Corporate Office have been apportioned to Maneri Bhali-II. The details of additional capitalisation for Maneri Bhali – II is shown in the Table below:

**Table 2.21: Proposed Additional Capitalisation for MB-II (Rs. Crore)**

Particulars	Total Expenditure Incurred up to CoD, i.e. 15.03.08	FY 2007-08 (From 15.03.08 to 31.03.08)	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12	Total Expenditure Actually Incurred
<b>Total</b>	1958.13	0.095	2.114	0.879	7.854	1.473	1970.545

Petitioner also submitted the breakup of components of additional capitalisation for Maneri Bhali-II as presented in the table below:

**Table 2.22: Breakup of proposed additional capitalisation for Maneri Bhali - II (Rs. Crore)**

Particulars	FY 2007-08 (From 15.03.08 to 31.03.08)	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Land	0.000	0.000	0.000	0.012	1.270
Building	0.000	-0.006	0.027	0.007	0.000
Major civil works	0.000	0.000	0.425	6.943	0.007
Plant & Machinery	0.021	1.281	0.004	0.414	0.148
Vehicles	0.021	0.091	0.177	0.264	-0.003
Furniture & Fixtures	0.036	0.330	0.041	0.143	0.012
Office Equipment	0.017	0.418	0.206	0.071	0.038
<b>Total</b>	<b>0.095</b>	<b>2.114</b>	<b>0.879</b>	<b>7.854</b>	<b>1.473</b>

## 2.2.8 Interest on Loans

As regard the Truing up of previous years, UJVN Ltd. has submitted that the interest on normative debt has been considered for nine LHPs excluding Maneri Bhali-II. The rate of interest for such debt has been considered as the weighted average rate of interest and finance charges of Maneri Bhali -II HEP. As regards the interest claim for Maneri Bhali-II, the Petitioner has submitted that the interest has been computed based on the actual weighted average interest rate on debt from all sources for respective financial year. The Station-wise interest on loan considered by the Petitioner for 9LHPs, excluding Maneri Bhali-II is given in the following Table:

**Table 2.23: Interest on Loan for 9 LHP proposed for Truing up (Rs. Crore)**

Stations	FY 2008-09		FY 2009-10		FY 2010-11	
	Approved in Order for FY 2008-09	Claimed for Truing Up	Approved in Order for FY 2009-10	Claimed for Truing Up	Approved in Order for FY 2010-11	Claimed for Truing Up
Dhakrani	0.04	0.15	0.02	0.15	0.02	0.17
Dhalipur	0.01	0.23	0.04	0.23	0.03	0.26
Chibro	0.52	0.48	0.28	0.57	0.35	0.69
Khodri	0.05	0.41	0.21	0.65	0.33	0.87
Kulhal	0.01	0.14	0.02	0.13	0.02	0.15
Ramganga	0.06	0.24	0.14	0.25	0.10	0.29
Chilla	0.61	1.00	0.66	0.95	0.63	1.86
Maneri Bhali-I	0.10	0.10	0.24	0.18	0.21	1.19
Khatima	0.03	0.08	0.05	0.08	0.04	0.09
<b>Total</b>	<b>1.43</b>	<b>2.83</b>	<b>1.66</b>	<b>3.19</b>	<b>1.74</b>	<b>5.57</b>

For Maneri Bhali-II interest on loan considered by the Petitioner is as shown in the Table below:

**Table 2.24: Interest on loan for Maneri Bhali - II proposed for Truing up (Rs. Crore)**

Particulars	FY 2007-08		FY 2008-09		FY 2009-10		FY 2010-11	
	Approved in Order for FY 2007-08	Claimed for Truing up	Approved in Order for FY 2008-09	Claimed for Truing up	Approved in Order for FY 2009-10	Claimed for Truing up	Approved in Order for FY 2010-11	Claimed for Truing up
Opening balance of loan		1370.69		1370.76		1372.24		1372.85
Additions		0.07		1.48		0.62		5.50
Closing Balance		1370.76		1372.24		1372.85		1378.35
Rate of interest (%)		0.54%		13.32%		12.26%		13.01%
<b>Total</b>	<b>6.33</b>	<b>7.33</b>	<b>131.19</b>	<b>182.66</b>	<b>120.42</b>	<b>168.30</b>	<b>106.91</b>	<b>178.94</b>

As regard the projections for the first Control Period, Petitioner submitted that it has computed the interest on normative loan for the 10 LHPs based on the actual weighted average rate of interest for Maneri Bhali -II HEP for FY 2011-12. Petitioner has not considered any loan repayment and loan additions during the first Control Period. The Station-wise interest on loan considered by the Petitioner first Control Period for 10 LHPs is given in the following Table:

**Table 2.25: Interest on loan for 10 LHPs proposed for first Control Period (Rs. Crore)**

Station	FY 2013-14	FY 2014-15	FY 2015-16
Dhakrani	0.19	0.19	0.19
Dhalipur	0.28	0.28	0.28
Chibro	0.86	0.86	0.86
Khodri	0.96	0.96	0.96
Kulhal	0.17	0.17	0.17
Ramganga	0.33	0.33	0.33
Chilla	2.75	2.75	2.74
Maneri Bhali-I	2.06	2.06	2.06
Khatima	0.09	0.09	0.09
Maneri Bhali - II	181.82	181.82	181.82
<b>Total</b>	<b>189.51</b>	<b>189.51</b>	<b>189.51</b>

### 2.2.9 Return on Equity (RoE)

As regard Truing up for previous years, for nine LHPs excluding Maneri Bhali-II, UJVN Ltd. submitted that it has claimed Return on Equity (RoE) on the average of opening and closing equity assuming the normative debt-equity ratio of 70:30. UJVN Ltd. has claimed RoE considering rate of return as 14% for 9 LHPs as shown in the Table below:

**Table 2.26: Return on Equity for 9 LHP proposed for Truing up (Rs. Crore)**

Stations	FY 2008-09			FY 2009-10			FY 2010-11		
	Approved RoE in Order for FY 2008-09	Equity Claimed for Truing up*	RoE claimed for Truing Up	Approved RoE in Order for FY 2009-10	Equity Claimed for Truing up*	RoE claimed for Truing Up	Approved RoE in Order for FY 2010-11	Equity Claimed for Truing up*	RoE claimed for Truing Up
Dhakrani	0.55	4.21	0.59	0.54	4.24	0.59	0.54	4.29	0.60
Dhalipur	0.86	6.85	0.96	0.88	6.90	0.97	0.89	6.97	0.98
Chibro	3.97	27.91	3.91	3.83	28.36	3.97	3.91	28.65	4.01
Khodri	3.12	23.52	3.29	3.22	24.47	3.43	3.32	25.05	3.51
Kulhal	0.74	5.69	0.80	0.75	5.72	0.80	0.75	5.76	0.81
Ramganga	2.14	15.77	2.21	2.19	15.88	2.22	2.20	15.95	2.23
Chilla	5.56	40.69	5.70	5.67	40.78	5.71	5.75	43.61	6.10
Maneri Bhali-I	4.67	33.91	4.75	4.66	34.21	4.79	4.67	37.49	5.25
Khatima	0.32	2.40	0.34	0.33	2.44	0.34	0.33	2.45	0.34
<b>Total</b>	<b>21.93</b>	<b>160.95</b>	<b>22.53</b>	<b>22.08</b>	<b>162.99</b>	<b>22.82</b>	<b>22.37</b>	<b>170.21</b>	<b>23.83</b>

\*Average of opening and closing equity

As regards the claim of RoE for Maneri Bhali-II for Truing up of previous years, UJVN Ltd. submitted that the Commission in its Order dated April 4, 2012 has not considered Return on equity on the funds deployed by GoU out of Power Development Fund (PDF).

UJVN Ltd. submitted that State of Uttarakhand enacted the Uttaranchal Power Development Fund Act, 2003 with effect from January 1, 2004. Under Section 3(1), the Government has been empowered to impose a duty on saleable energy generated from the existing and notified generating Hydro Plans of the generating company of the State of Uttarakhand which have been in commercial operation for over 10 years. UJVN Ltd. submitted that Section-4 of the Uttaranchal Power Development Fund Act, 2003 specifies that the taxes levied on account of Power Development Fund is first to be deposited in the consolidated funds of the State Government and if State Assembly by appropriation so provides, such proceeds may credited to the said Power Development Fund. Under Section-5 of the Uttaranchal Power Development Fund Act, 2003, the State Government may further credit sum of money to Power Development Fund by way of grants or loans as may be authorised by the State Assembly. Hence the Power Development Fund created under the said Act not only consist of duty collected through levy on saleable energy but also consist of such other funds which is not collected through any such levy from the sale of energy instead credited to Power Development Fund under Section-5.

The Power Development Fund consists of contributions not only through duty levied on saleable energy but through other sources also. Therefore it may not be possible to distinguish the investment made from Power Development Fund collected through levy on saleable energy and investment made from Power Development Fund collected through other sources.

UJVN Ltd. submitted that there is no exception which has been carved out on the basis of source of such equity in accordance with UERC (Terms & Conditions for determination of Hydro generation Tariff) Regulation, 2004. Petitioner further, submitted that in other states, the State Electricity Regulatory Commissions provides return on equity on total equity without going into details of sources of equity in accordance with Tariff Regulations applicable in that particular State. UJVN Ltd. Petitioner submitted that GoU has advised the Commission to allow Return on equity on the amount contributed by GoU out of withdrawal from PDF vide letter no. 337/1(2)/2011-04-(01)/84/2008 dated February 11, 2011. In view of the above, UJVN Ltd. has requested the Commission to allow the return on equity contributed by GoU out of withdrawal from PDF. UJVN Ltd. further submitted that equity for Maneri Bhali-II has been considered at 30% of capital employed in accordance with the Regulations. The year wise Return on Equity for Maneri Bhali-II as claimed by UJVN Ltd. for Truing up is as shown in the Table below:

**Table 2.27: Return on Equity for Maneri Bhali-II proposed for Truing up (Rs. Crore)**

Component	FY 2007-08		FY 2008-09		FY 2009-10		FY 2010-11	
	Approved in Order for FY 07-08	Claimed for Truing up	Approved in Order for FY 08-09	Claimed for Truing up	Approved in Order for FY 09-10	Claimed for Truing up	Approved in Order for FY 10-11	Claimed for Truing up
Return on Equity. (ROE)	1.30	3.83	28.05	82.29	28.05	82.35	28.05	82.54

As regard the projections for the first Control Period, Petitioner submitted that Regulation 27(2) of UERC Tariff Regulations, 2011 have been considered for calculating RoE. Petitioner further submitted that UJVN Ltd. pays income tax at corporate level and not for each station separately. Petitioner submitted that the bifurcation of tax which is paid at company level into projects level may be a complicated process and cause dissatisfaction among beneficiaries. Petitioner submitted that, in this regard Regulation 15 of CERC (Terms and Conditions of Tariff Regulations) Regulations 2009 may be considered as per which the Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up for income tax.

Petitioner requested the Commission that for the purpose of proposed tariff, total tax liability may be computed for first Control Period and provisionally approved upfront, in the MYT Tariff Order, based on present income tax rates. In case of variation of present tax rates with actual tax rates, the same may be taken care at the time of Truing Up for relevant year. In view of the above, the RoE has been proposed at the pre tax rate of 23.10% for the first Control Period from FY 2013-14 to FY 2015-16 for 10 LHPs is as shown in the Table below:

**Table 2.28: Return on Equity (RoE) for 10 LHPs proposed for first Control Period (Rs. Crore)**

Station	FY 2013-14	FY 2014-15	FY 2015-16
Dhakrani	1.00	1.00	1.00
Dhalipur	1.62	1.62	1.62
Chibro	6.74	6.74	6.74
Khodri	5.84	5.84	5.84
Kulhal	1.34	1.34	1.34
Ramganga	3.72	3.72	3.72
Chilla	10.71	10.71	10.71
Maneri Bhali-I	9.31	9.31	9.31
Khatima	0.57	0.57	0.57
Maneri Bhali - II	136.55	136.55	136.55
<b>Total</b>	<b>177.41</b>	<b>177.41</b>	<b>177.41</b>



### **2.2.10 Depreciation and Advance Against Depreciation**

As regards the truing up of previous years, for nine LHPs excluding Maneri Bhali-II Petitioner submitted that the Commission in its Order dated April 4, 2012 instructed the Petitioner to claim the depreciation on additional capitalisation from the next Tariff filing in accordance with the rates specified under the Regulations for different class of assets instead of claiming it at 2.66%.

Petitioner submitted that the depreciation on Additional Capitalisation from FY 2001-02 onwards has been computed based on the asset class wise rates specified under the Tariff Regulations. Petitioner submitted that in the previous Tariff Orders, methodology of calculation of depreciation was based on only opening balance of additional capitalisation of financial year for which depreciation is being calculated. However, this methodology does not consider the depreciation of asset and usage of such asset for a particular period of the financial year in which asset is commissioned. Petitioner in view of above, proposed to calculate depreciation based on the average of opening and closing balance of Additional Capitalisation of Asset.

Petitioner submitted that since the sub-classification of asset category is not available with the petitioner on the opening balance of capital cost as on January 2000, the rate of depreciation as considered by the Commission in Tariff orders dated May 10, 2011 and April 4, 2012, have been considered for computation of depreciation till FY 2007-08. Petitioner submitted that in the said Tariff orders the rate of depreciation on opening GFA has been considered at an average rate of 2.38% on additional capitalization. Petitioner submitted that the following rates have been considered for the purpose of calculating depreciation:

- On opening GFA –Weighted average rate of 2.38%
- On Additional capitalisation from FY 2001-02 onwards: Asset class wise rates as specified by UERC Tariff Regulations, 2004

Based on these principles, the Station-wise depreciation considered by the Petitioner is given in the Table below:

**Table 2.29: Depreciation for 9 LHP proposed for Truing up (Rs. Crore)**

Stations	FY 2008-09		FY 2009-10		FY 2010-11	
	Approved in Order for FY 2008-09	Claimed for true up	Approved in Order for FY 2009-10	Claimed for true up	Approved in Order for FY 2010-11	Claimed for true up
Dhakrani	0.02	0.06	0.01	0.06	0.01	0.07
Dhalipur	0.00	0.09	0.01	0.10	0.02	0.11
Chibro	0.18	0.30	0.11	0.36	0.16	0.41
Khodri	1.78	1.95	1.84	2.05	1.90	2.12
Kulhal	0.42	0.47	0.23	0.47	0.01	0.29
Ramganga	0.02	0.16	0.06	0.18	0.06	0.20
Chilla	3.20	3.33	3.25	3.34	3.30	3.60
MB-I	2.65	2.74	2.70	2.77	2.70	2.99
Khatima	0.01	0.05	0.02	0.05	0.02	0.06
<b>Total</b>	<b>8.28</b>	<b>9.13</b>	<b>8.23</b>	<b>9.39</b>	<b>8.19</b>	<b>9.85</b>

As regards the Truing up of depreciation and advance against depreciation for Maneri Bhali-II, UJVN Ltd. submitted that depreciation expense has been computed based on the asset classification and the applicable depreciation rates for these asset categories. UJVN Ltd. has further submitted that the rates have been considered based on the Schedule provided as Appendix-I to the Tariff Regulations, 2004.

**Table 2.30: Depreciation proposed for MB-II (Rs. Crore)**

Component	FY 2007-08		FY 2008-09		FY 2009-10		FY 2010-11	
	Approved in Order for FY 2007-08	Claimed for true up	Approved in Order for FY 2008-09	Claimed for true up	Approved in Order for FY 2009-10	Claimed for true up	Approved in Order for FY 2010-11	Claimed for true up
Depreciation	2.07	2.20	44.54	47.28	44.54	47.35	44.54	47.48
Adv. Against Dep. (AAD)	0.00	0.00	43.39	21.72	75.46	88.81	75.46	91.81
<b>Total Dep.</b>	<b>2.07</b>	<b>2.20</b>	<b>87.93</b>	<b>69.00</b>	<b>120.00</b>	<b>136.16</b>	<b>120.00</b>	<b>139.29</b>

As regard the projections for the first Control Period, Petitioner submitted that in accordance with the Regulation 29 of UERC Tariff Regulations, 2011 depreciation has been computed on the rates as specified below:

**Table 2.31: Rates of Depreciation as per Tariff Regulation, 2011**

Particulars	Rates- First 12 Years	Rates - Balance Life
Land	0.00%	0.00%
Land under lease	3.34%	2.61%
Building	3.34%	2.61%
Major civil works	3.34%	2.61%
Plant & Machinery	5.28%	1.59%
Vehicles	9.50%	0.00%
Furniture & Fixtures	6.33%	1.05%
Office Equipment	6.33%	1.05%

Petitioner submitted that in accordance with considerations of the Commission, it has considered only the actual Additional Capitalisation to arrive at GFA as on April 1, 2012 and as UERC Tariff Regulations, 2011 are applicable from April 1, 2013, till FY 2012-13, Petitioner has calculated depreciation based on Tariff Regulations 2004.

Petitioner submitted that UERC Tariff Regulations, 2011 allows recovery of major portion of depreciation in the initial 12 years of project operation. Further, for the additional capitalisation, the Commission in its previous tariff orders, has approved the depreciation till FY 2007-08 based on weighted average rate of 2.66%. Petitioner submitted that to compute the asset class wise depreciation from FY 2008-09 onwards, it has divided the depreciation recovered till FY 2007-08 among the relevant category of asset in proportion to the percentage of gross value of such category of asset in the total additional capitalisation. Accordingly, from FY 2008-09 onwards, Petitioner has claimed depreciation based on relevant category of asset.

With the above principles the Petitioner proposed the depreciation for the first Control Period from FY 2013-14 to FY 2015-16 as shown in the Table below:

**Table 2.32: Depreciation proposed for 10 LHPs for first Control Period (Rs. Crore)**

Station	FY 2013-14	FY 2014-15	FY 2015-16
Dhakrani	0.11	0.11	0.11
Dhalipur	0.17	0.17	0.16
Chibro	0.54	0.50	0.45
Khodri	0.58	0.58	0.52
Kulhal	0.10	0.10	0.09
Ramganga	0.22	0.18	0.17
Chilla	1.59	1.59	1.55
Maneri Bhali-I	0.87	0.87	0.85
Khatima	0.06	0.05	0.05
Maneri Bhali - II	74.79	74.79	74.79
<b>Total</b>	<b>79.04</b>	<b>78.94</b>	<b>78.75</b>

### **2.2.11 Operation and Maintenance (O&M) Expenses**

As regard the Truing up for previous years, UJVN Ltd. submitted that O&M expenses for FY 2008-09, FY 2009-10 and FY 2010-11 have been claimed as per audited accounts. The components of total O&M expenses have been bifurcated into direct and indirect expenses. Direct expenses have been allotted to respective station for which corresponding expenses have been incurred. Indirect expenses i.e. corporate office, other common expenses have been divided in the ratio of 80:10:10 to 9 LHPs, Maneri Bhali-II HEP and Small Hydro Projects including project under construction respectively. The 80% of total indirect expenses have further been divided into 9 LHPs based on their installed capacity in MW. UJVN Ltd. submitted that in addition to above, following expenses should also be considered as part of O&M expenses as approved by the Commission:

**a) Cost of Concessional Supply of Electricity to Employees residing in Colonies:**

Petitioner submitted that the cost of power supplies to employees of the Petitioner residing in plant colonies is borne by the Petitioner and the same has been recognised and approved by the Commission in its previous tariff orders. Petitioner submitted that the Commission, in its Tariff Order dated April 4, 2012, directed to segregate the consumption of employees of other departments, offices, etc. and also install the meters in all the un-metered connections including connections given to its employees. The Commission also directed not to include the consumption of consumers other than its departmental employees, while claiming cost of colony consumption in future. Petitioner submitted that the process of separation of employees with other consumers is already in progress.

Petitioner further, submitted that it has calculated cost of colony consumption at the Tariff proposed in the Present Tariff Petition for Truing Up for corresponding financial years.

**b) Cost of Concessional Supplies to Past & Present Employees of UJVN Ltd. residing in areas outside the Colonies:** UJVN Ltd. submitted that some departmental past and present employees of UJVN Ltd. are staying outside the colonies also. The cost of concessional power supply to such employee is determined by the Commission on

the basis of the prevalent demand tariff rate under category RTS-1 added with duty to state govt. and fixed charges of Rs. 20/ connection / month.

- c) **Impact of Arrears of Pay Revision:** As regards the arrears of Pay Revision, UJVN Ltd. submitted that in the Tariff Order dated May 10, 2011, the Commission has allowed the payment of arrear of VI Pay Commission on cash basis. Hence, the Petitioner has considered the financial impact of arrear of VI Pay Commission in FY 2009-10 and FY 2010-11 on cash basis.

Petitioner submitted that the total O&M expenses after including all components as discussed above are as given below:

**Table 2.33: O&M Expenses proposed for 9 LHP for Truing up (Rs. Crore)**

Stations	FY 2008-09		FY 2009-10		FY 2010-11	
	Approved in Tariff Order of FY 08-09	Claimed for Truing up	Approved in Tariff Order of FY 09-10	Claimed for Truing up	Approved in Tariff Order of FY 10-11	Claimed for Truing up
Dhakrani	5.57	5.74	7.95	12.53	8.27	11.59
Dhalipur	8.25	7.50	11.76	12.10	12.21	13.24
Chibro	21.95	21.99	28.03	30.22	29.40	32.27
Khodri	12.02	11.66	15.34	16.29	16.02	17.26
Kulhal	4.90	4.40	7.09	7.09	7.36	7.77
Ramganga	13.10	15.21	15.24	22.72	16.08	21.18
Chilla	15.36	18.32	20.24	25.84	20.99	29.14
Maneri Bhali-I	17.14	20.84	22.01	32.33	23.08	25.68
Khatima	6.70	7.46	9.41	9.75	9.78	9.67
<b>Total</b>	<b>104.98</b>	<b>113.11</b>	<b>137.06</b>	<b>168.87</b>	<b>143.21</b>	<b>167.80</b>

As regards O&M expenses for Maneri Bhali-II, UJVN Ltd. submitted that it has considered O&M expenses for FY 2007-08 to FY 2010-11 as per the audited Accounts. UJVN Ltd. submitted that in addition to above, following expenses should also be considered as part of O&M expenses:

- a) **Cost of Concessional Supply of Electricity to Employees residing in Colonies:** Petitioner submitted that the cost of power supplies to employees of the Petitioner residing in plant colonies is borne by the Petitioner and the same has been recognised and approved by the Commission in its previous tariff orders. Petitioner submitted that it has calculated cost of colony consumption for Maneri Bhali- II for FY 2008-09, FY 2009-10 and FY 2010-11 at the Tariff proposed in the Present Tariff Petition for Truing Up for corresponding financial years.

- b) **Impact of Arrears of Pay Revision:** As regards the arrears of Pay Revision, UJVN Ltd. submitted that in the Tariff Order dated May 10, 2011, the Commission has allowed the payment of arrear of 6<sup>th</sup> Pay Commission on cash basis. Hence, the Petitioner has considered the financial impact of arrear of 6<sup>th</sup> Pay Commission in FY 2009-10 and FY 2010-11 on cash basis.

The summary of the O&M expenses as submitted by UJVN Ltd. is as shown in the Table below:

**Table 2.34: O&M Expenses proposed for MB-II for Truing up (Rs. Crore)**

Particulars	FY 2007-08		FY 2008-09		FY 2009-10		FY 2010-11	
	Approved in Order	Claimed for Truing up	Approved in Order	Claimed for Truing up	Approved in Order	Claimed for Truing up	Approved in Order	Claimed for Truing up
O & M expenses	1.21	0.12	27.17	24.76	30.32	30.61	32.30	36.93
Colony Consumption	-	-	-	1.33	-	1.56	-	0.68
<b>Total</b>	<b>1.21</b>	<b>0.12</b>	<b>27.17</b>	<b>26.09</b>	<b>30.32</b>	<b>32.17</b>	<b>32.39</b>	<b>37.61</b>

As regard the projections for the first Control Period, Petitioner submitted that in accordance with Regulation 52(1) of UERC Tariff Regulations 2011, Operation and Maintenance (O&M) expenses shall comprise of the following,

- Employee Expense;
- A&G Expense;
- R&M Expense;

Petitioner submitted that the Commission had allowed the O&M expense components for the FY 2012-13 in its Order dated April 4, 2012. In its Tariff Order, due to non finalisation of actual figures for complete FY 2011-12, the Commission had proportionately increased the 9 months actual employee expense to arrive at the estimated figure for FY 2011-12. This figure was further escalated by 7.04% to arrive at employee expense for FY 2012-13. Petitioner submitted that the same escalation of 7.04% was also considered on A&G and R&M expense over the expenses approved for FY 2011-12 to arrive at A&G and R&M expense for FY 2012-13.

Petitioner submitted that in accordance with provisional accounts, the O&M expenditure figures for FY 2011-12 are available. Therefore in order to arrive at O&M expenses for FY 2013-14,

FY 2014-15 and FY 2015-16, the same escalation has been considered over the O&M components for FY 2011-12, as approved by the Commission in the Tariff Order dated April 4, 2012.

As regard the projections for the O&M Expenses for the first Control Period for Maneri Bhali-II, the Petitioner submitted that in accordance with Regulation 52(2) of UERC Tariff Regulations 2011, for Generating Stations in operation for less than 5 years in base year: (FY 2011-12), the operation and maintenance expenses for the base year of FY 2011-12 shall be fixed at 1.5% of the capital cost as admitted by the Commission for the first year of operation and shall be escalated from the subsequent year.

Petitioner submitted that in view of the modified Capital Cost proposed as on CoD of the project in the present Tariff Petition, O&M expenses for first Control Period from FY 2013-14 to FY 2015-16 may be based on estimated O&M expenses in base year FY 2011-12. To estimate the O&M expenses for FY 2011-12, 1.5% of capital cost of the project as on CoD of the project is further escalated with the same escalation as approved by the Commission in the Tariff Order dated April 4, 2012.

Based on the above principle, the projected O&M expenses for the first Control Period as submitted by the Petitioner as shown in the Table below:

**Table 2.35: O&M Expenses proposed for 10 LHPs for first Control Period (Rs. Crore)**

Station	FY 2013-14				FY 2014-15				FY 2015-16			
	Emp Exp	R&M Exp	A&G Exp	Total	Emp Exp	R&M Exp	A&G Exp	Total	Emp Exp	R&M Exp	A&G Exp	Total
Dhakrani	6.30	3.95	0.83	11.08	6.74	4.23	0.89	11.86	7.22	4.53	0.95	12.69
Dhalipur	9.52	5.97	1.25	16.74	10.19	6.39	1.34	17.92	10.91	6.84	1.43	19.18
Chibro	29.24	14.39	3.47	47.10	31.30	15.40	3.72	50.42	33.50	16.49	3.98	53.97
Khodri	16.21	4.64	1.49	22.34	17.35	4.97	1.59	23.91	18.57	5.32	1.70	25.59
Kulhal	5.60	3.51	0.74	9.85	5.99	3.76	0.79	10.54	6.42	4.02	0.84	11.28
Ramganga	17.83	2.36	2.19	22.38	19.09	2.53	2.34	23.95	20.43	2.70	2.51	25.64
Chilla	19.95	14.14	2.28	36.37	21.35	15.14	2.44	38.93	22.86	16.21	2.61	41.67
Maneri Bhali-I	14.94	17.94	1.77	34.65	15.99	19.21	1.90	37.09	17.12	20.56	2.03	39.71
Khatima	8.04	3.62	0.77	12.43	8.61	3.88	0.83	13.31	9.21	4.15	0.89	14.25
Maneri Bhali - II				43.44				46.49				49.77

### 2.2.12 Interest on Working Capital

As regard Truing up for previous years, UJVN Ltd. submitted that it has claimed interest on working capital in accordance with the provisions of UERC Tariff regulations, 2004 considering the following components of working capital:

- O&M expenses at one month of projected expenses;
- Maintenance spares at 1% of project cost, along with 6.00% annual escalation in value;
- Receivables at two months of revenue from sale of electricity.

UJVN Ltd. has claimed interest on working capital at 10.25%, 12.25% and 11.75% for FY 2008-09, FY 2009-10 and FY 2010-11 as per the prevailing SBI PLR as on April 1<sup>st</sup> of respective financial year.

**Table 2.36: Interest on Working Capital for 9 LHPs proposed for Truing up (Rs. Crore)**

Stations	2008-09		2009-10		2010-11	
	Approved in Order	Claimed for truing up	Approved in Order	Claimed for truing up	Approved in Order	Claimed for truing up
Dhakrani	0.18	0.19	0.29	0.44	0.29	0.39
Dhalipur	0.27	0.25	0.43	0.45	0.43	0.47
Chibro	0.82	0.81	1.16	1.24	1.17	1.27
Khodri	0.53	0.53	0.75	0.81	0.76	0.82
Kulhal	0.18	0.17	0.28	0.29	0.27	0.30
Ramganga	0.47	0.53	0.64	0.88	0.64	0.80
Chilla	0.79	0.87	1.11	1.30	1.11	1.41
Maneri Bhali-I	0.77	0.86	1.08	1.41	1.09	1.23
Khatima	0.19	0.22	0.32	0.33	0.32	0.32
<b>Total</b>	<b>4.20</b>	<b>4.43</b>	<b>6.06</b>	<b>7.15</b>	<b>6.07</b>	<b>7.01</b>

For Maneri Bhali-II, UJVN Ltd. has submitted interest on working capital as shown in the Table below:

**Table 2.37: Interest on Working Capital for Maneri Bhali-II proposed for Truing up (Rs. Crore)**

Particulars	FY 2007-08		FY 2008-09		FY 2009-10		FY 2010-11	
	Approved in Order	Claimed for truing up	Approved in Order	Claimed for truing up	Approved in Order	Claimed for truing up	Approved in Order	Claimed for truing up
Working Capital		23.42		85.67		97.87	72.74	103.05
Interest on working Capital.	0.34	2.40	8.31	8.78	8.99	11.99	8.55	12.11



As regard the projections for the first Control Period, Petitioner submitted that in accordance with Regulation 34 of Tariff Regulations 2011 it has computed the interest on working capital based on the following components:

- Operation and maintenance expenses for one month;
- Maintenance spares @ 15% of operation and maintenance expenses; and
- Receivables for sale of electricity equivalent to two months of the annual fixed charges calculated on normative capacity index.

Rate of interest on working capital has been considered as 14.75%. The projected interest on working capital for the first Control Period as submitted by the Petitioner is as shown in the Table below:

**Table 2.38: Interest on Working Capital for 10 LHPs proposed for first Control Period (Rs. Crore)**

Station	FY 2013-14	FY 2014-15	FY 2015-16
Dhakrani	0.84	0.90	0.96
Dhalipur	1.28	1.36	1.45
Chibro	3.65	3.89	4.15
Khodri	1.82	1.93	2.06
Kulhal	0.76	0.81	0.86
Ramganga	1.74	1.86	1.98
Chilla	3.04	3.23	3.42
Maneri Bhali-I	2.84	3.02	3.21
Khatima	0.93	0.99	1.06
Maneri Bhali - II	13.08	13.31	13.55
<b>Total</b>	<b>29.98</b>	<b>31.29</b>	<b>32.70</b>

### 2.2.13 Abstract of Tariff of UJVN Ltd. Generating Stations

On the basis of the actual expenses for FY 2008-09, FY 2009-10 and FY 2010-11 and projected expenses for the first Control Period from FY 2013-14 to FY 2015-16, the Petitioner has claimed total Annual Fixed Charges (AFC), for its 9 large hydro generating Stations. The Station-wise break-up of AFC for FY 2008-09, 2009-10 and FY 2010-11 & for the first Control Period from FY 2013-14 to FY 2015-16 and per unit tariff as proposed by the Petitioner is given in the Tables below:

**Table 2.39: Total AFC proposed for 9 LHP for truing up of FY 2008-09**

Stations	Approved AFC (Rs. Crore)	Interest on Loan (Rs. Crore)	Depreciation (Rs. Crore)	O&M Expenses (Rs. Crore)	Interest on WC (Rs. Crore)	RoE (Rs. Crore)	AFC Claimed (Rs. Crore)	Non Tariff Income (Rs. Crore)	Net AFC Claimed (Rs. Crore)	Saleable Primary Energy (MU)	Tariff (Rs./ kWh)
Dhakrani	6.36	0.15	0.06	5.74	0.19	0.59	6.72	0.27	6.46	118.54	0.55
Dhalipur	9.40	0.23	0.09	7.50	0.25	0.96	9.03	0.36	8.67	180.95	0.48
Chibro	27.44	0.48	0.30	21.99	0.81	3.91	27.49	1.66	25.83	620.64	0.42
Khodri	17.50	0.41	1.95	11.66	0.53	3.29	17.85	0.92	16.93	298.14	0.57
Kulhal	6.25	0.14	0.47	4.40	0.17	0.80	5.97	0.21	5.76	126.66	0.46
Ramganga	15.79	0.24	0.16	15.21	0.53	2.21	18.34	1.37	16.97	254.90	0.67
Chilla	25.52	1.00	3.33	18.32	0.87	5.70	29.21	1.21	28.00	711.79	0.39
MB-I	25.32	0.10	2.74	20.84	0.86	4.75	29.29	0.64	28.66	391.29	0.73
Khatima	7.26	0.08	0.05	7.46	0.22	0.34	8.13	0.35	7.78	140.52	0.55
<b>Total</b>	<b>140.82</b>	<b>2.83</b>	<b>9.13</b>	<b>113.11</b>	<b>4.43</b>	<b>22.53</b>	<b>152.04</b>	<b>6.99</b>	<b>145.05</b>	<b>2843.43</b>	

**Table 2.40: Total AFC proposed for 9 LHP for truing up of FY 2009-10**

Stations	Approved AFC (Rs. Crore)	Interest on Loan (Rs. Crore)	Depreciation (Rs. Crore)	O&M Expenses (Rs. Crore)	Interest on WC (Rs. Crore)	RoE (Rs. Crore)	AFC Claimed (Rs. Crore)	Non Tariff Income (Rs. Crore)	Net AFC Claimed (Rs. Crore)	Saleable Primary Energy (MU)	Tariff (Rs./ kWh)
Dhakrani	8.81	0.15	0.06	12.53	0.44	0.59	13.78	0.61	13.16	86.53	1.52
Dhalipur	13.12	0.23	0.10	12.10	0.45	0.97	13.84	0.81	13.03	157.59	0.83
Chibro	33.40	0.57	0.36	30.22	1.24	3.97	36.36	3.77	32.60	580.90	0.56
Khodri	21.36	0.65	2.05	16.29	0.81	3.43	23.23	1.91	21.32	273.01	0.78
Kulhal	8.36	0.13	0.47	7.09	0.29	0.80	8.79	0.47	8.31	109.62	0.76
Ramganga	18.27	0.25	0.18	22.72	0.88	2.22	26.25	3.08	23.17	161.33	1.44
Chilla	30.94	0.95	3.34	25.84	1.30	5.71	37.14	2.29	34.84	711.79	0.49
MB-I	30.69	0.18	2.77	32.33	1.41	4.79	41.48	1.45	40.03	391.29	1.02
Khatima	10.12	0.08	0.05	9.75	0.33	0.34	10.55	0.66	9.90	150.88	0.66
<b>Total</b>	<b>175.07</b>	<b>3.19</b>	<b>9.39</b>	<b>168.87</b>	<b>7.15</b>	<b>22.82</b>	<b>211.42</b>	<b>15.04</b>	<b>196.37</b>	<b>2622.94</b>	

**Table 2.41: Total AFC proposed for 9 LHP for truing up of FY 2010-11**

Stations	Approved AFC (Rs. Crore)	Interest on Loan (Rs. Crore)	Depreciation (Rs. Crore)	O&M Expenses (Rs. Crore)	Interest on WC (Rs. Crore)	RoE (Rs. Crore)	AFC Claimed (Rs. Crore)	Non Tariff Income (Rs. Crore)	Net AFC Claimed (Rs. Crore)	Saleable Primary Energy (MU)	Tariff (Rs./ kWh)
Dhakrani	9.14	0.17	0.07	11.59	0.39	0.60	12.83	0.41	12.42	118.54	1.05
Dhalipur	13.59	0.26	0.11	13.24	0.47	0.98	15.06	0.54	14.52	180.95	0.80
Chibro	35.00	0.69	0.41	32.27	1.27	4.01	38.65	2.65	36.00	620.64	0.58
Khodri	22.33	0.87	2.12	17.26	0.82	3.51	24.58	1.27	23.31	298.14	0.78
Kulhal	8.43	0.15	0.29	7.77	0.30	0.81	9.32	0.31	9.00	126.66	0.71
Ramganga	19.07	0.29	0.20	21.18	0.80	2.23	24.70	2.01	22.69	254.90	0.89
Chilla	31.78	1.86	3.60	29.14	1.41	6.10	42.12	1.85	40.28	711.79	0.57
Maneri Bhali-I	31.75	1.19	2.99	25.68	1.23	5.25	36.33	1.14	35.19	391.29	0.90
Khatima	10.49	0.09	0.06	9.67	0.32	0.34	10.47	0.47	10.00	150.75	0.66
<b>Total</b>	<b>295.80</b>	<b>5.57</b>	<b>9.85</b>	<b>167.80</b>	<b>7.01</b>	<b>23.83</b>	<b>214.06</b>	<b>10.64</b>	<b>203.42</b>	<b>2853.67</b>	

**Table 2.42: Tariff Proposed for 9 LHP for FY 2013-14**

Stations	Approved AFC (Rs. Crore)	Interest on Loan (Rs. Crore)	Depreciation (Rs. Crore)	O&M Expenses (Rs. Crore)	Interest on WC (Rs. Crore)	RoE (Rs. Crore)	AFC Projected (Rs. Crore)	Non Tariff Income (Rs. Crore)	Net AFC Projected (Rs. Crore)	Saleable Primary Energy (MU)	Energy Charges (Rs./ kWh)	Capacity Charges (Rs. Crore)
Dhakrani	9.09	0.19	0.11	11.08	0.84	1.00	13.22		13.22	118.54	0.56	6.61
Dhalipur	13.76	0.28	0.17	16.74	1.28	1.62	20.09		20.09	180.95	0.56	10.05
Chibro	39.16	0.86	0.54	47.10	3.65	6.74	58.89		58.89	620.64	0.47	29.44
Khodri	24.12	0.96	0.58	22.34	1.82	5.84	31.53		31.53	298.14	0.53	15.77
Kulhal	8.37	0.17	0.10	9.85	0.76	1.34	12.21		12.21	126.66	0.48	6.11
Ramganga	22.54	0.33	0.22	22.38	1.74	3.72	28.39		28.39	254.90	0.56	14.19
Chilla	38.23	2.74	1.59	36.37	3.04	10.71	54.44		54.44	711.79	0.38	27.22
Maneri Bhali-I	38.12	2.06	0.87	34.65	2.84	9.31	49.74		49.74	391.29	0.64	24.87
Khatima	12.00	0.09	0.06	12.43	0.93	0.57	14.09		14.09	151.50	0.46	7.04
<b>Total</b>	<b>205.39</b>	<b>7.68</b>	<b>4.25</b>	<b>212.94</b>	<b>16.89</b>	<b>40.85</b>	<b>282.60</b>		<b>282.60</b>	<b>2854.42</b>		<b>141.30</b>

**Table 2.43: Tariff Proposed for 9 LHP for FY 2014-15**

Stations	Approved AFC (Rs. Crore)	Interest on Loan (Rs. Crore)	Depreciation (Rs. Crore)	O&M Expenses (Rs. Crore)	Interest on WC (Rs. Crore)	RoE (Rs. Crore)	AFC Projected (Rs. Crore)	Non Tariff Income (Rs. Crore)	Net AFC Projected (Rs. Crore)	Saleable Primary Energy (MU)	Energy Charges (Rs./ kWh)	Capacity Charges (Rs. Crore)
Dhakrani	9.09	0.19	0.11	11.86	0.90	1.00	14.06		14.06	118.54	0.59	7.03
Dhalipur	13.76	0.28	0.17	17.92	1.36	1.62	21.35		21.35	180.95	0.59	10.68
Chibro	39.16	0.86	0.50	50.42	3.89	6.74	62.41		62.41	620.64	0.50	31.20
Khodri	24.12	0.96	0.58	23.91	1.93	5.84	33.22		33.22	298.14	0.56	16.61
Kulhal	8.37	0.17	0.10	10.54	0.81	1.34	12.96		12.96	126.66	0.51	6.48
Ramganga	22.54	0.33	0.18	23.95	1.86	3.72	30.04		30.04	254.90	0.59	15.02
Chilla	38.23	2.74	1.59	38.93	3.22	10.71	57.19		57.19	711.79	0.40	28.59
Maneri Bhali-I	38.12	2.06	0.87	37.09	3.02	9.31	52.36		52.36	391.29	0.67	26.18
Khatima	12.00	0.09	0.05	13.31	0.99	0.57	15.01		15.01	151.50	0.50	7.51
<b>Total</b>	<b>205.39</b>	<b>7.68</b>	<b>4.15</b>	<b>227.94</b>	<b>17.98</b>	<b>40.85</b>	<b>298.62</b>		<b>298.62</b>	<b>2854.42</b>		<b>149.30</b>

**Table 2.44: Tariff Proposed for 9 LHP for FY 2015-16**

Stations	Approved AFC (Rs. Crore)	Interest on Loan (Rs. Crore)	Depreciation (Rs. Crore)	O&M Expenses (Rs. Crore)	Interest on WC (Rs. Crore)	RoE (Rs. Crore)	AFC Projected (Rs. Crore)	Non Tariff Income (Rs. Crore)	Net AFC Projected (Rs. Crore)	Saleable Primary Energy (MU)	Energy Charges (Rs./ kWh)	Capacity Charges (Rs. Crore)
Dhakrani	9.09	0.19	0.11	12.69	0.96	1.00	14.95		14.95	118.54	0.63	7.47
Dhalipur	13.76	0.28	0.16	19.18	1.45	1.62	22.70		22.70	180.95	0.63	11.35
Chibro	39.16	0.86	0.45	53.97	4.15	6.74	66.16		66.16	620.64	0.53	33.08
Khodri	24.12	0.96	0.52	25.59	2.06	5.84	34.97		34.97	298.14	0.59	17.48
Kulhal	8.37	0.17	0.09	11.28	0.86	1.34	13.75		13.75	126.66	0.54	6.87
Ramganga	22.54	0.33	0.17	25.64	1.98	3.72	31.84		31.84	254.90	0.62	15.92
Chilla	38.23	2.74	1.55	41.67	3.42	10.71	60.08		60.08	711.79	0.42	30.04
Maneri Bhali-I	38.12	2.06	0.85	39.71	3.21	9.31	55.14		55.14	391.29	0.70	27.57
Khatima	12.00	0.09	0.05	14.25	1.06	0.57	16.02		16.02	151.50	0.53	8.01
<b>Total</b>	<b>205.38</b>	<b>7.68</b>	<b>3.96</b>	<b>243.98</b>	<b>19.16</b>	<b>40.85</b>	<b>315.60</b>		<b>315.60</b>	<b>2854.42</b>		<b>157.80</b>

For Maneri Bhali –II, UJVN Ltd. has claimed the AFC as shown in the Table below:

**Table 2.45: Total AFC Proposed for MB-II for Truing up (Rs. Crore)**

Particulars	FY 2007-08		FY 2008-09		FY 2009-10		FY 2010-11	
	Approved in Order of FY 2007-08	Claimed for Truing up	Approved in Order for FY 2008-09	Claimed for Truing up	Approved in Order for FY 2009-10	Claimed for Truing up	Approved in Order for FY 2010-11	Claimed for Truing up
Interest on Loan Capital	6.33	7.33	131.19	182.66	120.42	168.30	106.91	178.94
Depreciation including AAD	2.07	2.20	87.93	69.00	120.00	136.16	120.00	139.29
O&M Expense	1.21	0.12	27.17	26.09	30.32	32.17	32.30	37.61
Interest on Working Capital	0.34	2.40	8.31	8.78	8.99	11.99	8.55	12.11
Return on Equity	1.30	3.83	28.05	82.29	28.05	82.35	28.05	82.54
<b>Annual Fixed Charges</b>	<b>11.25</b>	<b>15.88</b>	<b>282.65</b>	<b>368.82</b>	<b>307.78</b>	<b>430.98</b>	<b>295.80</b>	<b>450.49</b>
Non Tariff Income	0.00	0.00	0.00	15.35	0.00	7.03	0.00	2.08
<b>Net AFC</b>	<b>11.25</b>	<b>15.88</b>	<b>282.65</b>	<b>353.47</b>	<b>307.78</b>	<b>423.95</b>	<b>295.80</b>	<b>448.40</b>

Accordingly, UJVN Ltd. has submitted the per unit cost of power for Maneri Bhali-II as shown in the Table below:

**Table 2.46: Per Unit Cost Proposed for Maneri Bhali-II for Truing up**

Particulars	Unit	Tariff Year (2007-08)	Tariff Year (2008-09)	Tariff Year (2009-10)	Tariff Year (2010-11)
Net Annual Fixed Charges	(Rs. Crore)	15.88	353.47	423.95	448.40
Saleable Energy	(MU)	31.40	1035.71	1187.47	1324.69
<b>Per unit Rate of Saleable Energy</b>	<b>(Rs./unit)</b>	<b>5.06</b>	<b>3.41</b>	<b>3.57</b>	<b>3.38</b>

**Table 2.47: Tariff Proposed for Maneri Bhali – II for first Control Period**

Particulars	Unit	FY 2013-14	FY 2014-15	FY 2015-16
Interest on Loan Capital	(Rs. Crore)	181.82	181.82	181.82
Depreciation	(Rs. Crore)	74.79	74.79	74.79
O&M Expense	(Rs. Crore)	43.44	46.49	49.77
Interest on Working Capital	(Rs. Crore)	13.08	13.31	13.55
Return on Equity	(Rs. Crore)	136.55	136.55	136.55
<b>Annual Fixed Charges</b>	<b>(Rs. Crore)</b>	<b>449.67</b>	<b>452.95</b>	<b>456.46</b>
Non Tariff Income	(Rs. Crore)			
<b>Net AFC</b>	<b>(Rs. Crore)</b>	<b>449.67</b>	<b>452.95</b>	<b>456.46</b>
<b>AFC to be recovered from energy Charge</b>	<b>(Rs. Crore)</b>	<b>224.84</b>	<b>226.48</b>	<b>228.23</b>
Net Primary Energy	(MU)	1221.57	1221.57	1221.57
Energy Charge Rate	(Rs. /kWh)	1.84	1.85	1.87
Capacity Charges	(Rs. Crore)	224.84	226.48	228.23

### **3 Stakeholders' Responses & Petitioner's Comments**

The Commission has received 05 Objections/Suggestions/Comments on UJVN Ltd. Business Plan and Multi Year Tariff Petition for First Control Period from FY 2013-14 to FY 2015-16. 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 are enclosed at Annexure-3. The Commission has further obtained replies from UJVN Ltd. on the Objections/Suggestions/Comments received from stakeholders. For the sake of clarity, the objections raised by the stakeholders and response of the Petitioner have been consolidated and summarised below. In the subsequent Chapters of this Order, the Commission has, kept in view the Objections/Suggestions/Comments of stakeholders and reply of the Petitioner while deciding the Annual Fixed Charges and Tariffs for different generating stations of UJVN Ltd.

#### **3.1 Tariff Increase**

##### **3.1.1 Stakeholder's Comments**

Shri. Pankaj Gupta, President, Industries Association of Uttarakhand submitted that the tariff proposal filed by UJVN Ltd. is not in the interest of the people. It has been the past experience that all the utilities are not spending within the cost approved by the UERC in its Tariff Orders. He further submitted that utilities come out with their actual cost, which are always higher from the cost approved by the Commission and then they plead for acceptance of their actual cost as pass through in the ensuing year. The same phenomenon is seen in this year's Tariff Petition also.

He further submitted that it is surprising to notice the abnormally high cost projected by UJVN Ltd. for all its stations. UJVN Ltd. is proposing abnormally high increases in all heads for all generating stations and this is not commensurate with past. In this regard, the Commission must closely scrutinise these costs.

Shri S. P. Joshi (Village & Post-Nakraunda, Dehradun), submitted, UJVN Ltd. has proposed 16% increase in Tariff, PTCUL has proposed 9% increase in Tariff and UPCL has proposed 50% increase in Tariff. Shri S. P. Joshi requested to clarify if the increase in Tariff of electricity consumers of the State would be 50%, 16% or 9% in total.

Shri. G. S. Bedi (General Manager, Indian Drugs & Pharmaceuticals Ltd., Rishikesh) submitted that UPCL has proposed a tariff hike of 67.39%. Further, if ARR and Tariff Petitions of PTCUL & UJVN Ltd. are accepted it will necessitate a further hike of 26.28% in addition to the hike of 67.39% proposed by UPCL for FY 2013-14. This abrupt and exorbitant increase is not justified on any account for any category of consumers. Considering the high increase already affected in tariff applicable for FY 2012-13, no increase is justified and if unavoidable, very marginal increase be considered.

M/s Asahi India Glass Limited submitted that there is a need to demystify the tariff proposal and create a system aiming at rendering efficient utilization of available resources. Care must be taken to see the cost of inefficiency of the public/electricity utilities, which should not be passed on to the consumers. Further, PTCUL and UJVN Ltd. in their ARR and Tariff Petition for FY 2013-14 have necessitated approx 26.28 % in consumer tariffs in addition to the hike of 67.39% proposed by UPCL for FY 2013-14. As per UJVN Ltd.'s ARR plan, increase in total R&M expenses booked under accounts and interest on working capital are on higher side. Therefore, there should be a proper methodology for computation of annual escalation factor in O&M expenses.

Shri Pratap Singh, President of Vasant Vihar Residents Welfare Association, Dehradun submitted that the proposal to increase the present electricity tariff to approx. 50% seems to be arbitrary and unjustifiable. The increase in tariff has to be gradual and in phased intervals. Further, there should be careful scrutiny of the justification given by PTCUL regarding the tariff hike of 9% and for UJVN Ltd. regarding the tariff hike of 16%. The cause of this great difference between the two Corporations has to be examined and justified as this gives an opportunity to UPCL to increase their rates and ultimately it burdens the consumers. He further submitted that increase in the overhead charges and increased cost of production of electricity has been one of the reasons for the tariff hike. In this regard, Commission should make all these figures available and emphasis should be on reducing the unproductive expenditure of the Power Corporations.

### **3.1.2 Petitioner's Reply**

As regards to the proposed increase in tariff by UJVN Ltd. Petitioner submitted that the Petitions for determination of tariff are prepared in accordance to the Hon'ble UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011 notified by Commission. The tariff for

forthcoming year is proposed on normative basis, in accordance to the Regulations, 2011 and truing up for past year is claimed based on actual audited expenditure as per Uttaranchal Electricity Regulatory Commission (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2004.

UJVN Ltd. further submitted that it continuously makes efforts to ensure strict commercial discipline and strives to protect the public interest at large. All efforts are being made to comply with the directives of the Hon'ble Commission which are issued from time to time.

### **3.1.3 Commission's Views**

With regard to points raised for increase in ARR/tariff, the Commission would like to clarify that it has been the practice of the Commission to 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 carries out due diligence and prudence check of all the expenses incurred by the Petitioner before considering it as part of annual revenue requirement. The Commission ascertains that no unnecessary cost arising out of inefficiencies of the Petitioner is loaded on to the consumers.

## **3.2 Capital Cost of Maneri Bhali-II**

### **3.2.1 Stakeholder's Comments**

Shri Pankaj Gupta, President of Industries Association of Uttarakhand submitted that the Commission has given its analysis and Orders on Capital Cost of Maneri Bhali-II in its different Orders for different years. In this regard, he requested the Commission to follow same approach as taken by it in its earlier Orders for Maneri Bhali-II.

### **3.2.2 Petitioner's Reply**

In accordance with the Regulation 15(1) of UERC Tariff Regulations, 2004-

*"Subject to prudence check by the Commission, the actual expenditure incurred on completion of the project shall form the basis for determination of final tariff. The final tariff shall be determined based on the admitted capital expenditure actually incurred up to the date of commercial operation of the*



*generating station and shall include initial capital spares subject to a ceiling norm of 1.5% of the original project cost as on the cutoff date."*

In accordance to UERC Tariff Regulations, 2004, the actual expenditure incurred upto the date of commercial operation of project shall form the basis for the Capital Cost of the Project, after prudence check by the Hon'ble Commission.

### **3.2.3 Commission's Views**

In this regard, the Commission would like to clarify that the Commission has sought certain clarifications from UJVN Ltd. vide its letter dated July 11, 2012 on the report submitted by UJVN Ltd on the issue of Capital Cost of Maneri Bhali-II. The Commission on non-receipt of the information sent a reminder letter dated November 27, 2012 asking UJVN Ltd. to submit its reply on the deficiencies pointed out in the report. The Commission has not received the information till date and therefore, the Commission for reasons spelt out in Chapter 4 of this Order has considered the capital cost as approved by the Commission in its previous Order dated April 04, 2012.

## **3.3 RoE for Maneri Bhali-II**

### **3.3.1 Stakeholder's Comments**

Shri. Pankaj Gupta, President, Industries Association of Uttarakhand submitted that the Commission should not allow Return on Equity on funds deployed by the GoU out of PDF (Power Development Fund) as PDF is a dedicated fund created in accordance with the provisions of the PDF Act passed by the GoU. It is further submitted that PDF Act and Rules made there-under clearly indicate that money available in this fund has to be utilized for the purposes of development of generation and transmission assets. The money for the purpose of this fund is collected by the State Govt. through cess imposed on the electricity generated by more than 10 year old hydro generating station. The cost of such cess is further passed on to UPCL and which in turn recovers the same from ultimate consumers of electricity through tariffs. The money available in this fund is, accordingly, provided by the consumers of electricity in the State and is, accordingly, their money. Since, under the Tariff Regulations of the Commission, licensees are not allowed any return on money contributed by the consumers for creation of assets, the Commission has not been allowing return on such contribution made by the Government out of PDF. In this connection, it also needs to

be highlighted that in case Commission allows returns on such money invested by the Government it would tantamount to double loading on consumers, first for financing the equity and then for servicing the same, i.e. first in the form of cess and thereafter in the form of return allowed to licensee as both these form part of respective utilities ARR and would ultimately be recovered from the final consumers of electricity through tariffs.

### **3.3.2 Petitioner's Reply**

In accordance with the Regulation 15(1) of UERC Tariff Regulations, 2004-

*"Subject to prudence check by the Commission, the actual expenditure incurred on completion of the project shall form the basis for determination of final tariff. The final tariff shall be determined based on the admitted capital expenditure actually incurred up to the date of commercial operation of the generating station and shall include initial capital spares subject to a ceiling norm of 1.5% of the original project cost as on the cutoff date."*

In accordance to Tariff Regulations, 2004, the actual expenditure incurred upto the date of commercial operation of project shall form the basis for the Capital Cost of the Project, after prudence check by the Hon'ble Commission.

Therefore, RoE should be allowed on the complete project equity i.e. 30% of capital cost of the project, including the amount of Equity deployed out of PDF. The reasons and justifications for allowances of RoE of Equity deployed out of PDF have been elaborated in petitions for kind consideration of Hon'ble Commission.

### **3.3.3 Commission's Views**

GoU vide its letter dated February 11, 2011, had advised the Commission to allow RoE on the amount contributed by GoU out of PDF. The Commission in its previous Tariff Orders had not allowed any return on equity provided by GoU through PDF for reasons spelt out in the said Orders. This issue has been addressed by the Commission adequately in subsequent Chapters.

### **3.4 Tax on Income**

#### **3.4.1 Stakeholder's Comments**

Shri Pankaj Gupta, President of Industries Association of Uttarakhand submitted that UJVN Ltd. for some strange reasons has been pleading to allow RoE post tax based on some formula derived from CERC Regulations. However, in this regard Regulation 35 of the UERC (Terms and Conditions for Determination of Tariff) Regulations 2011 is already available and, therefore, it should only be followed. Further, Regulation 35 of the UERC (Terms and Conditions for Determination of Tariff) Regulations 2011 has been extracted below:

##### ***"35. Tax on Income***

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

#### **3.4.2 Petitioner's Reply**

Petitioner has considered the rate of RoE in accordance with the Tariff Regulations 2011. Hence, there is no variation in this regard. Further, regarding income tax amount determination, in accordance with Regulation 35 of Tariff Regulations 2011-

*"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."*

UJVN Ltd. pays income tax at company level and not project level. Bifurcation of tax which is paid at company level into projects level may be a complicated process and cause dissatisfaction among beneficiaries. Also, in case the tax amount is claimed after it is paid to the tax authorities i.e. at the time of true up, this amount needs to be sourced by the Petitioner either from its own funds or through outside sources.

In case this amount is sourced from Petitioner's own reserves and surpluses then till such time it is approved by the Hon'ble Commission and reimbursed by the beneficiaries, a big amount would get stuck idle and unutilized. Hence, the funds which are meant for development of the Petitioner's hydro projects would get stuck for some time and this would impact the timely execution of the hydro projects.

In case this tax amount is sourced from outside sources then the cost of funds would need to be borne by the Petitioner which would again be a financial loss to the Petitioner.

Further, Section 61 of the Electricity Act is reproduced as under-

*The Appropriate Commission shall, subject to the provisions of this Act, specify the terms and conditions for the determination of tariff, and in doing so, shall be guided by the following, namely:-*

*(a) the principles and methodologies specified by the Central Commission for determination of the tariff applicable to generating companies and transmission licensees;*

In accordance with the above section, it is clear that the State Commission may adopt the same methodology as determined by the Central Commission. Petitioner, by giving reference of the Central Commission Regulations, has requested the Hon'ble Commission to allow income tax component in accordance with the same methodology as adopted by the Central Commission in its Tariff Regulations.

### **3.4.3 Commission's Views**

The Commission in its Regulation 27(2) of UERC Tariff Regulations, 2011 has clearly specified as follows:

*"(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.*

*Provided that in case of generation and transmission projects commissioned on or after 1st April, 2013, an additional Return of 0.5% shall be allowed if such projects are completed within the timeline as specified in Appendix - I to these Regulations."*

The Commission has, therefore, computed the Return on Equity in accordance with the provisions of Regulations as elaborated in subsequent Sections of the Order.

### **3.5 Interest on Loan Capital**

#### **3.5.1 Stakeholder's Comments**

Shri Pankaj Gupta, President of Industries Association of Uttarakhand submitted that the rate of interest as proposed on loan capital is 13.18%, which is very high. However, UERC in its earlier Order had allowed 11.31% and the same should be allowed in this tariff fixation also.

#### **3.5.2 Petitioner's Reply**

In accordance to the Regulations of the Hon'ble Commission, interest on normative debt has been considered on the value equivalent to 70% of additional capitalisation only.

As far as actual loans on operating hydro power projects are concerned, actual loan data is available for MB-II HEP. Hence, Petitioner claims that weighted average rate of interest and finance charges of MB-II hydro electric project should also be considered for interest rates on normative loan for other large hydro projects as per the Tariff Regulations, 2011 & Tariff Regulations, 2004.

#### **3.5.3 Commission's Views**

The Commission with regards to rate of interest on loan in its Regulation 28(5) of UERC Tariff Regulations, 2011 has clearly specified as follows:

*"(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:*

*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, 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 as a whole shall be considered."*

The Commission has therefore computed the Interest on Loan for the First Control Period in accordance with the provisions of Regulations as elaborated in subsequent Sections of the Order.

### **3.6 Design Energy/Actual Energy Generated**

#### **3.6.1 Stakeholder's Comment**

Shri. Pankaj Gupta, President, Industries Association of Uttarakhand submitted that while issuing its earlier orders, the Commission had taken the average of annual generation of last 15 years as projected generation for year 2004-05. Lower of this projected generation and the plant wise design energy mutually agreed between UPJVN and UPPCL was taken for the purpose of working out the primary energy rate and, therefore, Commission had fixed 3169.13 MU as approved primary energy generation for the year 2004-05.

In this regard, he further submitted that this analogy should not hold good for future years. The same was acceptable as far as sufficient data was not available and on account of UJVN Ltd. submissions that the plant were not kept in good condition and therefore the design energy could not be achieved in the previous years. He further submitted that as UJVN Ltd. is claiming that it has moved a long distance in setting right their generation stations by taking appropriate steps and therefore there is substantial improvement in availability and hence the Commission should revisit the design energy and allow the benefit of better generation to the consumers. This will also be in line with the tariff policy of Govt. of India in respect of operating norms, which says that operating norms should be at normative levels only and not at lower of normative and actual. This is essential to encourage better operating performance.

#### **3.6.2 Petitioner's Reply**

It is not so that UJVN Ltd. has decreased the Design Energy for all its Projects. In case of Chilla HEP, the Design Energy Proposed by UJVN Ltd. is higher than the Primary Energy allowed by Hon'ble UERC. UJVN Ltd has carried out studies while preparing the Business Plan for calculation of Design Energy on the basis of last few years' generation data.

For computing the Design Energy two methodologies have been considered i.e.

- (i) On the basis of average of 10 daily discharges
- (ii) The maximum generation possible from the Power Station considering that there were no machine and other outages.

UJVN Ltd. has considered Method –ii based on maximum possible generation from the HEPs for consideration of Design Energy in the Business Plan, which is based on actual generation and generation loss from the HEPs during past years. Also, this method considers turbine and generator efficiencies implicitly rather than the theoretical values of turbine and generator efficiencies. Due to very long operation period since the commissioning of Projects, the efficiencies of the Turbine and Generator have also deteriorated due to which the calculated values of Design Energy have come out.

However, it has been mentioned in the Business Plan that after completion of the RMU works of Projects, UJVN Ltd. shall approach the Commission to revise the Design Energy of Projects.

The Design Energy for Maneri Bhali Stage-II is 1566 MUs, but this Design Energy was calculated considering total installed capacity of Power Station and attainment of full barrage level of 1108m. Presently, due to restriction of reservoir level of 1104 m at Joshiyara Barrage instead of design maximum level of 1108 m, the head has reduced.

### **3.6.3 Commission's Views**

The Commission has analysed this issue of Design Energy in detail in subsequent Sections of the Order.

### **3.7 Views of State Advisory Committee**

During the State Advisory Committee meeting held on March 20, 2012, the Members made the following suggestions:

- Return on PDF should not be allowed as PDF has been financed out of money contributed by the consumers. Hence, if return and depreciation are allowed on the assets financed through PDF, it would tantamount to loading the cost on the consumers twice.
- Actual expenses claimed by the Company are found to have exceeded the expenses approved by the Commission, without any justification regarding the increase.
- UJVN Ltd. has projected Saleable Primary Energy much lower than the Saleable Primary Energy approved by the Commission in previous Orders, despite capital

expenditure towards R&M activity. This issue should be examined by the Commission in detail and Saleable Primary Energy should be approved accordingly.

- Non Consideration of Repayment by UJVN Ltd. for computing interest on Loan is unjustifiable shall have considerable impact on tariff and repayment should be considered while computing interest on Loan.
- Members opined that UJVN Ltd. is raising same issues again in its subsequent ARR and Tariff Petitions on which the Commission has already taken the decision and given its ruling in the previous Tariff Orders. Members requested the Commission to issue the suitable directions to UJVN Ltd. for not raising the issues again which have been settled by the Commission and in case UJVN Ltd. still raises those issues in its Petition, the Petition should be rejected.

### **3.7.1 Commission's View**

The Commission 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 taken decision and given its ruling in the previous Tariff Orders. In this regard, **the Commission 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, failing which, the Commission may reject the Petition upfront.**



## **4 Commission's Approach**

### **4.1 General**

It had been the approach of the Commission to detail the principles and methodology adopted by it in determining the AFC as well as tariffs for the different generating stations of the Petitioner in the previous Tariff Orders. Continuing with the past practice, the Commission, in the present Chapter has attempted to explain the principles followed by it in determining the various components of AFC as well as tariffs for different generating stations of the Petitioner for this Order on Approval of Business Plan and MYT Petition of UJVN Ltd. for the first Control Period from FY 2013-14 to FY 2015-16. Before detailing its approach, the Commission would, however, like to indicate that it has tried to detail separately, as far as possible, the scrutiny and analysis of Maneri Bhali-II Petition as Maneri Bhali-II is a new generating station and the issues linked with it are slightly different from the issues related to the old generating stations of UJVN Ltd.

### **4.2 Statutory Requirements**

Section 64 of the Act requires the generating companies and the licensees to file an application for determination of tariff under Section 62 in such manner and accompanied by such fee as may be specified through Regulations by the appropriate Commission. Section 61 of the Act further requires appropriate Commission to specify the terms and conditions for determination of tariff in accordance with the provisions of the Act. The Act also provides that while framing Regulations, the Commission shall be guided by, amongst other things, the principles & methodologies specified by the Central Commission, the National Electricity Policy and the Tariff Policy.

In the light of the above provisions of the Act, the Commission had notified the Uttarakhand Electricity Regulatory Commission (Terms & Conditions for Determination of Hydro Generation Tariff) Regulations, 2004 (hereinafter referred as UERC Tariff Regulations, 2004) and Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2011 (hereinafter referred as UERC Tariff Regulations, 2011). The UERC Tariff Regulations, 2004 were valid for tariff determination till FY 2012-13 and from April 1, 2013 onwards till March 31,

2016 UERC Tariff Regulations, 2011 shall be applicable. For the purposes of this Tariff Order, the Commission shall, therefore, be guided by the above said Regulations, subject, however to the relaxations granted by the Commission in the Tariff Orders dated December 16, 2004, read with Commission's Order dated July 12, 2006, March 14, 2007, March 18, 2008, October 21, 2009, December 30, 2009, April 05, 2010, May 10, 2011 and April 4, 2012 for various valid reasons recorded therein. The Commission proposes to continue with its approach elaborated in the earlier Tariff Orders or applicable as per the UERC Tariff Regulations, 2004 for truing up for FY 2008-09 to FY 2010-11. However, for the Control Period of FY 2013-14 to FY 2015-16, UERC Regulations, 2011 stipulates the cost plus approach with sharing of gains and losses on account of controllable and uncontrollable factors for determination of tariff. The Commission in accordance with UERC Regulations, 2011 has broadly followed the approach stipulated in UERC Tariff Regulations, 2011 for this Order on Business Plan and MYT Petition filed by UJVN Ltd. for the first Control Period from FY 2013-14 to FY 2015-16.

While nine of the total ten medium and large generating plants have been in operation for quite some time, their transfer first from Uttar Pradesh State Electricity Board (UPSEB) to Uttar Pradesh Jal Vidyut Nigam Ltd. (UPJVNL) and then from UPJVNL to the Petitioner threw up issues like capital cost of assets of these stations, Petitioner's investment in these assets, etc. Different claims and views pertaining to such issues have been considered in depth and decided by the Commission in its previous Tariff Orders. As the issues have been clearly spelt out and decided by the Commission in the previous Tariff Orders, it finds no reason to revisit the issues earlier decided, unless some new facts are now brought to its knowledge during the course of the present proceedings.

By and large, in line with the provisions of the UERC Tariff Regulations, 2004, till FY 2012-13 and the provisions of UERC Tariff Regulations, 2011 from FY 2013-14 to FY 2015-16 (i.e. first Control Period) the Commission shall be following the cost plus approach subject to specified operational norms/prudence check under this Tariff Order.

#### **4.3 True Up of past years' data**

UERC (Terms and Conditions for Truing Up of Tariff) Regulations, 2008 provides that-

*“(1) The Commission shall undertake a review of actual levels of expenses, revenues and operational parameters in a financial year vis-à-vis the approved levels in the relevant Tariff Order for that financial year either on a Petition moved by the concerned licensee/generating company or suo-moto. While doing so, the Commission after considering the reasons for these variations may permit carrying forward of financial impact of the same to the extent approved by the Commission to the following year(s). This exercise shall be called truing up exercise.*

*(2) Truing up exercise for a financial year shall normally be carried out along with Tariff determination exercise(s) taken up after the close of that financial year.*

*(3) Truing up can be done either based on provisional or audited data and can also be taken up for one or more items separately as deemed necessary by the Commission. No further true up shall normally be done after a truing up exercise based on audited data has been carried out.”*

In its present filing, the Petitioner has submitted data relating to its expenses and revenues for FY 2008-09, FY 2009-10 and FY 2010-11 for nine LHPs on the basis of the audited accounts and has, accordingly, requested the Commission to take up the truing up exercise for FY 2008-09, FY 2009-10 and FY 2010-11 on the basis of audited accounts submitted by it. Subsequently, after the public hearing UJVN Ltd. has requested for truing up of expenses and revenues for FY 2011-12 stating that since FY 2011-12 accounts have been audited, therefore, the same may also be trued up. In this regard, the Commission is of the view that since public hearings have already been conducted, therefore, truing up of FY 2011-12 cannot be undertaken by the Commission alongwith current proceedings and such request should have been made prior to public hearing so that consumers had a chance to express their views on same. The Commission has therefore not considered the request of UJVN Ltd. for carrying out the truing up of FY 2011-12 in this Order.

The Commission, with regards to the Repairs & Maintenance (R&M) Expenses, had in its Tariff Order dated October 21, 2009 directed the Petitioner as under:

*“...the Commission directs UJVNL to carry out an independent audit of all the R&M expenses for the period from FY 2001-02 onwards and submit a report within six months from the date of this Order. The Commission further directs UJVNL to have accounting of R&M expenses station-wise so that truing up of R&M expenses may be done on the basis of audit report on actual R&M expenses of revenue nature for each station.”*

The Commission again, in its Tariff Order dated May 10, 2011, directed the Petitioner to submit the audit report of R&M expenses within one month of the date of issuance of the said Order. The Petitioner, in compliance of the Commission's directions, submitted the report and its summary sheet to the Commission.

On examination of the submissions, the Commission observed that there were instances of some wrong bookings done for the said years. It was further observed that the Petitioner had included some of the expenses of capital nature under R&M expenses forming considerable part of the total R&M expenses. The Petitioner had also considered minor expenditures on furniture, etc. as capital nature while major expenditures have been treated as revenue expenditure.

The Commission, in its Order dated April 4, 2012, was of the view that the R&M Expenses of UJVN Ltd. has to be scrutinised properly and would require detailed examination. In view of the above, the Commission did not undertake the truing of FY 2008-09 and FY 2009-10 in its tariff order dated April 4, 2012 and decided to appoint an Expert Consultant to examine the R&M expenses incurred during FY 2008-09 and FY 2009-10 and based on its report, the truing up for past years shall be carried out.

The Commission appointed an Expert Consultant on 14.05.2012 to examine the R&M expenses of UJVN Ltd. The Commission vide its letter dated 28.06.2012 informed UJVN Ltd. regarding appointment of the consultant and sought plant wise and year wise details of R&M expenses for the 9 LHPs from FY 2008-09 to 2010-11 alongwith copies of bills, vouchers, approvals and sanctions from the competent authority for such works latest by 10.07.2012.

In response, the Petitioner company vide its letter dated 28.07.2012 sought time extension upto 30.09.2012 on the ground that the required information/documents were being collected from various accounting centres located in far-flung areas and the same would require more time. The Commission vide its letter dated 08.08.2012 informed the Petitioner that any delay in filing the desired information by it could delay the process of validation of the expenses for prudence by the Commission and in the absence of the relevant information, the Commission will proceed to decide the matter in the manner deemed appropriate by it. However, the time extension sought by the Petitioner was allowed by the Commission. A meeting was held with the officers of the petitioner company on 14.08.2012 wherein the officers of UJVN Ltd. were informed that in the absence of

relevant information the process of validation of expenses would be delayed due to which it would not be possible to carry out the truing up exercise for the relevant financial years. In the meeting it was agreed that all the vouchers alongwith supporting documents for expenses exceeding Rs. 1 lakh would be provided for R&M expenses incurred during FY 2008-09 to 2010-11 by 30.09.2012.

The Petitioner submitted certain details for few power stations on 11.09.2012 and for remaining stations on 27.09.2012. However, certain deficiencies were observed in the submissions made by the Petitioner which were informed to it vide Commission's letter dated 05.10.2012 asking it to remove the deficiencies latest by 15.10.2012. However, on non-receipt of any reply in this regard from the Petitioner, a reminder letter was issued by the Commission on 02.11.2012 asking the Petitioner to submit the information latest by 09.11.2012. The Petitioner submitted the reply on 03.11.2012

On examination of the information submitted by the Petitioner, few additional deficiencies were observed which were intimated to the Petitioner vide Commission's letter dated 05.12.2012 and the Petitioner was asked to submit the information latest by 12.12.2012. The information desired by the Commission was submitted by the field offices of the Petitioner company in bits & pieces. However, the expenditure details of building and major civil works of MB-I LHP for FY 2008-09 to FY 2010-11 and of Ramganga LHP for FY 2010-11 were not furnished which was informed to the Petitioner company by the Commission vide its letter dated 04.02.2013.

The consultant submitted his interim findings to the Commission on 05.04.2013. On examination of the findings, it was observed that the R&M expenses claimed for truing up of FY 2008-09 to FY 2010-11 were at significant variance compared to the amount of the vouchers and other relevant records submitted by UJVN Ltd. which is detailed in Chapter-6 of this Order. The same was informed to the Petitioner vide Commission's letter dated 11.04.2013 and the Petitioner was required to provide either the details of the balance expenses or to certify that the balance expense were less than Rs. 1 lakh failing which it would be construed that only the expenses for which details have been submitted are the actual expenses of the plant for the respective financial year. The Petitioner submitted its reply vide its letter no. 2586/MD UJVNL/U-6 dated 26.04.2013 in which it has submitted some of the details which are yet to be examined by the Expert Consultant.

However, in the absence of complete & timely information provided, despite numerous opportunities provided to the Petitioner company, the Commission at present has decided not to carry out the truing up of R&M expense for FY 2008-09 to FY 2010-11 in this proceeding and accordingly the Commission has considered the R&M expenses as had been approved in its previous Orders. However, it is brought to the notice of the Petitioner that the exercise of examination of R&M expenses is not closed by the Commission as the Expert Consultant in its interim report has submitted that based on the details submitted by the Petitioner it has observed that certain expenses of capital nature have been booked under R&M expenses which has been discussed in Chapter 6 of this Order. The Commission would take a final view on the same when complete information is submitted by the Petitioner in this regard. **The Petitioner is directed to submit the details as sought by the Commission within one month from the date of issue of this Order.** The impact of true up on this account and related impact on the capital related expenses based on the final Report of the Expert Consultant will be carried out by the Commission during the final truing up of R&M expenses in the first APR petition for first Control Period.

Further, the Petitioner in its Petition has claimed station wise additional capitalisation for FY 2008-09 to FY 2010-11 stating that these additional capitalisation were required in order to ensure efficiency and safety as well as ensuring continuous operation of the plants. In this regards, the Petitioner has further submitted that it has claimed additional capitalisation under Regulation 16(2) of UERC Tariff Regulations, 2004 which explicitly permit additional works/service, which may become necessary for efficient and successful operation of the plant.

The Commission has gone through the submissions of the Petitioner and observed that in FY 2010-11 there was substantial increase in the amount of additional capitalisation claimed for Chilla and Maneri Bhali-I generating stations. In this regard, Regulation 16(2) of UERC Tariff Regulations, 2004 stipulates as follows:

*“Subject to the provision of sub-regulation (s) of this regulation, the capital expenditure of following nature actually incurred after the cut-off date may be admitted by the Commission subject to the prudence check:*

- (i) *Deferred liabilities relating to works/services within the original scope of work.*
- (ii) *Liabilities to meet award of arbitration or in compliance of the order or decree of a court,*

- (iii) *On account of change in law, and*
- (iv) *Any additional works/service which has become necessary for efficient and successful operation of plant but not included in the original capital cost."*

The Commission is of the view that any additional capitalisation after cut-off date can be permitted only in case it is substantiated that such expenses have been incurred under one of the above provisions of Regulation 16(2) of the UERC Tariff Regulations, 2004. The Petitioner has claimed additional capitalisation of Rs. 18.58 Crore and Rs. 20.33 Crore for Chilla and MB-I generating stations respectively in FY 2010-11 which is a substantial amount considering the amount claimed as additional capitalisation in previous years. The Petitioner in its Petition has not submitted the details of additional capitalisation, although the Petitioner has submitted that it had incurred the expenses as they were necessary for efficient and successful operation of plant but not included in the original capital cost.

The Commission is, therefore, of the view that in the absence of complete details of expenses incurred and works/services procured therefrom out of additional capitalisation indicated for FY 2008-09 to FY 2010-11 alongwith the justification in view of the Tariff Regulations, 2004, prudence of such expenditure cannot be examined and hence, final truing up of additional capitalisation for these years cannot be carried out. This is all the more necessary considering the amount of capital expenditure proposed to be incurred by the Petitioner under RMU measures for these 9 old generating stations. However, for the current proceedings the Commission is provisionally accepting the additional capitalisation as submitted by the Petitioner for FY 2008-09 to FY 2010-11. The Commission on receipt of satisfactory information shall carry out the final truing up of additional capitalisation for FY 2008-09 to FY 2010-11 alongwith such other additions to additional capitalisation as may be determined by the Expert Consultant on scrutiny of R&M expenses as the expenses of capital nature booked under repairs and maintenance expenses. **The Commission, therefore, directs UJVN Ltd. to submit the station wise details of additional capitalisation for FY 2008-09 to FY 2010-11 giving details of works/services procured, their validity for inclusion in additional capitalisation as per provisions in regulation and amount spent there on for Commission's scrutiny within one month from the date of issue of this Order.**

As regard Maneri Bhali-II generating station, the Petitioner has requested the Commission for truing up of expenses from FY 2007-08 to FY 2010-11 based on the audited accounts. In this context, it would be relevant to mention that in its Order dated December 30, 2009, the Commission had directed the Petitioner to get an independent audit of the capital cost of the MB-II project done within six months of the issuance of the Tariff Order:

*"25... the Commission directs the Petitioner to get an independent audit of the capital cost of the project done within 6 months of the issue of this Order. The work of assessing and estimating the capital cost may be awarded to any independent audit firm by proper tendering process and the scope of work for this assignment should include the scope as laid down...."*

The Commission had further stated that:

*"29. The Commission had already advanced the reasons for considering the capital cost including IDC of Rs. 1741.72 Crore in its Order dated 28.11.2008. Thus, based on the above discussions there seems no reason material enough for the Commission to alter the capital cost already approved by the Commission till the Board of UJVNL approves the capital cost of the project and the report of independent audit is available before the Commission. The Commission would then scrutinize the Capital Cost and reasons for any increase in the same for prudence check. Without such a check, the cost and financing of the incremental cost arising due to cost/time over runs cannot be passed on to consumers in tariff.*

*30. Thus, based on the above, the total capital cost as on CoD approved by the Commission is Rs. 1,741.72 Crore against the Petitioner's claim of Rs. 1,950.27 Crore. As the project cost still remains provisional, the tariff determined now cannot be final tariff and is again provisional subject to the adjustments on final determination based on finally approved capital cost."*

The Petitioner through its letter number 374/DGM (Comm.)/UJVN Ltd. dated December 04, 2010 submitted the independent audit report with respect to Capital Cost of MB-II Project. After examination of the independent audit report submitted by the Petitioner, the Commission in its Order dated May 10, 2011 observed that the audit report was not complete as it did not provide the reasons for cost and time over-runs along with the quantification of impact of such over-runs on Capital Cost with variance analysis. Further, the report did not classify the factors leading to cost and time over-runs into controllable and un-controllable factors as per the scope of work.



The Commission in its Order dated May 10, 2011 stated as follows:

*"Since, the audit report does not provide complete details as per the scope of work approved by the Commission and as per Petitioner's own submissions, some of the Capital Works related to MB-II project are still to be completed, the Commission is unable to conduct a thorough prudence check of the Capital cost of the Project. The Commission is further of the view that unless proper prudence check of the Capital Cost has been carried out, the increase in cost due to cost and time over runs cannot be passed on to the beneficiaries in the tariffs. Accordingly, for thorough prudence check of the Capital Cost of MB-II project, the Commission will constitute a High Level Expert Committee to examine in details the reasons for time and cost over-run, impact of time-over run on Capital Cost and for proper identification of various factors leading to time and cost over-runs into controllable and un-controllable factors. The Commission will take a final view with respect to actual Capital Cost and Means of Finance for MB-II Project after submission of report by the Committee. The Commission also directs the Petitioner to extend all possible help to the members of the Committee in ascertaining the final project cost of the MB-II project."*

The Commission vide its letter No. 549/UERC/6/TF/11 dated 28.07.2011 directed the Petitioner to constitute a Committee to comply with the above referred directives of the Commission. The Petitioner, in its Petition for determination of Tariff for FY 2012-13, submitted that the desired Committee has been constituted by the Petitioner and the Committee is examining, in details, the reasons for time and cost over-run, impact of time over run on Capital Cost and for proper identification of various factors leading to time and cost over-runs into controllable and un-controllable factors. The Petitioner further submitted that the work entrusted to the Committee is in final stages and its report shall be submitted shortly. However the report had not been finalised and submitted by the Petitioner till the disposal of the Tariff Order for FY 2012-13.

The Commission in the Order dated April 4, 2012 stated as follows:

*"...*

*The Commission re-iterates its views that unless proper prudence check of the Capital Cost has been carried out, the increase in cost due to cost and time over-runs cannot be passed on to the beneficiaries in the tariffs. The Commission will take a final view with respect to actual completed Capital Cost of the Project and Means of Finance for MB-II Project along with the cost submitted in the*

*Supplementary Petition after receipt of the detailed report of the Committee constituted by the Petitioner. Hence, for the purpose of tariff determination for FY 2012-13, the Commission has taken the capital cost as approved by it in the Order dated May 10, 2011. The Commission directs the Petitioner to submit the report of the Expert Committee based on views expressed by the Commission in its earlier Tariff Order dated May 10, 2011 to ascertain the Capital Cost of MB-II Project, within 3 months from the date of this Order.”*

The Petitioner in its current Petition has submitted that it has already submitted the High-Level Committee Report before the Commission vide its letter number 3487/MD/UJVNL/U-6 dated June 25, 2012. As regards the various factors responsible for increase in original capital cost of Maneri Bhali-II, the report of High-level Committee states as under:

“

*... On examination of the Books of Account, relevant records, correspondences exchanged and various note issued by Competent Authorities from time to time and report dated September 13, 2010 of independent Auditor M/s Sumit Sabharwal and Associates Chartered Accountants, the Committee observed as follows:*

- 1. That delay on completion of the works were mainly due to adverse geological conditions unforeseen events and various technological changes that took place with efflux of time during the concurrency of the project.*
- 2. That no cost overrun resulted due to delay in completion of the works. However, due to time overrun the interest during the construction period (IDC) increase by Rs. 105.76 Crore along with other financial expenses mainly withdrawal of AG & SP subsidy and Guarantee fee.*

....

*It is evident from the bar charts that in certain periods, delays attributable to different reasons, whether controllable or uncontrollable were occurring concurrently. However, it is also clear that the delay is on the critical path were uncontrollable, which are entirely attributable to the reasons as per geology and other extraneous causes such as extra time required to restart the underground works after 10 years, collapses, huge quantity of slush due to seepage etc. and not attributable to the Contractors and Irrigation Department”*

The Commission after going through the report of High-level Committee, asked additional clarifications on deficiencies observed through its letter no. UERC/6/TF/12-13/2012/606 dated July 11, 2012. Upon, non receipt of such information the Commission sent a reminder through its letter no. UERC/6/TF-160/11-12/2012/1143 dated November 27, 2012 asking UJVN Ltd. to submit the replies within 10 days from receipt of the letter. UJVN Ltd. till date has not submitted its reply to the queries sent on the deficiencies observed regarding Capital Cost of Maneri Bhali-II Project. The Commission is of the view that till the completed cost is approved by the Commission, it may not be appropriate to revise the Capital Cost of Maneri Bhali-II Project for the purpose of determination of tariff in this Order. Therefore, the Commission has not revised the Capital Cost for Maneri Bhali-II and for the purpose of tariff determination for first Control Period from FY 2013-14 to FY 2015-16, the Commission has considered the capital cost as approved by it in its Order dated April 4, 2012. **Further, the Commission directs UJVN Ltd. to submit its replies to the above mentioned letter within one month from the date of issuance of this Order.** The Commission after analysing the details submitted by UJVN Ltd. will approve the Capital Cost of Maneri Bhali-II separately and consider the impact of same while carrying out the truing up as a part of Annual Performance Review.

#### **4.4 Disposal of Petitions through single order**

In the previous Tariff Orders, the Commission had been directing the Petitioner to get the transfer scheme finalized and also to maintain separate accounts for all its generating stations so that tariffs for each of the generating stations could be determined independently for each station. However, due to non-availability of separate historical data related to opening values of gross fixed assets etc., (on account of non-finalization of transfer scheme), for each of the generating stations and structure inherited by it (detailed in the previous Tariff Orders), wherein certain functions for more than one generating stations are being performed by one single office/headquarter, the Petitioner has been requesting the Commission to allow it to apportion the common expenses based on certain assumptions. Since, no immediate solution to the above problem is available, the Commission had been, for practical considerations, allowing the Petitioner to allocate the common expenses in certain proportions. The above practice, however, requires the Petitions to be dealt with simultaneously and for better clarity to be disposed of through single Order.

Further, as detailed in Chapter 2 as the Petitioner has filed both the Business Plan Petition and the MYT Petition simultaneously and to ensure the timely tariff determination, the Commission has taken up processing of the Business Plan Petition and MYT Petitions simultaneously and, accordingly, the Commission has decided to club the Petitions for approval of Business Plan and Multi Year Petitions. The Commission is therefore deciding the Petitions for approval of Business Plan and Multi Year Tariff Petitions for the first Control Period for the 10 LHPs, through a single Order.

#### **4.5 Multi Year Tariff Framework principles**

UERC Tariff Regulations, 2011 specifies as follows:

##### ***“5. Multi-year Framework***

*The Commission shall adopt multiyear tariff framework for approval of ARR and expected revenue from tariffs and charges for the control period. The multiyear tariff framework shall be based on the following: -*

- a) Business plan submitted by the applicant for the entire control period for the approval of the Commission prior to the beginning of the control period;*
- b) Applicant's forecast of expected ARR for each year of the control period, based on reasonable assumptions and financial & operational principles/parameters laid down under these Regulations submitted alongwith the MYT petition for determination of Aggregate Revenue Requirement and Tariffs for first year of the control period;*
- c) Trajectory for specific parameters as may be stipulated by the Commission based on submissions made by the Licensee, actual performance data of the Applicants and performance achieved by similarly placed utilities;*
- d) Annual review of performance shall be conducted vis-à-vis the approved forecast and categorization of variations in performance into controllable factors and uncontrollable factors;*

*e) Sharing of excess profit or loss due to controllable and uncontrollable factors as per provisions of these Regulations.*

.....

### **8. Determination of Baseline**

*The baseline values (operating and cost parameters) for the base year of the control period shall be determined by the Commission based on historical data, latest audited accounts, estimates for the relevant year and prudence check as may be applied by the Commission:*

*Provided that in case of substantial difference between the estimates earlier provided / considered for determination of baseline values and the actual audited accounts, the Commission may re-determine the baseline values for the base year suo-moto or on an application filed by the Applicant."*

Petitions for approval of the Business Plan and Multi Year Tariff for the first Control Period from FY 2013-14 to FY 2015-16 are being decided in accordance with the above provisions of the regulation.

### **4.6 Business Plan for the first Control Period**

Regulation 9 and Regulation 10 of UERC Tariff Regulations, 2011 in this regard specifies as follows:

*"9. Business Plan*

*...*

*a) The Business Plan for the Generating Company shall be for the entire control period and shall, interalia, contain-*

*(i) Capital investment plan, which shall include details of the investments planned by the Generating Company for existing stations, yearly phasing of capital expenditure alongwith the source of funding, financing plan and corresponding capitalisation schedule. This plan shall be commensurate with R&M schemes and proposed efficiency improvements for various plants of the company.*

(ii) *The capital investment plan shall show separately, on-going projects that will spill over into the years under review, and new projects (along with justification) that will commence in the years under review but may be completed within or beyond the tariff period.*

(iii) *The Generating Company shall submit plant-wise details of the capital structure and cost of financing (interest on debt and return on equity), after considering the existing market conditions, terms of the existing loan agreements, risks associated in generation business and creditworthiness;*

(iv) *Details related to major shut down of machines, if any.*

(v) *Trajectory of performance parameters*

#### **10. Specific Trajectory for Certain Variables**

(1) *The Commission shall stipulate a trajectory for certain variables having regard to the past performance:*

*Provided that the variables for which a trajectory shall be stipulated, shall include but not limited to,*

...

a) *In case of Generating Stations:*

*Generating station's availability, station heat rate, secondary oil consumption, auxiliary consumption, transit losses, etc.*

...

*Provided further that this trajectory should provide for sharing of gains and losses with the consumers on account of superior and inferior performance as against the targets defined;*

...

(2) *The trajectory stipulated by the Commission in accordance with these Regulations shall be incorporated by the applicant in its MYT Petition.*

In accordance with the provisions of above Regulations and the submissions of the Petitioner, the Commission has analysed the Capital Expenditure Plan, Capitalisation Plan and Specific Trajectory for Certain Variables for the first Control Period in the approval of Business Plan of the Petitioner as detailed in Chapter 5 of this Order.

#### 4.7 Multi Year Tariff for the first Control Period

Regulation 11 of UERC Tariff Regulations, 2011 specifies as follows:

*"11. MYT Petition for the Control Period*

*(1) The applicant shall submit under affidavit and as per the UERC (Conduct of Business) Regulations, 2004, the forecast of Aggregate Revenue Requirement and expected revenue from tariff for each year of the Control Period, accompanied by fees applicable, latest by 30th November of the year previous to the start of the Control Period in the format prescribed by the Commission.*

*(2) Forecast of Aggregate Revenue Requirement for each of the financial year of the Control Period*

*a) For projecting different components of Aggregate Revenue Requirement for each financial year of the Control Period Applicant shall develop a mathematical model. For this purpose applicant may utilize suitable macro-economic variables, market indexes, past year's growth trends etc. Applicant shall further submit a soft copy of the above model with all the formulas and linkages along with its MYT petition and petition for Annual Performance Review and Tariff determination.*

...

*(3) Forecast of expected revenue from tariff and charges*

*a) The applicant shall develop mathematical model for projecting the expected revenue from tariff and charges based on the following:*

*(i) In the case of a Generating Company, based on prevailing generation tariffs as on the date of making the application and estimates of capacity allocated to Distribution Licensees and Open Access Customers and expected energy generation for each financial year of the Control Period;*

*(4) After examining the application, the Commission shall either-*

*a) Pass an order approving the forecast of Aggregate Revenue Requirement and expected revenue from tariff and charges for the Control Period, subject to such modifications and conditions as it may specify in the said Order; or*

...

*(5) In its MYT Order, the Commission shall specify the variables comprised in the Aggregate Revenue Requirement and expected revenue from tariff and charges of the applicant that shall be reviewed by the Commission as part of the Annual Performance Review;*

*Provided that such variables shall be limited to the major items of cost and revenue forecast of the applicant that in the Commission's opinion could have a material impact on the cost of supply of electricity to consumers in the State over the Control Period: UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011 Page 21 of 104*

*Provided further that the variables, as may be stipulated by the Commission under Regulations below, shall form part of the Annual Performance Review, unless exempted by the Commission from such review in its Order."*

In accordance with the provisions of above Regulations, the Commission has decided the forecasted Aggregate Revenue Requirement and expected revenue from Tariff and Charges for the first Control Period in the approval of Multi Year Tariff Petition of the Petitioner. The Commission's Analysis for approval of Multi Year Tariff of the Petitioner for the first Control Period has been detailed in Chapter 6 of this Order. The approach adopted by the Commission on some of the key issues while approving the Business Plan and Tariff for the first Control Period is summarised below:

#### **4.8 Capitalisation of new assets**

As regard the Renovation & Modernisation, the UERC Tariff Regulations, 2011 specified as follows:

##### *"25. Renovation and Modernisation*

*(1) The generating company or the transmission company, as the case may be, for meeting the expenditure on renovation and modernization (R&M) for the purpose of extension of life beyond the useful life of the generating station or a unit thereof or the transmission system, shall make an application before the Commission for approval of the proposal with a Detailed Project Report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component, if any, record of consultation with beneficiaries*



*and any other information considered to be relevant by the generating company or the transmission company.”*

The Petitioner in its Business Plan Petition has proposed the capital expenditure for the Renovation Modernisation and Up-rating (RMU) works of its existing hydro projects. The Commission at this stage has noted the submission of the Petitioner regarding the proposed RMU works. The Commission will take up approval of the capital expenditure for the Renovation Modernisation and Up-rating (RMU) works of existing hydro projects based on the Detailed Project Report and other information submitted by UJVN Ltd., in accordance with the provisions of UERC Tariff Regulations, 2011.

#### **4.9 Interest and finance charges**

Prior to MYT Control Period, the Commission has been computing the interest expenses in accordance with the Tariff Regulations, 2004. The Commission in view of the same had been allowing the interest based on the approved and actual interest rate and loan repayment schedule respectively for the normative and actual loans. The Commission while computing the interest expenses for the purpose of Truing-up for FY 2008-09 to FY 2010-11 has followed the same approach as followed by it in its previous Orders.

As regards the interest expenses for the first Control Period i.e. from FY 2013-14 to FY 2015-16, Regulation 28 of the UERC Tariff Regulations, 2011 specifies as follows:

*“(1) The loans arrived at in the manner indicated in Regulation 22 shall be considered as gross normative loan for calculation of interest on loan.*

*(2) The normative loan outstanding as on 1.4.2013 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2013 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 at the beginning of each year applicable to the project:*

*.....*

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

*.....”*

In accordance with the above Regulations, the Commission while computing the interest expenses for the first Control Period has considered the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year and has considered repayment equal to the depreciation allowed for the year.

#### **4.10 Interest on Working Capital**

Regulation 34(1) of UERC Tariff Regulations, 2011 specifies the methodology for computing the Interest on Working Capital. For reference the above mentioned Regulation has been extracted as below:

*“34. Interest on Working Capital*

*(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.”*

The Commission while determining the tariff for the first Control Period has considered Interest on Working Capital for each year of the first Control Period from FY 2013-14 to FY 2015-16 in accordance with the provisions of above Regulations.

#### 4.11 Depreciation

For period prior to MYT Control Period, the Commission has been considering the claims of depreciation and advance against depreciation in accordance with the Tariff Regulations, 2004. Regulation 23 of the Tariff Regulations, 2004, provides that depreciation shall be allowed only up to 90% of the asset cost. The Commission is, accordingly, providing depreciation on the opening GFA for Maneri Bhali-I, Maneri Bhali-II, Khodri and Chilla generating stations and is not providing depreciation on opening GFA for Khatima, Kulhal, Dhakrani, Dhalipur, Ramganga and Chibro generating stations as the accumulated depreciation till the start of the respective financial year has already reached 90% of the opening GFA. However, in addition to depreciation on opening GFA of the above referred four plants, the Commission has also allowed depreciation on approved additional capitalization for all the plants.

As regards the depreciation for the first Control Period i.e. from FY 2013-14 to FY 2015-16, the UERC Tariff Regulations, 2011 specifies as follows:

*"29. Depreciation*

*...*

*(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.*

*...*

*(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."*

The Commission for the purpose of tariff determination for the first Control Period has computed the depreciation in accordance with the above provision of the Regulations.

As regard depreciation for MB-II for first Control Period, the Commission has considered the depreciation rates as specified in UERC Tariff Regulations, 2011. Further, as the UERC Tariff Regulations, 2011 does not provide for Advance Against Depreciation (AAD), the Commission while computing the depreciation for first Control Period has not allowed AAD.

#### **4.12 Return on Equity**

As regards the RoE on opening GFA, the Commission, in its Tariff Order dated March 18, 2008 stipulated as under:

*"Further, with regard to equity corresponding to opening GFA of UJVNL, GoU vide its letter No. 70/AS(E)/I/2008-04(3)/22/08 dated March 7, 2008 addressed to the Commission has recommended that RoE to UJVNL may be awarded/allowed on the equity of Rs 151.19 Crore being 30% of Gross Fixed Assets of Rs 503.96 Crore. It has also been mentioned that a formal notification in this regard will be issued later. This recommendation is as per decision taken in the meeting held between Government, UJVNL and the Commission on February 01, 2008 in the Commission's office, where it was also agreed that the Government would reduce the cess to absorb the resulting impact of this allowance.*

*As the recommendation of GoU is in accordance with the Paras 24 and 26 of above referred Order of the Hon'ble ATE, the Commission in the present exercise has considered RoE on the equity of Rs 151.19 Crore being 30% of GFA of Rs 503.96 Crore as assessed by the Commission. The allowance is, however, provisional subject to adjustment as and when Final Transfer Scheme is notified. The Commission has also provisionally considered impact of 10 paisa/unit towards allowing return on this equity and tax thereon to be absorbed in cess applicable for purchase of power by UPCL from these stations, in anticipation of issuance of notification in this regard by the Government."*

Accordingly, for the purpose of computing RoE the Commission has considered the opening equity of Rs. 151.19 Crore as considered in its Tariff Order dated March 18, 2008. In addition, the Commission has also allowed the RoE on the equity portion of the additional capitalisation as incurred by the Petitioner on the existing generating stations, considering a normative debt-equity of 70:30, where no loan was taken to fund the additional capitalisation and the funding of the same has been done through the internal resources of the Petitioner and on actual basis in other cases subject to a cap of 30% on the amount of equity as specified in the Tariff Regulations. Further, the Commission for the purpose of Truing up has computed the RoE at the rate of 14% in accordance with UERC Tariff Regulations, 2004 and 15.50% for the tariff determination for the first Control Period from FY 2013-14 to FY 2015-16 in accordance with UERC Tariff Regulations, 2011.

For approving the RoE for MB-II generating station, the Commission has considered the opening equity as approved in its Tariff Order dated April 4, 2012 for determination of tariff for MB-II for first Control Period from FY 2013-14 to FY 2015-16. However, the Commission has not allowed return on equity invested out of Power Development Fund (PDF). The detailed reasoning for not allowing RoE on funds invested out of PDF is elaborated in subsection B of Section 6.1.2.5.

#### **4.13 Operation & Maintenance Expenses**

It has been the philosophy of the Commission to allow all genuine O&M expenses as they are required for maintaining the plants in healthy condition. The Commission has, accordingly, been considerate all through in allowing the Petitioner, O&M expenses by resetting the base year and reviewing and revising the escalation rates.

In order to capture the impact of Sixth Pay Commission's recommendations, the Commission in its Tariff Orders dated October 21, 2009, April 05, 2010, May 10, 2011 and April 4, 2012 had further relaxed the norm and approved the O&M expenses separately for Employee, A&G and R&M expenses, after the prudence check.

During the proceeding of the Tariff Order for FY 2012-13 dated April 4, 2012 the Commission observed that the Petitioner had included some of the expenses of capital nature under R&M expenses forming considerable part of the total R&M expenses. The Petitioner had also considered minor expenditures on furniture, etc. as capital nature while major expenditures have been treated as revenue expenditure.

As detailed earlier the Expert Consultant has not submitted its final report due to non-submission of required information by UJVN Ltd., therefore at this stage it would not be appropriate to carry out the truing up of R&M expenses for FY 2008-09 to FY 2010-11. Accordingly, the Commission in this Order has considered the R&M expenses as had been approved by the Commission in its previous orders for respective years.

UJVN Ltd., in its Petition, while calculating the O&M expenses for first Control Period from FY 2013-14 to FY 2015-16 has considered the audited/actual data for O&M expenses for the past four years from FY 2007-08 to FY 2010-11 in order to arrive at O&M expenses for the base year FY 2011-12 and for the first Control Period has escalated the same at the CAGR of previous four years from FY 2007-08 to FY 2010-11.

As regard Operation and Maintenance Expenses for the first Control Period, Regulation 52 of UERC Tariff Regulations, 2011 is specified as below:

*"52. ...*

*(1) Operation and Maintenance (O&M) expenses shall comprise of the following:-*

*(b) salaries, wages, pension contribution and other employee costs;*

*(c) administrative and general expenses including insurance charges if any;*

*(d) repairs and maintenance expenses;*

*(2) For Generating Stations in operation for more than five years in 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.*

*(3) For Generating Stations in operation for less than 5 years in base year:*

*In case of the hydro electric generating stations, which have not been in existence for a period of five years in the base year of FY 2011-12, the operation and maintenance expenses for the base year of FY 2011-12 shall be fixed at 1.5% 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 sub regulation (6) below.*

...

(5) Post, determination of base O&M Expenses in Regulation 52(2) above, the O&M expenses for the  $n$ th year and also for the year immediately preceding the Control Period, i.e. 2012-13 shall be approved based on the formula given below:-

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

Where –

- $O\&M_n$  – Operation and Maintenance expenses for the  $n$ th year;
- $EMP_n$  – Employee Costs for the  $n$ th year;
- $R\&M_n$  – Repair and Maintenance Costs for the  $n$ th year;
- $A\&G_n$  – Administrative and General Costs for the  $n$ th year;

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

$$EMP_n = (EMP_{n-1}) \times (1 + G_n) \times (CPI_{inflation})$$

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

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

Where –

- $EMP_{n-1}$  – 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;
- $CPI_{inflation}$  – 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 (WPI) for immediately preceding three years;
- *GFA<sub>n-1</sub>* – Gross Fixed Asset of the Generating Company for the n-1<sup>th</sup> year;
- *G<sub>n</sub>* is a growth factor for the n<sup>th</sup> year. Value of *G<sub>n</sub>* shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on Generating Company's filings, benchmarking and any other factor that the Commission feels appropriate

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

*(6) O&M expenses determined in sub-Regulation (3) & (4) above, shall be escalated for subsequent years to arrive at the O&M expenses for the control period by applying the Escalation factor (EF<sub>k</sub>) for a particular year (K<sup>th</sup> year) which shall be calculated using the following formula:*

$$EF_k = 0.55 \times WPIInflation + 0.45 \times CPIInflation \dots$$

The Commission for the purpose of the tariff determination for the first Control Period has computed the O&M expenses from FY 2013-14 to FY 2015-16 in accordance with the provisions of above Regulations as elaborated in Chapter 6 of the Order.

As regards O&M expenses for MB-II generating station, the Commission has considered the allowable O&M expenses for the base year, i.e. FY 2007-08 as 1.5% of the Capital Cost in accordance with the Tariff Regulations and the same has been escalated considering the escalation rates determined in accordance with Regulation 52 (3) of UERC Tariff Regulations, 2011 for approving the O&M expenses for first Control Period.

However, all along, the Commission has been allowing O&M expenses genuinely required by the utility for the efficient operation of the plants in the sustainable manner. In the Tariff Order dated 21st October 2009, the Commission had directed UJVN Ltd. to conduct a performance benchmarking study. The relevant extract from this Order is reproduced below:

*“For further improvement in efficiency of these plants, the Petitioner is directed to conduct a benchmarking study of its plants with other efficient utilities like NHPC, to see further scope of improvement in technical losses and manpower rationalisation. Based on this study the Petitioner*



*should submit a report on its action plan for implementation of efficiency improvement and manpower rationalisation measures giving target dates for completion of each milestone of proposed plan within 6 months of issuance of this Order."*

The Petitioner, during the Tariff determination process for FY 2012-13 had submitted that the benchmarking studies of four power plants namely Chilla, Pathri, Mohammadpur and Khatima in comparison to Tanakpur power plant of NHPC. The Commission, in its Order dated April 4, 2012 was of the view that comparison of performance parameters including per unit operating costs with only one station of NHPC cannot be considered as a Benchmarking study in true sense and directed the Petitioner to complete the benchmarking study for all its stations and submit the report to the Commission.

The Petitioner, in its current filling submitted that it has already submitted benchmarking report for its five stations and benchmarking report for other stations is in progress and shall submit the same to the Commission.

**The Commission so far has not received the complete benchmarking report for all the stations and therefore directs UJVN Ltd. to complete the benchmarking study for all its stations considering few more stations and submit the report to the Commission within three months from the date of issue of this Order.**

## 5 Commission's Analysis, Scrutiny and Conclusions on Business Plan

Regulation 9 and Regulation 10 of UERC Tariff Regulations, 2011 in this regard stipulates as follows:

*"9. Business Plan*

*...*

*a) The Business Plan for the Generating Company shall be for the entire control period and shall, interalia, contain-*

*(i) Capital investment plan, which shall include details of the investments planned by the Generating Company for existing stations, yearly phasing of capital expenditure alongwith the source of funding, financing plan and corresponding capitalisation schedule. This plan shall be commensurate with R&M schemes and proposed efficiency improvements for various plants of the company.*

*(ii) The capital investment plan shall show separately, on-going projects that will spill over into the years under review, and new projects (along with justification) that will commence in the years under review but may be completed within or beyond the tariff period.*

*(iii) The Generating Company shall submit plant-wise details of the capital structure and cost of financing (interest on debt and return on equity), after considering the existing market conditions, terms of the existing loan agreements, risks associated in generation business and creditworthiness;*

*(iv) Details related to major shut down of machines, if any.*

*(v) Trajectory of performance parameters*

### **10. Specific Trajectory for Certain Variables**

*(1) The Commission shall stipulate a trajectory for certain variables having regard to the past performance:*

*Provided that the variables for which a trajectory shall be stipulated, shall include but not limited to,*

*...*

*b) In case of Generating Stations:*

*Generating station's availability, station heat rate, secondary oil consumption, auxiliary consumption, transit losses, etc.*

*...*

*Provided further that this trajectory should provide for sharing of gains and losses with the consumers on account of superior and inferior performance as against the targets defined;*

*...*

*(2) The trajectory stipulated by the Commission in accordance with these Regulations shall be incorporated by the applicant in its MYT Petition.*

In accordance with the provisions of above Regulations and the submissions of the Petitioner, the Commission has examined the Business Plan for the first Control Period from FY 2013-14 to FY 2015-16. The Commission's analysis in the approval of Business Plan of the Petitioner for the first Control Period has been detailed below.

## **5.1 Capital Investment Plan**

### **5.1.1 Capital Expenditure and Capitalisation Plan for upcoming projects**

UJVN Ltd. in its Business Plan Petition has submitted its Capital Investment Plan which includes the yearly Capital Expenditure and Capitalisation Plan for the first Control Period of FY 2013-14 to FY 2015-16. The same has been reproduced in Chapter 2 of this Tariff Order. As regard the Capital expenditure and capitalisation plan for upcoming Units, the Commission has noted the submissions of UJVN Ltd. The Commission appreciates that UJVN Ltd. is planning for capacity addition of around 3276 MW, which will help in catering the growing energy requirement of the State. The Commission expects UJVN Ltd. to stick to its capacity addition plan as submitted in its Business Plan Petition and endeavour to prepare commissioning of these plans. However, the Commission at this stage while approving the Business Plan for the first Control Period has not

scrutinised the capital expenditure and capitalisation estimated for the upcoming new Stations. The Commission shall look into such details for the upcoming stations upon submission of separate proposal filed by UJVN Ltd. for each station. The Commission based on the separate proposal filed by the Petitioner for each new generating station shall approve the capital cost.

### **5.1.2 Capital Expenditure and Capitalisation Plan for existing projects**

As detailed in Chapter 2 of this Order, Petitioner in its Business Plan Petition has proposed capital expenditure for the Renovation Modernisation and Up-rating (RMU) works of its existing hydro projects. The Commission has noted the submissions of Petitioner however, the Commission at this stage while approving the Business Plan for the first Control Period has not scrutinized the capital expenditure and capitalisation estimated for the Renovation, Modernization and Up-rating (RMU) as submitted by the Petitioner. Further, as discussed in Chapter 4 of this Order, Petitioner is required to make separate proposal alongwith the APR petition before the Commission with a Detailed Project Report giving complete scope, justification, cost-benefit analysis, estimated life extension from a reference date, financial package, phasing of expenditure, schedule of completion, reference price level, estimated completion cost including foreign exchange component, if any, record of consultation with beneficiaries and other relevant information. The Commission based on the above and on the basis of prudent actual capital expenditure incurred shall consider the additional capitalisation for each year of the first Control Period during Annual Performance Review to be carried out for each year of the Control Period.

## **5.2 Trajectory of the Performance Parameters**

### **5.2.1 Design Energy**

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

Due to non-availability of reliable information on the design water discharges for nine old generating stations (i.e. except Maneri Bhali-II), 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.

In the Business Plan Petition, UJVN Ltd has submitted the revised computation of the Design Energy based on the actual generation and water discharge data for past years varying from 10 to 20 years for the generating stations. The Commission has gone through the submissions made by UJVN Ltd. and has observed that the Design Energy for most of the Stations as proposed by the Petitioner is lower than the earlier considered Primary Energy

As per the UERC Tariff Regulations, 2011, Design Energy is defined as follows:

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

In accordance with Regulation 54(5) of UERC Tariff Regulations, 2011 the Energy Charge Rate has to be worked out based on the Design Energy of each Station, the relevant extract of the Regulations is reproduced herein,

*“55...*

*(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:*

$$ECR = AFC \times 0.5 \times 10 / \{ DE \times (100 - AUX) \times (100 - FEHS) \}$$

*Where,*

*DE = Annual Design Energy specified for the hydro generating station, in MWh,*

*FEHS = Free Energy for home State, in percent, as applicable*

*...”*

The Commission therefore asked UJVN Ltd. to submit the Detailed Project Report (DPR) for each of its Hydro Generating Station so that the values of Design Energy can be assessed based on the DPR data. UJVN Ltd. submitted that the DPRs for existing 9 LHPs are not available with it and expressed its inability to submit the same. The Commission also asked UJVN Ltd to submit the 10 day daily discharge data for each of the stations for past 20 years. UJVN Ltd. expressed its inability to submit the same and did not submit the data for past 20 years for all the stations. In view of the above facts and in the absence of any reasonable basis for assessing the design energy, the Commission has relaxed the norms for Petitioner to recover its AFC for first Control Period at the

Design Energy equivalent to primary energy approved in Tariff Order dated April 04, 2012. The Commission has therefore provisionally retained the primary energy as approved for 9 LHPs in Tariff Order dated April 04, 2012 as design energy for the control period. However, for calculation of secondary energy charges, the ECR will be based on the Original Design Energy and not on the basis of primary energy considered by the Commission for recovery of AFC. 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. **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 alongwith first Annual Performance Review (APR) Petition for the Control Period.** The Commission based on analysis of DPR and further data submitted by UJVN Ltd. may revise the Design Energy for 9 LHPs in its Order on first APR Petition of UJVN Ltd. For Maneri Bhali-II the Commission has considered the design energy as per DPR of the Project.

UJVN Ltd. in its Business Plan Petition has further, submitted that most of the hydro stations are undergoing RMU works after which the Design Energy for such stations will again be revised. As regard the same, the Commission in its Order dated April 4, 2012 also stated as follows:

*“Since the Petitioner has informed that it would be carrying out the major RMU works, hence, the Commission would revisit this issue when the RMU works are completed and design energy of nine generating stations are firmed up.”*

As submitted by UJVN Ltd. as the generating stations are undergoing RMU works therefore, the Commission may revise the design energy on completion of such works. Further, in line with the past practice, in this MYT Order also, the Saleable Primary Energy has been derived by deducting the normative auxiliary consumption and transformation losses from the above projected primary energy in accordance with UERC Tariff Regulations, 2004 and UERC Tariff Regulations, 2011 respectively for concerned years. As regard the benefit of excess generation over and above the original design energy i.e. secondary energy, the Commission in accordance with Regulation 54 (7) of UERC Tariff Regulations, 2011 shall consider the rate of 80 paise/kWh in case Energy Charge Rate (Primary Energy Rate) is higher than 80 paise/kWh. The relevant extract of the Regulation has also been reproduced below for reference:

"54...

(7) In case the Energy Charge Rate (ECR) for a hydro generating station, as computed above, exceeds eighty paise per kWh, and the actual saleable energy in a year exceeds  $\{ DE \times (100 - AUX) \times (100 - FEHS) / 10000 \}$  MWh, the Energy Charge for the energy in excess of the above shall be billed at eighty paise per kWh only:"

From above, it is amply clear that the Petitioner can get the benefits of Secondary Energy only in case it is able to generate energy more than the Original Design Energy. To provide necessary clarity on the issue the Commission would like to quote from its Tariff Order dated October 21, 2009:

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

**Table 5.1: Original Design Energy, Design Energy and Saleable Primary Energy for first Control Period from FY 2013-14 to FY 2015-16 as approved by the Commission**

Name of the Generating Station	Original Design Energy	Design Energy	Auxiliary consumption (including Transformation Loss)		Saleable Primary energy
	MU	MU	%	MU	MU
Dhakrani	169.00	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
Maneri Bhali-I	546.00	395.00	0.70%	2.77	392.24
Khatima	208.00	194.05	0.70%	1.36	192.69
<b>Total</b>	<b>3484.00</b>	<b>3169.13</b>		<b>28.98</b>	<b>3140.13</b>

### B. Maneri Bhali-II

Further, as regards the Design Energy for MB-II, the Commission has considered the values as approved in the Tariff Order dated April 4, 2012 and the Saleable Primary Energy has been derived by deducting the normative auxiliary consumption and transformation losses in accordance with UERC Tariff Regulations, 2004 and UERC Tariff Regulations, 2011 respectively for concerned years. Hence, the Commission has considered the Design Energy of 1566.10 MU as per the DPR of the project and Saleable Primary Energy has further been considered as 1550.44 MU by deducting the auxiliary consumption including transformation losses (@ 1.0% of the gross generation) from the design energy 1566.10 MU.

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

UJVN Ltd. in its Business Plan Petition has submitted NAPAF computations under two approaches as detailed in Chapter 2 of this Tariff Order and as summarised below:

**Table 5.2: NAPAF under various approaches as submitted by UJVN Ltd.**

Station	Approach 1	Approach 2
Chibro	78%	75%
Khodri	83%	84%
Dhakrani	84%	83%
Dhalipur	77%	82%
Kulhal	86%	88%
Maneri Bhali - I	72%	73%
Chilla	76%	78%
Khatima	85%	78%
Ramganga	--	85%
Maneri Bhali - II	--	75%

The Commission observed that UJVN Ltd. in its Business Plan has submitted that except for Ramganga which is reservoir type, all other plants are Run of River (ROR) type. However, in its past years' submissions for approval of Capacity Index, Petitioner submitted that Chibro, Khodri, and MB-I are Run of River with pondage and Ramganga HEP as storage plant. The Commission being aware that Maneri Bhali-I, Maneri Bhali-II, Chibro and Khodri also were ROR with pondage type plant and therefore, asked UJVN Ltd. to give appropriate justification for submitting these plants as ROR type. UJVN Ltd. in its reply submitted that due to barrage level restriction MB-II could not be operated as ROR station with pondage and therefore submitted as ROR type. UJVN



Ltd. further with respect to Chibro, Khodri and MB-I submitted that since these plants are also operated as base load power stations as per instructions of SLDC, these power stations have been considered as ROR generating stations in the Business Plan.

The Commission has gone through the submissions made by UJVN Ltd. in this regard and is of the view that UJVN Ltd. has misrepresented the facts with intent of misleading the Commission and consumers at large. Operating restrictions real of imaginary cannot be used to change the type of power plant. **UJVN Ltd. is hereby directed not to make such submissions which are factually incorrect in future as this could attract legal actions against Petitioner.**

Based on the facts, the Commission for approval of NAPAF for ROR generating stations with pondage, in accordance to Regulations 51, of UERC Tariff Regulations, 2011 has considered the NAPAF for such stations as 85%. For purely ROR type plant the Commission has gone through the submissions made by UJVN Ltd. under both the approaches as detailed in Chapter 2 of this Tariff Order.

Regulation 51, of UERC Tariff Regulations, 2011 for ROR type plant specifies that NAPAF for purely ROR type generation stations shall be determined on the basis of 10 day design energy data, moderated by past experience where available/relevant. Further, the appendix III of the UERC Tariff Regulations, 2011 provides guidelines for determination of NAPAF for ROR type generating stations on the basis of 90% dependable 10 day daily inflow pattern as approved in the DPR of the project.

The Commission however, observed that for computation of NAPAF, different range of past years data were considered by UJVN Ltd. UJVN Ltd. has not submitted the original DPR of the projects. The Commission, therefore, asked UJVN Ltd. to submit the Detailed Project Report (DPR) for each of its Hydro Generating Station so that the NAPAF can be considered based on DPR. UJVN Ltd. submitted that the DPRs for existing 9 LHPs are not available with it and expressed its inability to submit the same. The Commission also asked UJVN Ltd to submit the 10 day daily discharge data for each of the stations for past 20 years. UJVN Ltd. expressed its inability to submit the same and did not submit the data for past 20 years for all the stations.

The Commission, however, observed that the NAPAF submitted by UJVN Ltd. for pure Run Off River plants are substantially higher than the NAPAF approved by CERC for NHPC stations of ROR type plants which is 60% in case of Salal and Uri stations and 55% for Tanakpur station.

The Commission in absence of past 20 years 10 day daily discharge data and original DPR decides to provisionally approve the NAPAF for ROR type plants as the minimum NAPAF submitted by UJVN Ltd. under two approaches. However, as it has been observed that Kulhal, Dhalipur and Dhakrani are fed from a common water channel, the NAPAF for these stations should not be at significance variance with each other. In view of the same, the Commission has provisionally approved the NAPAF for the above mentioned stations (i.e. Kulhal, Dhalipur and Dhakrani) as minimum of the NAPAF submitted under the two approaches for these three stations, i.e. 77%. As regard Khatima and Chilla LHPs, the Commission has approved the NAPAF as minimum NAPAF under the two approaches as submitted by the Petitioner for each station, i.e. 78% of Khatima LHP and 76% of Chilla LHP. The station-wise NAPAF as approved by the Commission is given in Table below:

**Table 5.3: NAPAF for first Control Period as approved by the Commission**

Station	Approach I of the Petitioner	Approach II of the Petitioner	NAPAF
Chibro	78%	75%	85%
Khodri	83%	84%	85%
Dhakrani	84%	83%	77%
Dhalipur	77%	82%	77%
Kulhal	86%	88%	77%
Maneri Bhali - I	72%	73%	85%
Chilla	76%	78%	76%
Khatima	85%	78%	78%
Ramganga	-	85%	85%
Maneri Bhali - II	-	75%	85%

The Commission in the previous section has already directed the Petitioner to submit the DPRs for its 9 LHPs. The Commission based on analysis of DPR and further data, if any, submitted by UJVN Ltd. may revise the NAPAF for 9 LHPs in its Order on first APR Petition of UJVN Ltd.

### **5.2.3 Outage Plan during the first Control Period**

As detailed in Chapter 2 of this Order, UJVN Ltd. in its Business Plan Petition has submitted the outage plan for the first Control Period wherein it has submitted the period under which hydro

stations shall undergo outage for RMU works or for the annual maintenance works. The Commission for the purpose of approval of the Business Plan has noted the submissions of UJVN Ltd. Further, the Commission expects that UJVN Ltd. shall adhere to the outage plan as submitted with minimum outages to achieve maximum generation during the first Control Period.

#### 5.2.4 Auxiliary Consumption

As detailed in Chapter 2 of this Order, Petitioner in its Business Plan Petition computed the Auxiliary consumption and Transformation losses based on the average of the actual Auxiliary consumption and Transformation losses for previous years. Petitioner has further, submitted that based on the above, the Auxiliary Consumption and Transformation losses for the Maneri Bhali – I, Khodri, Chilla and Maneri Bhali –II during the first Control Period are expected to be lower than the normative Auxiliary consumption as specified by the UERC Tariff Regulations, 2011. UJVN Ltd. further submitted that for other HEPs, Auxiliary consumption and Transformation losses which are currently higher than the limit prescribed by the Commission are likely to achieve the specified norms on completion of the RMU works. As UJVN Ltd. submitted that the Auxiliary Consumption for all the HEPs are likely to be within the norms specified by UERC Tariff Regulations, 2011 after the completion of RMU works and has projected normative auxiliary consumption for the Control Period, the Commission for the purpose of approval of Business Plan has approved the Auxiliary Consumption for first Control Period as specified under the UERC Tariff Regulations, 2011. The relevant extract the UERC Tariff Regulations, 2011 are reproduced below:

"51....

(2) *Auxiliary energy consumption including transformation losses:*

(a) *Surface hydro electric power generating stations*

i. *With rotating exciters mounted on the generator shaft - 0.7%*

ii. *With static excitation system: 1%*

(b) *Underground hydro generating station*

i. *With rotating exciters mounted on the generator shaft - 0.9%*

ii. *With static excitation system: 1.2% "*

In view of above, Auxiliary Consumption including Transformation Losses as approved by the Commission for the first Control Period is as shown in the Table below:

**Table 5.4: Auxiliary consumption including Transformation losses for first Control Period**

Name of the Generating Station	Aux. Consumption including Transformation Losses		
	FY 2013-14	FY 2014-15	FY 2015-16
Dhakrani	0.70%	0.70%	0.70%
Dhalipur	0.70%	0.70%	0.70%
Chibro	1.20%	1.20%	1.20%
Khodri	1.00%	1.00%	1.00%
Kulhal	0.70%	0.70%	0.70%
Ramganga	0.70%	0.70%	0.70%
Chilla	1.00%	1.00%	1.00%
Maneri Bhali-I	0.70%	0.70%	0.70%
Khatima	0.70%	0.70%	0.70%
Maneri Bhali-II	1.00%	1.00%	1.00%

## 6 Commission's Analysis, Scrutiny and Conclusions on Truing up and MYT

### 6.1 Truing up for Previous Years

#### 6.1.1 Physical Parameters

##### 6.1.1.1 Energy Generation and Saleable Primary Energy

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

Due to non-availability of reliable information on the design water discharge for nine old large hydro generating stations, the Commission in its previous Orders has considered the lower of 15 years' average annual generation or the plant-wise Design Energy (as mutually agreed between UPJVNL and UPPCL) as the gross primary energy generation from these generating stations for tariff purposes. Thereafter, for ascertaining the saleable primary energy, normative auxiliary consumption and transformation losses as specified in the UERC (Terms and conditions for determination of Hydro Generation Tariff) Regulation 2004 (UERC Tariff Regulations, 2004) were deducted from the gross primary energy. In line with the above approach, the Commission approves the saleable primary energy for FY 2008-09 to FY 2010-11 as 3140.13 MUs for the nine old Large Hydro-generating Stations of the Petitioner as follows:

**Table 6.1: Primary Energy and Saleable Primary Energy for FY 2008-09 to FY 2010-11**

Name of the Generating Station	Gross Primary Energy	Auxiliary Consumption		Transformation Loss		Saleable Primary Energy
	MU	%	MU	%	MU	MU
Dhakrani	156.88	0.20%	0.31	0.50%	0.78	155.78
Dhalipur	192.00	0.20%	0.38	0.50%	0.96	190.66
Chibro	750.00	0.70%	5.25	0.50%	3.75	741.00
Khodri	345.00	0.50%	1.73	0.50%	1.73	341.55
Kulhal	153.91	0.20%	0.31	0.50%	0.77	152.83
Ramganga	311.00	0.20%	0.62	0.50%	1.56	308.82
Chilla	671.29	0.50%	3.36	0.50%	3.36	664.58
M Bhali I	395.00	0.20%	0.79	0.50%	1.98	392.24
Khatima	194.05	0.20%	0.39	0.50%	0.97	192.69
<b>Total</b>	<b>3169.13</b>		<b>13.14</b>		<b>15.85</b>	<b>3140.13</b>

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

With regard to Maneri Bhali-II (MB-II) large hydro generating station, UJVNL Ltd. submitted

that due to barrage level restriction and improper evacuation of water through TRC, presently the capacity of the plant is restricted to 280 MW. UJVN Ltd. further submitted that due to technical reasons and availability of reduced quantity of water, which is beyond the control of the Petitioner, the net generation is less than the expected generation. UJVN Ltd. in its MYT Petition has proposed the design energy for the station as the average of billed energy during FY 2008-09 to FY 2011-12.

In this regard, the Commission is of the view that the issue of lower barrage level and improper evacuation of water through TRC is pending since long. The issue has not been addressed even after five years from the date of commercial operation of the plant. The Commission is of the view that such reasons cannot be a ground for lowering of the design energy. **The Commission directs UJVN Ltd. to overcome this constraint at the earliest. UJVN Ltd. is directed to submit the quarterly progress report on the progress made by it to address this issue.** Therefore, the Commission declines to revise the Design energy for MB-II and has considered the original design energy as per the DPR of the station as 1566.10 MU as compared to 1221.57 MU proposed by UJVN Ltd.

#### **6.1.2 Financial Parameters**

##### **6.1.2.1 Apportionment of Common Expenses**

The Commission, in line with the proposal of the Petitioner, in its previous Tariff Orders, had been allocating common/indirect expenses on 9 LHPs, MB-II and SHPs in the ratio of 80:10:10. The Commission in this regard, in the Tariff Order dated April 04, 2013 directed the Petitioner as follows:

*"The Commission re-iterates its direction to complete the exercise of examining the practices being followed in similar Utilities in Other States as well as Central Sector utilities and submit the report to the Commission within 3 months from the date of this Order."*

UJVN Ltd. in this regard has submitted that it has been pursuing the matter in the past and had also submitted correspondences with NHPC and SJVNL alongwith its earlier tariff filings. However, no response was received from either NHPC or SJVNL. UJVN Ltd. further submitted that getting such information from other utilities is beyond its control and it had also made efforts to look for such information in public domain however, the same was unavailable.

From the Petitioner's submission, it seems that its management has not taken initiatives for arranging a top level meeting between appropriate authorities of UJVN Ltd. and other utilities. Therefore, the Commission is of the view that the matter should be taken up with the utilities at the highest level.

The Commission for the purpose of this Tariff Order has adopted the same approach followed by it in previous Tariff Orders for apportionment of common expenses for truing up of expenses for FY 2008-09 to FY 2010-11. **Further, the Commission once again directs the Petitioner to complete the exercise of examining the practices being followed in similar Utilities in Other States as well as Central Sector utilities and if required, take this matter at highest level and submit the report to the Commission within three months from the date of this Order.**

#### 6.1.2.2 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 old LHPs as on January 14, 2000, as Rs. 506.17 Crore. Since, the Transfer Scheme is yet to be finalized, the Commission for the purposes of truing up for FY 2008-09 to FY 2010-11 has considered the opening GFA of nine old LHPs, as on January 14, 2000, as Rs. 506.17 Crore only as per the details given below:

**Table 6.2: Approved Capital Cost (Rs Crore)**

Name Of the Generating Station	Claimed	Approved
Dhakrani	12.40	12.40
Dhalipur	20.37	20.37
Chibro	87.89	87.89
Khodri	73.97	73.97
Kulhal	17.51	17.51
Ramganga	50.02	50.02
Chilla	124.89	124.89
Maneri Bhali-I	111.93	111.93
Khatima	7.19	7.19
<b>Total</b>	<b>506.17</b>	<b>506.17</b>

##### B. Maneri Bhali-II

The issues related to prudent Capital Cost of MB-II generating station as on CoD have been discussed in detail under Chapter 4, i.e. Approach of the Commission. With regard to fixation of the

Capital Cost of MB-II on the date of its Commercial Operation (CoD), the Commission in its Order dated December 30, 2009 had directed the Petitioner to get an audit of its capital cost done as per the scope of work approved by the Commission. The Petitioner in its filing for FY 2011-12, submitted the report, however, the Commission observed that the said report did not serve the purpose for reasons detailed in the Tariff Order dated May 10, 2011. The Commission directed the Petitioner to constitute an Expert Committee to examine the capital cost incurred and asked the Petitioner to submit the report to the Commission. UJVN Ltd. did not submit the said report in its filing for FY 2012-13 for Commission's consideration. The Commission, accordingly, did not revise the Capital Cost of the station and retained the Capital Cost of the station as approved by it in its earlier Tariff Order.

UJVN Ltd. however, submitted the said report on June 25, 2012. On preliminary analysis by the Commission certain deficiencies were observed in the report and therefore, UJVN Ltd. vide Commission's letter dated July 11, 2012 was asked to submit reply to the queries raised therein by the Commission. UJVN Ltd. did not submit reply to the queries raised by the Commission within the stipulated time. The Commission, accordingly, sent a reminder vide letter dated November 27, 2012 and asked UJVN Ltd. to submit its response within 10 days of the receipt of the letter failing which the Commission would decide to consider the provisional capital cost as the final Capital Cost of the Project. UJVN Ltd. has not submitted its reply till date.

In this context, it would be relevant to point out that the project was envisaged to be commissioned by March 31, 2007, i.e. by Tenth Plan Period wherein it was eligible for interest subsidy from PFC. The delay in commissioning of the project, therefore, not only led to the company losing interest subsidy both prior and subsequent to the commissioning of the project but also the increased burden of IDC for the extended period. The Table below shows the capital expenditure and IDC as submitted by the Petitioner for MB-II Project:



**Table 6.3: Capital Expenditure including IDC for MB-II Project (Rs. Crore)**

Particulars	Envisaged in DPR	Ind approval by PFC	Capital Cost if the project was commissioned by 31.03.2007	Claimed
Capital exp. Exc. IDC	1,002.69	1,559.91	1,494.70	1,494.70
<b>IDC</b>				
Interest paid to PFC	246.49	154.50	171.83	287.57
Guarantee Fee	-	-	40.86	40.86
Intt. On GoU Loan	-	-	5.04	5.04
Intt. Repayment AGSP	-	-	-	66.64
<b>Total IDC</b>	<b>246.49</b>	<b>154.50</b>	<b>217.73</b>	<b>400.11</b>
Guarantee Fee	-	-	-	18.81
Adjustment of account of DRB award paid but not capitalised as per AS-16	-	-	-	44.51
<b>Total</b>	<b>1,249.18</b>	<b>1,714.41</b>	<b>1,712.43</b>	<b>1958.13</b>

The Petitioner submitted that the claimed Capital Cost of Maneri Bhali-II as on 15.03.2008 was Rs. 1894.81 Crore and that the said capital cost has increased by Rs. 63.32 Crore as detailed above due to the following reasons:

- (i) UJVN Ltd. submitted that the guarantee fee on outstanding PFC loan at the commencement of the financial year is payable to GoU @ 1% at the beginning of the financial year. In case of deferment in payment of such guarantee fee, the applicable rate is 2%. Prior to CoD, i.e. March 15, 2008 such guarantee fee was paid subsequent to the financial year in which it became due and hence, the guarantee fee applicable was 2%. UJVN Ltd. requested GoU to waive off the additional 1% of the guarantee fee. As the request of waiver of additional guarantee fee was not accepted by GoU, UJVN Ltd. has made the provision of the same in the accounts for F.Y. 2009-10. UJVN Ltd. accordingly requested the Commission to allow additional guarantee fees of Rs 18.81 Crore.
- (ii) UJVN Ltd. further submitted that an amount of Rs 44.51 crore pertains to DRB amount paid but not capitalised.

The Commission observes that prior to CoD, the Petitioner has been paying guarantee fee after the end of the financial year in which it became due instead of paying it as per the terms of the same. This has resulted in payment of 1% extra guarantee fee as penalty. This excess guarantee fee

paid by the Petitioner is due to the delayed payment and could have been avoided in case timely payments were made and, hence, it would not be appropriate to load the inefficiencies of the Petitioner on to the consumers and be allowed to be recovered from tariffs. The Petitioner is expected to ensure prudence and propriety while incurring any expenditure during its day to day operations. Therefore, the Commission has not considered the excess payment made towards guarantee fee as an addition to Capital cost of the Project.

With regard to DRB claim of Rs. 44.51 Crore, the Commission is of the view that as the final Capital Cost is yet to be approved by the Commission for reasons discussed in detail in above paragraphs and in Chapter 4 of this Tariff Order, there is no merit in re-determining the capital cost as on CoD at present and the Commission shall take a view on this issue while approving the Capital Cost of MB-II Project as on CoD after carrying out the prudence check of the Capital Cost of MB-II which is still pending on account of UJVN Ltd. not been able to submit its reply to the information/queries sought by the Commission in the matter discussed above.

The Commission in the current proceedings has, therefore, considered the already approved capital cost of Rs. 1741.72 Crore and its financing as on CoD.

**Table 6.4: Approved Capital Cost and Financing for MB-II  
as on CoD (Rs Crore)**

<b>Name of the Generating Stations</b>	<b>Claimed</b>	<b>Approved</b>
Capital Cost	1958.13	1741.72
Means of Financing		
PFC Loan	1200.00	1200.00
Govt. Loan	0	0
PFC Additional Loan	0	0
Unpaid liability	142.49	0
Guarantee Fee Payable	18.81	0
Total debts	1361.3	1200.00
Equity by UJVN Ltd.	596.83	541.72
<b>Total Loan and Equity</b>	<b>1958.13</b>	<b>1741.72</b>

The Commission has already directed the Petitioner in Chapter 4 of this Order to ensure submission of required information/clarifications within one month so that this long pending issue could be decided.

### 6.1.2.3 Additional Capitalisation

#### A. Old Nine Generating Stations

In addition to the opening GFA of Rs. 506.17 Crore as on January 14, 2000, as approved by the Commission in the previous Tariff Order dated April 4, 2012, the Petitioner has claimed additional capitalisation of Rs. 83.24 Crore for the period 01.04.2001 to 31.03.2012.

The Petitioner also submitted that as per the observations of the Commission, it is maintaining proper accounts of various components of Additional Capitalisation. The Petitioner has also submitted the breakup of the components of additional capitalisation till FY 2011-12. The Petitioner submitted that the additional capitalisation from FY 2008-09 to FY 2010-11 is based on the audited accounts and additional capitalisation for FY 2011-12 is on the basis of provisional accounts.

As regard the additional capitalisation for FY 2008-09 to FY 2010-11, the Commission during the proceedings of Tariff Order for FY 2012-13 had observed that the Petitioner had included some of the expenses of capital nature under R&M expenses forming considerable part of the total R&M expenses. The Commission in view of this, appointed an Expert Consultant to examine the R&M expenses of UJVN Ltd. On the submissions made by UJVN Ltd., the Expert Consultant examined the expenses incurred by Petitioner for FY 2008-09, FY 2009-10 and FY 2010-11 and submitted an interim report as UJVN Ltd. did not submit complete details of expenses incurred during these years. The Expert Consultant, in the interim report has submitted the details of the expenses of capital nature booked under R&M Expenses. The summary of expenses of capital nature that has been booked under the R&M Expenses as identified by the Expert Consultant is shown in the Table below:

**Table 6.5: Summary of expenses of capital nature wrongly booked under R&M Expenses (Rs. Crore)**

Station	FY 2008-09	FY 2009-10	FY 2010-11
Dhakrani	0.06	0.10	0.45
Dhalipur	0.31	0.28	0.57
Chibro	0.18	0.82	0.49
Khodri	0.50	0.17	0.48
Kulhal	0.08	0.00	0.38
Ramganga	0.38	0.04	0.00
Chilla	0.16	0.17	0.17
M Bhali-I	0.16	0.49	0.36
Khatima	0.02	0.16	0.44
<b>Total</b>	<b>1.86</b>	<b>2.24</b>	<b>3.33</b>

As detailed in Chapter 4 of this Order, the Commission is not carrying out the truing up of R&M expenses in these proceedings, and accordingly, no adjustment of expenses of capital nature booked under R&M expenses is being made in additional capitalisation for respective years. However, the necessary correction, if any, will be carried out based on the Final Report of the Expert Consultant.

UJVN Ltd. during the first TVS submitted that the accounts for FY 2011-12 have also been audited and it will submit additional capitalisation for FY 2011-12 based on the audited accounts. UJVN Ltd. in its additional submission submitted the details of the additional capitalisation based on the audited accounts for FY 2011-12. The summary of additional capitalisation as submitted by UJVN Ltd. is shown in the Table below:

**Table 6.6: Additional Capitalisation as submitted by the Petitioner (Rs. Crore)**

Stations	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Dhakrani	0.02	0.04	0.08	0.03	0.04	0.94	0.42	0.12	0.10	0.21	0.02	2.03
Dhalipur	0.03	0.06	0.12	0.04	0.06	1.43	0.63	0.18	0.15	0.32	0.04	3.07
Chibro	0.15	0.50	0.61	0.28	0.27	0.51	1.94	1.78	1.17	0.77	1.32	9.31
Khodri	0.07	0.17	0.48	0.22	0.29	0.27	1.18	3.52	2.81	1.04	0.31	10.34
Kulhal	0.02	0.04	0.07	0.02	0.04	0.84	0.37	0.11	0.09	0.19	0.02	1.81
Ramganga	0.05	0.13	0.51	0.40	0.25	0.28	0.69	0.48	0.25	0.23	0.33	3.61
Chilla	0.04	1.18	2.10	2.58	2.33	1.98	0.37	0.33	0.23	18.58	(0.08)	29.66
Maneri Bhal-I	0.02	0.06	0.25	0.08	0.12	0.12	0.21	0.48	1.52	20.33	(0.81)	22.39
Khatima	0.01	0.03	0.10	0.11	0.08	0.05	0.33	0.19	0.05	0.05	0.02	1.02
<b>Total</b>	<b>0.41</b>	<b>2.21</b>	<b>4.33</b>	<b>3.75</b>	<b>3.49</b>	<b>6.43</b>	<b>6.15</b>	<b>7.20</b>	<b>6.38</b>	<b>41.71</b>	<b>1.17</b>	<b>83.24</b>

Further, the Commission observed that UJVN Ltd. has considered minor expenditures on furniture/fixtures, etc. in the additional capitalisation, however, as per the Tariff Regulations such minor expenditure cannot be included in the additional capitalisation. In view of the above, the Commission asked UJVN Ltd. to submit an appropriate justification for considering the minor expenditure like furniture, etc as a part of the additional capitalisation.

The Petitioner in its reply submitted that Additional Capitalisation has been considered in accordance with its audited accounts. The Petitioner also submitted that the Commission in the previous tariff orders has approved minor deviations and considered the expenses like furniture and fixture in the Additional Capitalisation. Further, the Petitioner also submitted that the impact of such expenditure would be negligible on tariff and has thus, requested the Commission to consider the audited accounts for determining the Additional Capitalisation.

As discussed in Chapter 4 of this Order and reasons mentioned therein, the Commission is not carrying out the final truing up of additional capitalisation for FY 2008-09 to FY 2010-11.

The Commission for the purpose of tariff determination for the first Control Period has although, considered the additional Capitalisation for FY 2011-12 as submitted by UJVN Ltd. which is based on the audited accounts, however, as the Commission is not undertaking Truing up for FY 2011-12 the detailed scrutiny and prudence check of the additional capitalisation for FY 2011-12 has not been done. Further, additional capitalisation for FY 2012-13 has not been considered as the audited data for the same was not available. The Commission has accordingly, provisionally considered the additional capitalisation as submitted by the Petitioner till FY 2011-12.

*B. Maneri Bhali-II*

With regard to MB-II, UJVN Ltd submitted the actual capitalisation from CoD till FY 2011-12 based on the audited accounts.

However, as the Commission is yet to approve the final Capital Cost as on CoD for reasons mentioned in Chapter 4 of this Order and in para 6.1.2.2 of this Chapter, the Commission has not considered any additional capitalisation and the means of financing of the additional capitalisation after the CoD of the project. Further, due to non-finalisation of the capital cost of MB-II, the Commission in this Order has not trued-up the expenditure for MB-II.

**6.1.2.4 Depreciation**

*A. Old Nine Large Generating Stations*

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 and Chibro, the Petitioner has not claimed any depreciation. The Petitioner has claimed depreciation on the opening GFA only for the remaining three plants, i.e. Khodri, Chilla and Maneri Bhali-I.

The Petitioner submitted that the Commission in its Tariff Order dated April 4, 2012, had instructed the Petitioner to claim the depreciation on additional capitalisation in accordance with the rates specified under the UERC Tariff Regulations, 2004 for different class of assets instead of

claiming it at 2.66%. The Petitioner further submitted that as the asset classification for the additional capitalisation from FY 2001-02 onwards is available, it has computed the depreciation based on the rates specified under the UERC Tariff Regulations, 2004.

The Petitioner further, submitted that in the previous Tariff Orders, methodology of calculation of depreciation was based on the balance of the asset base at the beginning of the year for which depreciation is being calculated. However, this methodology does not consider the depreciation of asset and usage of such asset for a particular period of the financial year in which asset is commissioned. Thus, the Petitioner proposed to compute depreciation based on the average of opening and closing balance of Additional Capitalisation of Asset.

The Petitioner further, submitted that since, the sub-classification of asset category is not available for the opening balance of capital cost as on January 2000, the rate of depreciation of 2.38% as considered by the Commission in its previous tariff orders, have been considered for computation of depreciation.

As regard the depreciation on the opening GFA as on January, 2000, in the absence of sub-classification of asset category, the Commission has computed the depreciation as per the weighted average rate of 2.38% as considered in previous Tariff Orders.

As regard the depreciation on the additional capitalisation, UJVN Ltd has computed the depreciation on the premise that the cumulative depreciation for each class of asset does not exceed 90% of GFA. However, it has been observed that due to continuous addition of assets in various classes in each year, such cumulative depreciation would never exceed 90%. In this regard, the Commission asked UJVN Ltd. to submit Year wise Depreciation for Additional Capitalisation under each class of asset from FY 2001-02 onwards.

UJVN Ltd. in its reply submitted that the methodology of depreciation has been considered in the same manner as approved by the Commission during the previous tariff orders. UJVN Ltd. further, submitted that in accordance with the rate specified by UERC Tariff Regulations, 2004, no other component except vehicle, would exceed 90% depreciation till the MYT period ending in FY 2015-16. In view of the same UJVN Ltd. submitted year-wise depreciation for Additional Capitalisation only for Vehicles.

The Commission for the purpose of Truing up has computed the year wise Depreciation for Additional Capitalisation under each class of asset from FY 2001-02 onwards, separately for the Additional Capitalisation of each year to ensure that depreciation on asset added in any year does not exceed beyond 90%.

Further, as regard the depreciation computation on the asset utilization during the year, the Commission in the past had observed that UJVN Ltd. capitalises its asset on the last day of each financial year. In view of the above, the Commission in its previous Orders has been allowing depreciation only on opening GFA. Further, the Petitioner did not place any such document/details contrary to the approach followed by the Commission in this regard. Hence, the Commission is following the same approach as adopted by it in its previous Tariff Orders and has computed the depreciation on the opening GFA for each class of asset.

Based on the above discussed approach, the summary of depreciation as claimed by the Petitioner and as approved by the Commission for FY 2008-09, FY 2009-10 and FY 2010-11 is shown in the Tables given below:

**Table 6.7: Depreciation approved for FY 2008-09 (Rs. Crore)**

Particulars	On Opening GFA		On Additional Capitalisation		Total Depreciation	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Dhakrani	0.00	0.00	0.06	0.06	0.06	0.06
Dhalipur	0.00	0.00	0.09	0.08	0.09	0.08
Chibro	0.00	0.00	0.30	0.27	0.30	0.27
Khodri	1.76	1.76	0.19	0.12	1.95	1.88
Kulhal	0.42	0.42	0.05	0.05	0.47	0.47
Ramganga	0.00	0.00	0.16	0.15	0.16	0.15
Chilla	2.97	2.97	0.35	0.34	3.33	3.32
Maneri Bhali-I	2.66	2.66	0.07	0.06	2.74	2.73
Khatima	0.00	0.00	0.05	0.04	0.05	0.04
<b>Total</b>	<b>7.81</b>	<b>7.81</b>	<b>1.32</b>	<b>1.18</b>	<b>9.13</b>	<b>9.00</b>

**Table 6.8: Depreciation approved for FY 2009-10 (Rs. Crore)**

Particulars	On Opening GFA		On Additional Capitalisation		Total Depreciation	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Dhakrani	0.00	0.00	0.06	0.06	0.06	0.06
Dhalipur	0.00	0.00	0.10	0.09	0.10	0.09
Chibro	0.00	0.00	0.36	0.33	0.36	0.33
Khodri	1.76	1.76	0.29	0.25	2.05	2.01
Kulhal	0.42	0.22	0.06	0.05	0.47	0.28
Ramganga	0.00	0.00	0.18	0.17	0.18	0.17
Chilla	2.97	2.97	0.37	0.36	3.34	3.34
Maneri Bhali-I	2.66	2.66	0.10	0.08	2.77	2.75
Khatima	0.00	0.00	0.05	0.05	0.05	0.05
<b>Total</b>	<b>7.81</b>	<b>7.62</b>	<b>1.58</b>	<b>1.46</b>	<b>9.39</b>	<b>9.07</b>

**Table 6.9: Depreciation approved for FY 2010-11 (Rs. Crore)**

Particulars	On Opening GFA		On Additional Capitalisation		Total Depreciation	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Dhakrani	0.00	0.00	0.07	0.07	0.07	0.07
Dhalipur	0.00	0.00	0.11	0.10	0.11	0.10
Chibro	0.00	0.00	0.41	0.39	0.41	0.39
Khodri	1.76	1.76	0.36	0.34	2.12	2.10
Kulhal	0.23	0.00	0.06	0.06	0.29	0.06
Ramganga	0.00	0.00	0.20	0.19	0.20	0.19
Chilla	2.97	2.97	0.63	0.38	3.60	3.35
Maneri Bhali-I	2.66	2.66	0.33	0.13	2.99	2.79
Khatima	0.00	0.00	0.06	0.06	0.06	0.06
<b>Total</b>	<b>7.62</b>	<b>7.40</b>	<b>2.22</b>	<b>1.70</b>	<b>9.85</b>	<b>9.10</b>

**B. Maneri Bhali-II**

As discussed earlier, the Commission has not considered the revision in capital cost of MB-II and the additional capitalisation after CoD, the Commission in this Order has not trued up the depreciation expenditure for previous years.

**6.1.2.5 Return on Equity****A. Old Nine Large Generating Stations**

Regulation 18(1) of UERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2004 stipulates as under:

*“In case of all generating stations, debt-equity ratio as on the date of commercial operation shall be 70:30 for determination of tariff. Where equity employed is more than 30%, the amount of equity for*



*determination of tariff shall be limited to 30% and the balance amount shall be considered as the normative loan. Provided that in case actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff".*

In accordance with the above provisions of the Regulation, pending finalisation of the Transfer Scheme of the Petitioner, the Commission has 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, as detailed in the Order dated March 14, 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 Regulations.

Further, it has been observed that UJVN Ltd. computed the RoE for FY 2008-09 to FY 2010-11 on the average of opening and closing equity for each year at the allowable rate of 14% post tax. As discussed earlier, the Commission has observed that as per the practice followed by UJVN Ltd. the capitalisation of assets added during the year occurs on 31<sup>st</sup> 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 for each financial year.

As regards finalization of Transfer Scheme, the Commission in its Tariff Order dated October 21, 2009, had directed the Petitioner to submit a report on the status of Transfer Scheme and steps being taken by it to fast track the process. The above direction of the Commission is reproduced below:

*"The Petitioner is, therefore, directed to approach the State Government for early finalization of the transfer scheme and to provide them all necessary details/assistance in this regard. The Petitioner is directed to submit a report on steps taken by it and the status of transfer scheme within 3 months of the issuance of this Tariff Order."*

The Commission in its Order dated April 4, 2012 again directed UJVN Ltd. to take necessary steps for finalisation of transfer without further delay and submit the report to the Commission.

UJVN Ltd. in its Petition submitted that even after rigorous follow-up with UPJVN, it could not get the required information. UJVN Ltd. submitted that getting such information from

other departments is beyond the control of the Petitioner and in order to speed up the process of finalisation of transfer scheme, the Petitioner has appointed a consultant.

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

As the Transfer Scheme is yet to be finalized, the Commission is provisionally allowing a return on normative equity @ 14% post tax in accordance with the provisions of the Tariff Regulations and the approach as discussed in the above paragraphs. The summary of the Return on Equity approved for 9 LHPs for FY 2008-09, FY 2009-10 and FY 2010-11 is shown in the Table given below:

**Table 6.10: Equity and Return on Equity for Nine Old LHPs for FY 2008-09 (Rs. Crore)**

Name of the Generating Station	Claimed		Approved				Total
	Equity*	RoE	On Transferred Asset		On Additional Capitalisation		
			Normative Equity	RoE	Opening Equity	RoE	
Dhakrani	4.21	0.59	3.72	0.52	0.47	0.07	0.59
Dhalipur	6.85	0.96	6.11	0.86	0.71	0.10	0.96
Chibro	27.91	3.91	26.37	3.69	1.10	0.15	3.84
Khodri	23.52	3.29	22.19	3.11	0.74	0.10	3.21
Kulhal	5.69	0.80	5.25	0.74	0.42	0.06	0.79
Ramganga	15.77	2.21	15.01	2.10	0.70	0.10	2.20
Chilla	40.69	5.70	37.47	5.25	3.08	0.43	5.68
Maneri Bhali-I	33.91	4.75	32.92	4.61	0.26	0.04	4.64
Khatima	2.40	0.34	2.16	0.30	0.21	0.03	0.33
<b>Total</b>	<b>160.95</b>	<b>22.53</b>	<b>151.19</b>	<b>21.17</b>	<b>7.68</b>	<b>1.08</b>	<b>22.24</b>

\* average of opening and closing equity

**Table 6.11: Equity and Return on Equity for Nine Old LHPs for FY 2009-10 (Rs. Crore)**

Name of the Generating Station	Claimed		Approved				
	Equity*	RoE	On Transferred Asset		On Additional Capitalisation		Total
			Normative Equity	RoE	Opening Equity	RoE	
Dhakrani	4.24	0.59	3.72	0.52	0.51	0.07	0.59
Dhalipur	6.90	0.97	6.11	0.86	0.77	0.11	0.96
Chibro	28.36	3.97	26.37	3.69	1.63	0.23	3.92
Khodri	24.47	3.43	22.19	3.11	1.79	0.25	3.36
Kulhal	5.72	0.80	5.25	0.74	0.45	0.06	0.80
Ramganga	15.88	2.22	15.01	2.10	0.84	0.12	2.22
Chilla	40.78	5.71	37.47	5.25	3.18	0.44	5.69
Maneri Bhali-I	34.21	4.79	32.92	4.61	0.40	0.06	4.66
Khatima	2.44	0.34	2.16	0.30	0.27	0.04	0.34
Total	162.99	22.82	151.19	21.17	9.85	1.38	22.54

\* average of opening and closing equity

**Table 6.12: Equity and Return on Equity for Nine Old LHPs for FY 2010-11 (Rs. Crore)**

Name of the Generating Station	Claimed		Approved				
	Equity*	RoE	On Transferred Asset		On Additional Capitalisation		Total
			Normative Equity	RoE	Opening Equity	RoE	
Dhakrani	4.29	0.60	3.72	0.52	0.54	0.08	0.60
Dhalipur	6.97	0.98	6.11	0.86	0.81	0.11	0.97
Chibro	28.65	4.01	26.37	3.69	1.98	0.28	3.97
Khodri	25.05	3.51	22.19	3.11	2.63	0.37	3.48
Kulhal	5.76	0.81	5.25	0.74	0.48	0.07	0.80
Ramganga	15.95	2.23	15.01	2.10	0.92	0.13	2.23
Chilla	43.61	6.10	37.47	5.25	3.25	0.45	5.70
Maneri Bhali-I	37.49	5.25	32.92	4.61	0.86	0.12	4.73
Khatima	2.45	0.34	2.16	0.30	0.29	0.04	0.34
<b>Total</b>	<b>170.21</b>	<b>23.83</b>	<b>151.19</b>	<b>21.17</b>	<b>11.76</b>	<b>1.65</b>	<b>22.81</b>

\* average of opening and closing equity

#### B. Maneri Bhali-II

The Petitioner in its Petition submitted that in the Tariff Order dated April 4, 2012, the Commission has not considered the amount of equity contributed out of withdrawal from PDF and ruled as under:

“ ...

*Since, under the Tariff Regulations of the Commission, licensees are not allowed any return on money contributed by the consumers for creation of assets, the Commission has not been allowing return on such contributions made by the Government out of PDF...*”

The Petitioner submitted that the Uttarakhand PDF Act, 2003 states as under:

*“Uttarakhand Power Development Fund Act, 2003*

*...*

*Section 3. (1) The Government may collect duty with effect from such date as the State Government may, by notification in the official gazette, specify for the purpose of the Act on the saleable energy generated from existing and notified generating Hydro Power Plants of the generating company of the State of Uttraranchal which have been in commercial operation for over ten years.*

*(2) The rate of the duty shall be notified by the Government.*

*(3) Every duty leviable under subsection (1) shall be payable by the generating company on whom such duty is imposed.*

*(4) The duty leviable under subsection (1) shall be in addition to any duty leviable under any other law for the time being in force.*

*Section 4. The proceeds of the duty levied under Section-3 shall first be credited to the consolidated fund of the State Government and the State Government may, if the State Assembly by appropriation so provides, credit such proceeds to the Fund from time to time after deducting the expenses of collection, for being utilised exclusively for the purpose of the Act.*

*Section 5. The State Government may, after the appropriation made by the State Assembly, credit by way of grants or loans, such sums of money as the State Government may consider necessary to the fund."*

The Petitioner further submitted that the State of Uttarakhand enacted the Uttaranchal Power Development Fund Act, 2003 with effect from January 1, 2004. The Petitioner submitted that under Section 3(1) of the Uttaranchal Power Development Fund Act, 2003, the Government has been empowered to impose a duty on saleable energy generated from the existing and notified hydro generating plants of the generating company of the State of Uttarakhand, which have been in commercial operation for over 10 years. The Petitioner further, submitted that Section 4 of the Act specifies that the taxes levied on account of Power Development Fund is first to be deposited in the consolidated funds of the State Government and if State Assembly by appropriation so provides, such proceeds may be credited to the said Power Development Fund. Under Section 5 of the Uttaranchal Power Development Fund Act, 2003, the State Government may further credit such sum of money to Power Development Fund by way of grants or loans as may be authorised by the State Assembly. Hence, the Power Development Fund created under the said Act not only consists of duty collected through levy of cess on saleable energy but also consists of such other funds credited to Power Development Fund under Section 5 which is not collected through any such levy from the sale of energy.

The Petitioner submitted that the Power Development Fund consists of contributions not only through duty levied on saleable energy but through other sources also. Therefore, it may not be possible to distinguish the investment made from the Power Development Fund collected through levy on saleable energy and investment made from Power Development Fund collected through other sources. As regards source of funding of equity, there is no exception which has been

carved out on the basis of source of such equity in accordance with UERC (Terms & Conditions for determination of Hydro generation Tariff) Regulation, 2004.

The Petitioner submitted that in other States, the State Electricity Regulatory Commissions provides return on equity on total equity in accordance with Tariff Regulations without going into details of sources of equity applicable in that particular State. In view of the same UJVN Ltd. has requested the Commission to consider the return on equity infused by Government of Uttarakhand from Power Development Fund.

UJVN Ltd. further, submitted that GoU vide letter No 337/I(2)/2011-04-(1) /84/2008 dated 11.2.2011 advised the Commission to allow Return on equity contributed out of withdrawal from Power Development Fund (PDF).

The Petitioner submitted that it has computed Return on Equity assuming a normative debt equity ratio of 70:30 in accordance with the Regulations of the Commission. Further, Petitioner computed the return on equity on the average of opening and closing equity for each year at the rate of 14% post tax.

As discussed in Chapter 4 of the Order and Para 6.1.2.2 of this Chapter, the Commission has considered a Capital Cost of Maneri Bhali-II as Rs. 1741.42 Crore on CoD for the purpose of Truing up. As per the financing considered by the Commission of the approved Capital Cost of Rs. 1741.42 Crore, Rs. 541.72 Crore have been funded through equity. However, since, out of the total equity of Rs. 541.72 Crore, Rs. 341.39 Crore had come through PDF, the Commission has considered the balance equity of Rs. 200.33 Crore only for the purposes of allowing return in the previous Tariff Orders for various reasons given therein.

The Commission has not been allowing Return on Equity on funds deployed by the GoU out of PDF fund for various reasons recorded in the previous Tariff Orders. With regard to the above submissions of the Petitioner in this Petition, and as discussed earlier in Chapter 4 of this Order 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. 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.

The contention of the Petitioner that power development fund, in past, has been funded through contribution from, State Government vide Section 5 of the PDF Act, in addition to being funded by the Cess on Hydro Generation has not been substantiated by the Petitioner and it has failed to provide any documentary evidence either by way of related Vidhan Sabha's resolution or the State Government's Orders. At this point of time it would be difficult to give credence to the contention of the Petitioner. The Commission recognising that this issue has substantial financial implication mainly on the Return on Equity of assets partly funded by this fund, decides to keep in abeyance final view in the matter. Keeping this in view, the Commission has decided to give another opportunity to the Petitioner to bring up evidence in support of its contention that this fund, also included the contributions made by the State Government and if so, the extent thereof. For the present, practice of not permitting return on equity on the fund utilised out of PDF assistance is being continued. **The Petitioner is directed to bring up the above mentioned evidence within six months of the date of Order.** The Commission shall take a final view in the matter in the 1<sup>st</sup> APR of the control period.

Thus, the Commission in absence of any details 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 more than 10 year old Hydro Generating Station 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.

Further, as discussed earlier, since the capital cost of MB-II remains unaltered and the additional capitalisation claimed by the Petitioner after CoD has not been considered for reasons already discussed above, the Commission in this Order has not trued up the RoE expenditure for previous years.

#### **6.1.2.6 Interest on Loans**

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

The Petitioner submitted that the, interest on normative debt has been considered on the value equivalent to 70% of additional capitalisation only. The Petitioner submitted that the actual loan data is available for MB-II HEP and the actual weighted average rate of interest and finance

charges of MB-II hydro electric project should also be considered for computing the interest expenses on normative loan for other large hydro projects.

The Petitioner submitted the details of loans for MB-II hydro power project as reflected in audited accounts of respective financial year. Summary of principal amount due and actual interest and finance charges paid during respective financial years as submitted by UJVN Ltd. are shown in the Table below:

**Table 6.13: Weighted Average Rate of Interest for MB-II HEP as submitted by Petitioner**

Year	Principal Due (Rs. crore)	Interest and Finance charges (Rs. crore)	Weighted Avg. Rate of Interest
FY 2008-09	1148.10	152.91	13.32%
FY 2009-10	1114.69	136.69	12.26%
FY 2010-11	993.69	129.26	13.01%
FY 2011-12	863.14	113.77	13.18%

For the purpose of Truing up and computing the interest expenses for FY 2008-09, FY 2009-10 and FY 2010-11, the Commission has determined the normative loan in accordance with the Regulations. Further, for calculating the interest expense, the Commission has considered an interest rate of 11% and repayment period of 10 years on the normative loan as approved by the Commission in its previous Tariff Orders. The Commission would like to further, indicate that it would not be appropriate to revise the interest on normative loan as interest rate for normative loans is calculated based on the weighted average interest rate of the existing actual loans during the year. Since, no actual loans exist for the 9 LHPs, the Commission does not find any basis for considering the actual weighted average rate of interest and finance charges of MB-II hydro electric project for computing the interest expenses for 9 LHPs. Thus, it is only appropriate to consider the normative interest rate of 11% as allowed by the Commission in the previous Tariff Orders for computing the interest expenses for FY 2008-09, FY 2009-10 and FY 2010-11. Accordingly, the Commission has considered the interest on normative loan @ 11% as approved in the previous Tariff Orders. As regards the APDP loan, the Commission has considered the repayment period and interest rates as per the terms and conditions of the loan agreement.

Further, in accordance with the decision of the Government of Uttarakhand, vide their letter no. 90/1/2005-06/77/2003 dated June 29, 2007 and Order of the Hon'ble High Court dated May 14, 2007, the Commission had provisionally considered an amount of Rs. 2.21 Crore as part of the

Capital Cost on the date of Commissioning of MB-I in its previous Orders. The Commission had treated the above amount as loan advanced to the Petitioner by the Government with terms similar to other new loans given by the Government to the Petitioner. The Commission had, accordingly, considered an interest rate of 9% per annum and repayment period of 10 years for the purposes of this loan. Based on the above considerations, the Commission has calculated the interest expense of UJVN Ltd. for FY 2008-09, FY 2009-10 and FY 2010-11 as shown in the Tables below:

**Table 6.14: Interest on Loan for Nine Old LHPs for FY 2008-09 (Rs. Crore)**

Name of the Generating Station	Interest Claimed	Approved		
		Opening Loan	Closing Loan	Interest
Dhakrani	0.15	0.98	0.95	0.11
Dhalipur	0.23	1.48	1.44	0.16
Chibro	0.48	2.87	3.86	0.38
Khodri	0.41	1.75	4.05	0.32
Kulhal	0.14	0.87	0.85	0.09
Ramganga	0.24	1.28	1.45	0.15
Chilla	1.00	6.21	5.84	0.68
Maneri Bhali-I	0.10	2.67	2.73	0.21
Khatima	0.08	0.42	0.50	0.05
<b>Total</b>	<b>2.83</b>	<b>18.52</b>	<b>21.67</b>	<b>2.14</b>

**Table 6.15: Interest on Loan for Nine Old LHPs for FY 2009-10 (Rs. Crore)**

Name of the Generating Station	Interest Claimed	Approved		
		Opening Loan	Closing Loan	Interest
Dhakrani	0.15	0.95	0.91	0.10
Dhalipur	0.23	1.44	1.37	0.15
Chibro	0.57	3.86	4.28	0.45
Khodri	0.65	4.05	5.60	0.53
Kulhal	0.13	0.85	0.80	0.09
Ramganga	0.25	1.45	1.43	0.16
Chilla	0.95	5.84	5.31	0.63
Maneri Bhali-I	0.18	2.73	3.48	0.30
Khatima	0.08	0.50	0.47	0.05
<b>Total</b>	<b>3.19</b>	<b>21.67</b>	<b>23.65</b>	<b>2.48</b>



**Table 6.16: Interest on Loan for Nine Old LHPs for FY 2010-11 (Rs. Crore)**

Name of the Generating Station	Interest Claimed	Approved		
		Opening Loan	Closing Loan	Interest
Dhakrani	0.17	0.91	0.93	0.10
Dhalipur	0.26	1.37	1.40	0.15
Chibro	0.69	4.28	4.33	0.48
Khodri	0.87	5.60	5.71	0.62
Kulhal	0.15	0.80	0.83	0.09
Ramganga	0.29	1.43	1.37	0.15
Chilla	1.86	5.31	17.62	1.27
Maneri Bhali-I	1.19	3.48	17.29	1.11
Khatima	0.09	0.47	0.44	0.05
<b>Total</b>	<b>5.57</b>	<b>23.65</b>	<b>49.92</b>	<b>4.03</b>

**B. Maneri Bhali-II**

As discussed earlier, the Commission has not considered the revision in capital cost of MB-II and the additional capitalisation after CoD, the Commission in this Order has not trued up the interest expenses for previous years.

**6.1.2.7 Operation & Maintenance (O&M) Expenses for Nine Old Large Generating Stations**

The Petitioner submitted that O&M expenses for the FY 2008-09, FY 2009-10 and FY 2010-11 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 allotted to respective hydro power project for which corresponding expenses have been incurred. The Petitioner submitted that indirect expenses, i.e. corporate office, other common expenses have been divided in the ratio of 80:10:10 to 9 LHPs, MB-II HEP and Small Hydro Projects including project under construction respectively. The Petitioner submitted that 80% of total indirect expenses have further been divided into 9 LHPs based on their installed capacity in MW.

The Petitioner submitted that the Commission vide its Tariff Order dated October 21, 2009, directed the Petitioner to submit the probable alternatives for rationally allocating the common/indirect expenses. The Petitioner further submitted, that in the Tariff Order dated May 10, 2011, Commission instructed the Petitioner to examine the practices being followed in similar utilities in other States as well as Central Sector utilities like NTPC, NHPC, etc. The Petitioner in this regard submitted that it has made sincere efforts to comply with the Commission's directions,

however, getting such information from other utilities is beyond its control. The Petitioner submitted that since, there was no response received from the concerned utilities, the Petitioner tried to enquire if any such information is available in public domain. No such information was found available in the public domain also.

The Petitioner submitted that during its research and analysis and based on discussions with various power sector experts, it was found that there are three methods which have been widely adopted and recognised across generation companies in India for allocation of common expenses. These methods are as under:

- Allocation based on actual revenues of power projects
- Allocation based on installed capacity of power projects
- Allocation based on power generation in Million Units (MUs)

The Petitioner submitted that the above information is merely on the basis of primary research and without any documentary evidences and hence, may not be firmly established in the present Tariff Petition.

The Petitioner requested the Commission to consider the methodology as adopted by it based on the following facts:

- There is only one major beneficiary from all the Projects of the Petitioner. Since, this is a truing up exercise, whatever methodology is adopted for allocating indirect expenses, the total indirect expenses of UJVN Ltd. to be recovered from the beneficiary would not vary. Hence, there may be a project-wise variation in the recovery of indirect expenses, however, in terms of total indirect expenses recovery, neither UJVN Ltd. will be benefited nor beneficiary would have disadvantage.
- The share of indirect expenses is less than 10% of total O&M expenses, hence, any methodology may be adopted and the variation of allocated expenses among all methodologies would be negligible.

From the Petitioner's submission, it seems that its management has not taken initiatives for arranging a top level meeting between appropriate authorities of UJVN Ltd. and other utilities.

Therefore, the Commission is of the view that the matter should be taken up with the utilities at the highest level.

The Commission, for the purpose of current Truing up exercise, has adopted the same approach followed by it in previous Tariff Orders for apportionment of common expenses. **Further, the Commission once again directs the Petitioner to complete the exercise of examining the practices being followed in similar Utilities in Other States as well as Central Sector utilities and if required, take this matter at highest level and submit the report to the Commission within three months from the date of this Order.**

In addition to the O&M Expenses as per the audited accounts, the Petitioner has also claimed the following expenses:

- Cost of consumption in colonies and barrages.
- Cost of concessional supply to past and present employees of the Petitioner residing outside the colonies.

The Petitioner for truing up purpose has also claimed payment of Rs.3.67 Crore, Rs. 3.83 Crore and Rs. 4.95 Crore towards GPF trust respectively for FY 2008-09, FY 2009-10 and FY 2010-11 for meeting the difference between cash collection and cash disbursements required during the year. The Petitioner also claimed Rs. 0.40 Crore for FY 2008-09 towards incentive to the employees for higher generation as a part of employee expenses.

Further, in accordance with the Commission's view in Tariff Order dated May 10, 2011 the Petitioner has considered the impact of arrears of 6<sup>th</sup> Pay Commission only on cash basis.

The Petitioner further, submitted that in the previous Tariff Order dated April 4, 2012, the Commission did not take up True Up exercise and stated as follows:

*"The Hon'ble Commission has decided to appoint an Expert Consultant to examine the R&M expenses incurred during FY 2008-09 and FY 2009-10 and based on its report, the Commission will carry out the truing up for these years in the next Tariff proceedings."*

The Petitioner in its Petition submitted that it has been submitting the required details in accordance with the requirement of independent consultant appointed by the Commission.

However, it requested the Commission to consider the O&M expenses in accordance with the Audited Accounts, which is common practice adopted by all Regulatory Commissions.

The Commission has gone through the submissions made by UJVN Ltd. UJVN Ltd. has submitted consolidated audited balance sheet for the years FY 2008-09, FY 2009-10 and FY 2010-11 and requested the Commission to carry out the truing up for these years based on audited balance sheets. However, the expenses submitted by UJVN Ltd. under each head for nine old LHPs and Maneri Bhali-II cannot be verified from the consolidated audited accounts submitted by UJVN Ltd and what is available is the break up of expenses submitted by UJVN Ltd. for Nine LHPs as well as MB-II based on expenses directly booked to these LHPs and allocation of common/indirect expenses. It has to be borne in mind that true up of o& m expenses of 9 LHPs is only required as SHPs are on generic tariff and MB-II has normative O&M expenses. To ensure that truing up is based on audited account, expenses on each station need to be separately captured and got audited. The Commission is of the view that the proper prudence check of expenses for all the stations can be carried out if the accounts of expenses and revenue is maintained separately for each Station. As a first step in this direction, the Commission directs the UJVN Ltd. to prepare two separate Accounts from FY 2013-14 onwards, one for its large hydro generating stations including Maneri Bhali-II and the other for its small hydro plants and submit the same alongwith truing up for FY 2013-14. Further, as a next step the Petitioner should further segregate the accounts and prepare separate accounts for its 9 old LHPs, Maneri Bhali-II and SHPs and submit the same along with truing up petition for FY 2014-15 onwards. **The Commission directs the Petitioner to submit a detailed methodology for segregation of accounts for its large hydro generating stations and small hydro plants within two months from the date of this Order for the Commission's approval.**

#### *6.1.2.7.1 Utilisation of Expenses approved by the Commission*

As regards utilisation of O&M expenses vis-a-vis the approved value, the Commission had directed the Petitioner, in the Tariff Order dated October 21, 2009, to ensure that the direct O&M expenses as approved by the Commission are actually utilised in maintaining the plants in healthy conditions. The Commission had also indicated that it would consider truing up of these expenses only to the extent they are actually utilised in each plant and subject, of course, to prudence check.

The Commission in view of the same while carrying out the truing up for FY 2008-09, FY 2009-10 and FY 2010-11 has allowed O&M expenses only to the extent they are actually utilised in each plant after prudence check.

#### 6.1.2.7.2 Employee Cost

The Commission observed that, while claiming the employee cost for FY 2008-09, FY 2009-10 and FY 2010-11, the Petitioner. has claimed amount of Rs.3.67 Crore, Rs. 3.83 Crore and Rs. 4.95 Crore towards GPF trust respectively for FY 2008-09, FY 2009-10 and FY 2010-11 for meeting the difference between cash collection and cash disbursement required during the year against interest paid to GPF trust. The Commission in the data gaps asked the Petitioner to submit the current status on the matter of the interest on GPF Trust as per the direction of the Commission to consistently pursue the matter with UPJVNL and to report status on the utilisation of the funds of Rs. 16.80 Crore allowed by the Commission previously for meeting the cash shortfall of GPF Trust and to settle its claims with UP and intimate the same to the Commission. The Petitioner in its reply, submitted the letter of Govt. of Uttar Pradesh dated 29.5.2012 vide which UJVN Ltd. was informed that fund is not available with GPF trust of Uttar Pradesh, therefore, it is not possible to settle the claim of UJVN Ltd.

In this regard, the relevant extract from the Commission's Order dated April 4, 2012 is reproduced below:

*"With regards to the claim of interest on GPF trust, interest is payable by the GPF Trust of UJVN Ltd. on the outstanding balances of GPF liability towards employees. Some of this liability relating to old employees is unfunded as the liability of the employees transferred to the Petitioner from erstwhile UPSEB has been assumed by UP Government by issuing bonds in favour of UP Power Sector Employees Trust (UPPSET). The share of UJVN Ltd. employees is to be claimed by the Uttarakhand Trust. The interest on this portion of GPF liability towards employees is being earned and, hence, accruing on the bonds available with UPPSET. The Uttarakhand Trust and the Petitioner should make efforts to get their share of bonds or an equivalent sum of money from UPPSET/GoUP. The other portion of this liability is the cash available with the trust by collection of current GPF contribution from employees, excluding the loans, if any, on which the Trust is earning interest. Hence, allowing interest on this entire liability would tantamount to providing the interest twice on*

*the two portions of this liability. In any case, this entire liability is that of the UJVN Ltd. Trust and not of the Petitioner. Further, as is evident from the Petitioner's submissions, Rs. 91.40 Crore due as on September, 2011, is to be recoverable from UPPSET comprising of the amount of GPF contribution and also the interest accrued thereon, hence, the Petitioner should make concerted efforts to realize this money.*

*It would also be relevant to note that the Commission has already allowed difference of cash available with the Trust and cash payments required in its previous tariff orders till the unfunded liability of the Trust is made good. It may be recalled that the Commission while determining tariff for FY 2006-07 in its Order dated 12.07.2006 declined to take cognisance of UJVN Ltd.'s late submission of tariffs for 2005-06 and did not approve the same. By default, therefore, the tariffs finalised for FY 2004-05 in March 2007 were also applicable for FY 2005-06. Accordingly, the revenue of Rs. 8.40 Crore made available to the Petitioner for meeting cash shortfalls of the GPF Trust for FY 2004-05 was also recovered by it in FY 2005-06, making the total revenue available with it as Rs. 16.80 Crore till the end of FY 2005-06. In order to know the exact amount of such payouts, the Commission sought the actual figures of the differential amount upto FY 2011-12 from the Petitioner. The Petitioner has submitted the following details of cash available with the trust and cash payments made by it to serving/retiring employees:*

*...*

*The Commission has not scrutinised the above figures for correctness. However, it is amply clear from the above Table that out of total revenue of Rs. 16.80 Crore made available to the Petitioner till FY 2005-06 for meeting the cash shortfall, the Petitioner/Trust has utilised only Rs. 4.91 Crore till FY 2011-12 and would still be left with a cash of Rs. 11.89 Crore after FY 2011-12. The Petitioner is again directed to keep the funds allowed by the Commission in a separate account for utilisation in the specified manner and to settle its claims with UP and immediately intimate the same to the Commission so that the amount of Rs. 16.80 Crore may be adjusted in future ARRs."*

The letter from Govt. of Uttar Pradesh informing that there is no fund available with GPF trust of Uttar Pradesh does not establish that the interest paid to GPF trust can simply be passed on to the consumers of Uttarakhand. Merely stating that the funds cannot be transferred to UJVN Ltd. from the UPPSET as the Trust does not have funds does not absolve the Trust of its liability. As advised by the Commission in its earlier Orders, the Uttarakhand Trust and the

Petitioner should make concerted efforts to get their share of bonds or an equivalent sum of money from UPPSET/GoUP. Further, Commission is of the view that there is no material reason for the Commission to deviate from its earlier stand, and, therefore, the Commission in continuation with its previous approach is not allowing the interest paid to GPF trust.

The Commission in its data gaps further asked the Petitioner to submit the breakup of the employee expenses detailing various minor and major heads booked under the employee expenses. The Petitioner in its reply submitted the breakup of the employee expenses. The Commission, observed that UJVN Ltd. has booked certain amount towards Generation Incentive in FY 2008-09 and FY 2011-12 under the employee expenses. The Commission asked the Petitioner to submit the details and the justification for booking generation incentive under the employee expenses. The Petitioner in its reply submitted the details of the incentive booked under employee expenses as shown in the Table below:

**Table 6.17: Details of Generation incentive booked by UJVN Ltd. under employee expenses (Rs. Lakh)**

Particulars	Dhakrani	Dhalipur	Chibro	Khodri	Kulhal	Ramganga	Chilla	MB-I	Khatima	MB-II	TOTAL
FY 2008-09	2.23	5.09	7.26	4.34	1.98	5.28	5.93	4.93	2.83	7.08	46.93
FY 2011-12	3.89	9.49	14.42	7.92	3.45	9.54	11.58	9.63	5.2	8.13	83.26

The Petitioner further, submitted that such incentive has been paid to employees on account of higher generation in the respective year and should be taken as part of employee expenses. The Commission is of the view that the generation incentive paid to the employees should be met either through the secondary energy charges or from the return available and can not be claimed as employee expenses. In view of the same the Commission, for the purpose of Truing up for FY 2008-09, has not allowed generation incentive booked under the employee expenses. Further, the Commission for the purpose of using the base values of FY 2011-12 for determining the O&M expenses for the first Control Period has reduced the above amount from the employee expenses for FY 2011-12 as submitted by UJVN Ltd.

Further, in the accordance with the Commission's views in its previous tariff orders to allow the impact of the 6<sup>th</sup> Pay Commission arrears only on cash basis, the Commission has reduced the

amount of Rs. 15.76 crore on accrual basis from the total employee expenses for FY 2008-09 as per the audited accounts. The Commission has separately allowed the 6<sup>th</sup> Pay Commission arrears on the cash basis in FY 2009-10, FY 2010-11 and FY 2011-12 as discussed subsequently in this Order.

The Commission has accordingly, approved the employee expenses for FY 2008-09, FY 2009-10 and FY 2010-11 as shown in the Table below:

**Table 6.18: Employee Expenses as approved for FY 2008-09, FY 2009-10 and FY 2010-11  
(Rs. Crore)**

Name of Generating Stations	FY 2008-09*		FY 2009-10*		FY 2010-11*	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Dhakrani	3.29	3.14	4.73	4.59	4.98	4.80
Dhalipur	4.97	4.72	7.15	6.94	7.52	7.26
Chibro	13.50	12.49	19.59	18.62	20.13	18.88
Khodri	8.26	7.75	10.10	9.62	12.05	11.42
Kulhal	2.92	2.79	4.20	4.08	4.42	4.27
Ramganga	10.29	9.47	14.56	13.76	14.13	13.10
Chilla	10.13	9.52	13.90	13.32	15.96	15.21
Maneri Bhali-I	8.32	7.92	10.50	10.14	10.83	10.36
Khatima	4.12	3.93	5.73	5.56	6.24	6.03
<b>Total</b>	<b>65.79</b>	<b>61.72</b>	<b>90.46</b>	<b>86.63</b>	<b>96.27</b>	<b>91.32</b>

*Note: \* excluding impact of 6<sup>th</sup> Pay Commission*

#### 6.1.2.7.3 Repairs and Maintenance Expenses

As discussed earlier in Chapter 4, the Commission in the Tariff Order for FY 2012-13 while examining the R&M Expenses of UJVN Ltd. observed that the Petitioner had included some of the expenses of capital nature under R&M expenses forming considerable part of the total R&M expenses. The Commission appointed an Expert Consultant to examine the R&M expenses of UJVN Ltd.

As discussed in Chapter 4 of this Order, the Expert Consultant appointed by the Commission has examined the R&M expenses incurred by the Petitioner for FY 2008-09, FY 2009-10 and FY 2010-11. The Expert Consultant has submitted his interim findings to the Commission on 05.04.2013. On examination of the findings, it was observed that the R&M expenses claimed for truing up of FY 2008-09 to FY 2010-11 were at significant variance compared to the amount of the vouchers and other relevant records submitted by UJVN Ltd. which is given in the table below:



**Table 6.19: Summary of amount claimed as R&M Expenses vis-a-vis details submitted by Petitioner (Rs. Crore)**

Name of the Generating Station	FY 2008-09		FY 2009-10		FY 2010-11	
	Claimed by UJVN Ltd.	Amount as per the details submitted to Expert Consultant	Claimed by UJVN Ltd.	Amount as per the details submitted to Expert Consultant	Claimed by UJVN Ltd.	Amount as per the details submitted to Expert Consultant
Dhakrani	1.26	1.05	2.25	1.18	2.88	2.56
Dhalipur	1.91	1.88	3.41	2.78	4.35	4.12
Chibro	6.36	3.91	6.21	7.33	6.80	6.40
Khodri	2.43	3.03	3.29	3.37	2.42	2.63
Kulhal	1.12	1.67	2.00	1.09	2.56	1.69
Ramganga	2.12	1.93	2.37	1.81	2.54	2.19
Chilla	6.80	6.36	7.35	7.62	8.44	10.44
Maneri Bhali-I	11.48	7.65	18.36	7.96	11.55	8.03
Khatima	2.89	1.91	2.53	2.31	2.03	2.46
<b>Total</b>	<b>36.37</b>	<b>29.39</b>	<b>47.77</b>	<b>35.45</b>	<b>43.58</b>	<b>40.53</b>

Hence, it is evident from the above that the Petitioner has not submitted the complete details/information of the expenses incurred during FY 2008-09 to FY 2010-11. Further, as detailed in Chapter 4 the Commission has given numerous opportunities to the Petitioner for submitting the complete details, however, the Petitioner did not submit the complete details. One option in this case would be to consider only those R&M expense for which details have been submitted by the Petitioner but this would impact the finances of the Petitioner Company adversely. As can be seen from the Table above, the Petitioner had claimed a total expense of Rs. 127.72 Crore for the three years, however, the details furnished by it are of Rs. 105.37 Crore. It has also been observed that for some stations such as Khodri (FY 2008-09, FY 2009-10 and FY 2010-11), Kulhal (FY 2008-09), Chibro (FY 2009-10), Chilla (FY 2009-10 and FY 2010-11), Khatima (FY 2010-11) the Petitioner has submitted the details of R&M Expenses which are more than the R&M Expenses as claimed by the Petitioner based on the Audited Accounts.

Hence, at this stage it would not be appropriate to carry out the truing up of R&M expenses for these three years. Accordingly, the Commission in this Order has considered the R&M expenses as had been approved by the Commission in its previous orders for respective years. The Commission would take a final view on the same when complete information is submitted by the Petitioner. The impact of true up on this account and related impact on the capital related expenses, based on the final Report of the Expert Consultant will be considered by the Commission during the

final truing up of R&M expenses in the Petition for the next year of the Control Period. The summary of plant-wise R&M expenses as claimed by the Petitioner and as considered by the Commission for FY 2008-09, FY 2009-10 and FY 2010-11 is given in the following Table:

**Table 6.20: R&M Expenses as Considered for FY 2008-09, FY 2009-10 and FY 2010-11 (Rs. Crore)**

Name of the Generating Station	FY 2008-09		FY 2009-10		FY 2010-11	
	Claimed	Considered	Claimed	Considered	Claimed	Considered
Dhakrani	1.26	2.22	2.25	2.36	2.88	2.51
Dhalipur	1.91	3.19	3.41	3.40	4.35	3.62
Chibro	6.36	6.36	6.21	6.77	6.80	7.21
Khodri	2.43	3.19	3.29	3.39	2.42	3.62
Kulhal	1.12	1.97	2.00	2.10	2.56	2.24
Ramganga	2.12	0.85	2.37	0.90	2.54	0.97
Chilla	6.80	4.52	7.35	4.82	8.44	5.13
Maneri Bhali-I	11.48	9.34	18.36	9.95	11.55	10.60
Khatima	2.89	2.55	2.53	2.72	2.03	2.89
<b>Total</b>	<b>36.37</b>	<b>34.19</b>	<b>47.77</b>	<b>36.41</b>	<b>43.58</b>	<b>38.79</b>

#### 6.1.2.7.4 Administrative & General Expenses

The Petitioner has claimed A&G expenses for FY 2008-09, FY 2009-10 and FY 2010-11 based on the audited accounts. The Petitioner has allocated the indirect A&G expenses in the ratio of 80:10:10 on 9 LHPs, Maneri Bhali – II and SHPs respectively in accordance with the approach followed by the Commission. Further, the expenses of FY 2008-09, FY 2009-10 and FY 2010-11 include the insurance expenses and regulatory expenses and hence, they have not been allowed by the Commission separately. The Commission thus based on the audited accounts, has approved the A&G expenses for FY 2008-09, FY 2009-10 and FY 2010-11 as shown in the Table below:

**Table 6.21: A&G Expenses as Approved for FY 2008-09, FY 2009-10 and FY 2010-11 (Rs. Crore)**

Name of the Generating Station	FY 2008-09		FY 2009-10		FY 2010-11	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Dhakrani	0.38	0.38	0.50	0.50	0.56	0.56
Dhalipur	0.58	0.58	0.75	0.75	0.84	0.84
Chibro	2.06	2.06	2.32	2.32	3.06	3.06
Khodri	0.93	0.93	1.21	1.21	1.38	1.38
Kulhal	0.34	0.34	0.44	0.44	0.50	0.50
Ramganga	1.47	1.47	1.58	1.58	2.30	2.30
Chilla	1.22	1.22	1.80	1.80	2.50	2.50
Maneri Bhali-I	0.81	0.81	0.89	0.89	1.60	1.60
Khatima	0.37	0.37	0.39	0.39	0.57	0.57
<b>Total</b>	<b>8.16</b>	<b>8.16</b>	<b>9.88</b>	<b>9.88</b>	<b>13.30</b>	<b>13.30</b>

6.1.2.7.5 *Impact of 6<sup>th</sup> Pay Commission*

As discussed earlier, the Commission in this Order has allowed the impact of the 6<sup>th</sup> Pay Commission arrears only on cash basis. UJVN Ltd. in its Petition has submitted the details of the arrears paid on cash basis as shown in the Table below:

**Table 6.22: Details of arrears of 6th Pay Commission on cash basis (Rs. Crore)**

Name of the Generating Station	FY 2009-10	FY 2010-11	FY 2011-12
Dhakrani	2.58	1.56	1.53
Dhalipur	0.73	0.47	0.43
Chibro	2.01	2.18	2.17
Khodri	1.65	1.37	1.06
Kulhal	0.43	0.27	0.25
Ramganga	2.68	1.48	2.53
Chilla	2.60	2.06	1.60
Maneri Bhali-I	2.04	1.17	1.57
Khatima	0.98	0.72	0.64
<b>Total</b>	<b>15.68</b>	<b>11.27</b>	<b>11.78</b>

The Commission for the purpose of truing up has additionally considered the impact of 6<sup>th</sup> Pay Commission on cash basis in the respective years as submitted by UJVN Ltd.

6.1.2.7.6 *Cost of Consumption in colonies/dam/barrages*

The Petitioner in its Petition submitted that the cost of power supplies to employees of the Petitioner residing in plant colonies is borne by the Petitioner. The Petitioner submitted that the same has been approved by the Commission in its previous tariff orders. The Petitioner submitted that the Commission, in its Tariff Order dated April 4, 2012 had directed the Petitioner to segregate the consumption of employees of other departments, offices, etc. and also install the meters in all the un-metered connections including connections given to its employees. The Petitioner was also directed not to include the consumption of consumers other than its departmental employees, while claiming cost of colony consumption in future.

The Petitioner submitted that the process of separation of employees with other consumers is already in progress. The Petitioner, in its Petition, has submitted that the colony consumption for FY 2008-09, FY 2009-10 and FY 2010-11 is 29.27 MU, 37.52 MU, and 36.64 MU respectively. The Petitioner further, submitted that for the purpose of computing the cost of colony consumption it

has taken the Tariff for each financial year as proposed in the Present Tariff Petition for Truing Up for corresponding financial years.

In the absence of the proper segregation of the employees with other consumers, the Commission for the purpose of computing the cost of colony consumption has considered the colony consumption for the 9 LHPs as approved in the Tariff Order for respective financial year, i.e. 20.11 MU for FY 2008-09 and FY 2009-10 and 29.27 MU for FY 2010-11. The Commission has, accordingly, calculated the cost of colony consumption based on Primary Energy Rate applicable for FY 2008-09, FY 2009-10 and FY 2010-11. The Commission also observed that the supply to the colonies of Dhakrani, Chibro, Khodri and Kulhal are met through Dhakrani Hydro Station and, therefore, for computing the cost of colony consumption for these LHPs the primary energy rate of Dhakrani LHP has been considered. Accordingly, the cost of colony consumption for 9 LHPs is depicted in the Table given below:

**Table 6.23: Cost of Colony Consumption approved for FY 2008-09, FY 2009-10 and FY 2010-11**

Name of the Generating Station	FY 2008-09			FY 2009-10			FY 2010-11		
	Colony Consumption claimed (MU)	Colony Consumption Approved (MU)	Cost of Colony Consumption (Rs. Crore)	Colony Consumption claimed (MU)	Colony Consumption Approved (MU)	Cost of Colony Consumption (Rs. Crore)	Colony Consumption claimed (MU)	Colony Consumption Approved (MU)	Cost of Colony Consumption (Rs. Crore)
Dhakrani	13.55	1.10	0.05	15.81	1.10	0.07	15.85	1.08	0.07
Dhalipur	0.54	0.87	0.04	0.55	0.87	0.06	0.52	0.54	0.04
Chibro	0.00	4.31	0.18	0.00	4.31	0.29	0.00	7.67	0.50
Khodri	0.00	2.14	0.09	0.00	2.14	0.15	0.00	3.84	0.25
Kulhal	0.00	1.11	0.05	0.00	1.11	0.08	0.05	0.96	0.06
Ramganga	7.84	2.94	0.13	10.95	2.94	0.18	9.77	7.84	0.50
Chilla	2.78	3.69	0.14	3.05	3.69	0.17	2.31	2.78	0.15
Maneri Bhali-I	2.70	2.04	0.13	5.59	2.04	0.16	6.80	2.70	0.22
Khatima	1.86	1.91	0.07	1.57	1.91	0.10	1.35	1.86	0.10
<b>Total</b>	<b>29.27</b>	<b>20.11</b>	<b>0.87</b>	<b>37.52</b>	<b>20.11</b>	<b>1.26</b>	<b>36.64</b>	<b>29.27</b>	<b>1.89</b>

Further, UJVN Ltd. is maintaining distribution in the suburbs in the vicinity of its plants colonies and supplying power to sundry consumers in these areas for not only domestic usage but also commercial/industrial usage. However, as per the Section 12 of the Electricity Act, 2003, UJVN Ltd. is not authorised to undertake the distribution of electricity, in the absence of Distribution License and the distribution of electricity carried out by it is ultra vires to the provisions of the Act. The Commission in its earlier Orders has directed UJVN Ltd to follow up the matter with UPCL

and handover the business of distribution of power to UPCL. As regard the same, the Commission asked Petitioner to submit the current status, steps being taken up and its action plan in this regard. The Petitioner in this regard, submitted that the proposed action plan for handing over the business of distribution of power to UPCL is under process and shall be submitted to the Commission after finalisation.

**The Commission in this regard hereby directs the Petitioner, to hand over all of its distribution business to UPCL within six months of this Order. The Commission also directs UPCL to take charge of the distribution business carried out by UJVN Ltd., within six months of this Order. The Petitioner is further, directed to submit a detailed action plan for the same within 30 days of this Order. The Petitioner is also required to submit the bi-monthly reports for complying with the above directions of the Commission. It is further clarified that the non-compliance of the above direction of the Commission within the specified timelines would attract action under Section 142 of the Electricity Act, 2003.**

In addition to above, the Petitioner has also considered the cost of concessional supplies to past and present employees residing in areas outside the colonies. The Petitioner submitted that the cost of concessional power supply to such employee is determined by the Commission on the basis of the prevalent demand tariff rate under category RTS-1 added with duty to State Govt. and fixed charges of Rs. 20/connection/month. The Petitioner submitted that for the purpose of True up for FY 2008-09, FY 2009-10 and FY 2010-11, it has considered the same amount which was approved by the Commission in the Tariff Order of respective financial year.

The Commission in the earlier Tariff Orders for the respective financial years while computing the cost of concessional supply to past and present employees residing in areas outside the colonies had considered the total number of employees as 1441, which is an estimated number. The Commission in its data gaps asked the Petitioner to submit the actual number of past and present employees residing in areas outside the colonies. The Petitioner in its reply submitted that the actual number of past and present employees residing in areas outside the colonies for FY 2008-09, FY 2009-10 and FY 2010-11 as 377, 348 and 405 respectively. The Commission has, accordingly, considering the actual number of past and present employees residing in areas outside the colonies and the prevalent retail tariff and fixed charge for the respective financial year in accordance with

the rate under category RTS-1 has approved the cost of concessional supply to past and present employees residing in areas outside the colonies as shown in the Table below:

**Table 6.24: Cost of Concessional supply to past and present employees residing in areas outside the colonies approved for FY 2008-09, FY 2009-10 and FY 2010-11 (Rs. Crore)**

Particulars	FY 2008-09	FY 2009-10	FY 2010-11
Cost of Concessional Supply	0.09	0.09	0.11

The Commission has further, allocated the above cost to each of the 9 LHPs in proportion of the installed capacity of each station.

Based on the above, the Commission has approved the total O&M expenses for FY 2008-09, FY 2009-10 and FY 2010-11 as shown in the Tables below:

**Table 6.25: O&M Expenses for Nine Old LHPs for FY 2008-09, FY 2009-10 and FY 2010-11 as approved by the Commission (Rs. Crore)**

Name of the generating Station	FY 2008-09		FY 2009-10		FY 2010-11	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Dhakrani	5.74	5.79	12.53	10.11	11.59	9.50
Dhalipur	7.50	8.54	12.10	11.88	13.24	12.23
Chibro	21.99	21.11	30.22	30.03	32.27	31.86
Khodri	11.66	11.97	16.29	16.02	17.26	18.06
Kulhal	4.40	5.15	7.09	7.13	7.77	7.34
Ramganga	15.21	11.93	22.72	19.11	21.18	18.36
Chilla	18.32	15.41	25.84	22.72	29.14	25.06
Maneri Bhali-I	20.84	18.21	32.33	23.18	25.68	23.97
Khatima	7.46	6.92	9.75	9.75	9.67	10.31
<b>Total</b>	<b>113.11</b>	<b>105.04</b>	<b>168.87</b>	<b>149.95</b>	<b>167.80</b>	<b>156.68</b>

#### 6.1.2.8 O&M Expenses for Maneri Bhali-II

As discussed earlier, the Commission has not considered the revision in capital cost of MB-II and the additional capitalisation after CoD, the Commission in this Order has not trued up the O&M Expenses for Maneri Bhali – II.

#### 6.1.2.9 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 Regulations on normative levels. The rate of interest

considered by the Petitioner for computing interest on working capital for FY 2008-09, FY 2009-10 and FY 2010-11 has been considered as 10.25%, 12.25% and 11.75% respectively.

The components of working capital as per UERC Tariff Regulations, 2004 are as follows:

- O&M expense at one month of projected expenses;
- Maintenance spares @ 1% of project cost escalated @ 6% per annum from the date of commercial operation (in case of UJVN Ltd.'s stations transferred from UPJVNL, historical cost shall be the cost as on the date of unbundling of UPSEB to be escalated @ 6% p.a., thereafter); and
- Receivables at two months of revenue from sale of electricity.

#### *6.1.2.9.1 One Month O&M Expenses*

The annual O&M expenses, as approved by the Commission are Rs. 105.04 crore, Rs. 149.95 crore, Rs. 156.68 Crore respectively for FY 2008-09, FY 2009-10 and FY 2010-11. Based on the approved O&M expenses, one month's O&M expenses works out to Rs. 8.75 Crore, Rs. 12.50 Crore and Rs. 13.06 Crore respectively for FY 2008-09, FY 2009-10 and FY 2010-11. The same has been considered by the Commission for working out the working capital requirement.

#### *6.1.2.9.2 Maintenance Spares*

The Commission has considered the maintenance spares in accordance with Tariff Regulations of the Commission. For old assets, the Commission has considered maintenance spares @ 1% of the historical cost transferred from UPJVNL as on January 14, 2000 and escalated @ 6% per annum, thereafter. For assets capitalised during subsequent years, maintenance spares have been considered @ 1% of the additional capitalisation and escalated by 6% per annum. The value of maintenance spares, thus, works out to Rs. 8.46 Crore, Rs. 9.03 Crore and Rs. 9.99 Crore respectively for FY 2008-09, FY 2009-10 and FY 2010-11.

#### *6.1.2.9.3 Receivables*

The Regulations envisage receivables equivalent to two months of fixed charges for sale of electricity as an allowable component of working capital. Annual Fixed Charges (AFC) for the Petitioner include 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 approved AFC of Rs. 135.51 Crore, Rs. 175.22 Crore, Rs. 188.39 Crore respectively for FY 2008-09, FY 2009-10 and FY 2010-11

As regards the interest on working capital, Regulation 27(2) of the UERC Tariff Regulations, 2004 stipulates:

*“Rate of interest on working capital shall be the short-term Prime Lending Rate of State Bank of India as on 1.4.2004 or on 1st April of the year in which the generating unit/station is declared under commercial operation, whichever is later. The interest on working capital shall be payable on normative basis notwithstanding that the generating company has not taken working capital loan from any outside agency.”*

Hence, for FY 2008-09, the rate of interest considered for truing up Interest on Working Capital is the prevailing SBI prime lending rate of 10.25% as on April 1, 2004. The Commission, in its Tariff Order dated October 21, 2009, accommodating the request of the Petitioner, while estimating the interest on working capital, had considered the prevailing PLR, so as to effectively capture the existing market conditions. The Commission has allowed the same rate of interest as approved in the respective Tariff Order for FY 2009-10 and FY 2010-11, i.e. 12.25% for FY 2009-10 and 11.75% for FY 2010-11. Accordingly, the Commission has determined the Interest on working Capital for FY 2008-09, FY 2009-10 and FY 2010-11 as shown in the Tables below:

**Table 6.26: Interest on working Capital for Nine LHPs for FY 2008-09 (Rs. Crore)**

New Generating Stations	Approved				Interest on Working Capital	
	1 month O&M Expenses	1% Maintenance Spares	2 months Receivables	Total Working Capital	Claimed	Approved
Dhakrani	0.48	0.22	1.08	1.77	0.19	0.18
Dhalipur	0.71	0.35	1.61	2.67	0.25	0.27
Chibro	1.76	1.47	4.12	7.34	0.81	0.75
Khodri	1.00	1.25	2.83	5.07	0.53	0.52
Kulhal	0.43	0.30	1.08	1.80	0.17	0.18
Ramganga	0.99	0.83	2.25	4.07	0.53	0.42
Chilla	1.28	2.13	4.11	7.52	0.87	0.77
M Bhali I	1.52	1.80	4.32	7.64	0.86	0.78
Khatima	0.58	0.12	1.20	1.90	0.22	0.19
<b>Total</b>	<b>8.75</b>	<b>8.46</b>	<b>22.59</b>	<b>39.80</b>	<b>4.43</b>	<b>4.08</b>



**Table 6.27: Interest on working Capital for Nine LHPs for FY 2009-10 (Rs. Crore)**

New Generating Stations	Approved				Interest on Working Capital	
	1 month O&M Expenses	1% Maintenance Spares	2 months Receivables	Total Working Capital	Claimed	Approved
Dhakrani	0.84	0.23	1.77	2.84	0.44	0.35
Dhalipur	0.99	0.38	2.12	3.49	0.45	0.43
Chibro	2.50	1.57	5.35	9.43	1.24	1.15
Khodri	1.34	1.35	3.46	6.15	0.81	0.75
Kulhal	0.59	0.31	1.35	2.26	0.29	0.28
Ramganga	1.59	0.88	3.21	5.69	0.88	0.70
Chilla	1.89	2.26	5.20	9.35	1.30	1.15
M Bhali I	1.93	1.92	5.09	8.94	1.41	1.10
Khatima	0.81	0.13	1.64	2.59	0.33	0.32
<b>Total</b>	<b>12.50</b>	<b>9.03</b>	<b>29.20</b>	<b>50.73</b>	<b>7.15</b>	<b>6.21</b>

**Table 6.28: Interest on working Capital for Nine LHPs for FY 2010-11 (Rs. Crore)**

New Generating Stations	Approved				Interest on Working Capital	
	1 month O&M Expenses	1% Maintenance Spares	2 months Receivables	Total Working Capital	Claimed	Approved
Dhakrani	0.79	0.25	1.70	2.74	0.39	0.32
Dhalipur	1.02	0.40	2.22	3.65	0.47	0.43
Chibro	2.65	1.67	5.87	10.20	1.27	1.20
Khodri	1.50	1.44	3.97	6.91	0.82	0.81
Kulhal	0.61	0.34	1.38	2.32	0.30	0.27
Ramganga	1.53	0.94	3.27	5.73	0.80	0.67
Chilla	2.09	2.58	5.79	10.46	1.41	1.23
M Bhali I	2.00	2.24	5.43	9.67	1.23	1.14
Khatima	0.86	0.14	1.77	2.77	0.32	0.33
<b>Total</b>	<b>13.06</b>	<b>9.99</b>	<b>31.40</b>	<b>54.45</b>	<b>7.01</b>	<b>6.40</b>

*B. Maneri Bhali-II*

As discussed earlier, the Commission has not considered the revision in capital cost of MB-II and the additional capitalisation after CoD, the Commission in this Order has not trued up the Interest on Working Capital for Maneri Bhali – II.

**6.1.2.10 True Up of Annual Fixed Charges for Nine LHPs for FY 2008-09, FY 2009-10 and FY 2010-11 for Nine LHPs**

Based on the above analysis, the Commission has worked out the approved figures of Gross AFC for FY 2008-09, FY 2009-10 and FY 2010-11 after truing up and has calculated the net impact to

be carried forward with reference to the AFC approved in the previous Order. The net impact of true up of expenses has been apportioned between UPCL and HPSEB on the basis of their capacity shares in the Plants. The summary of Gross AFC of FY 2008-09, FY 2009-10 and FY 2010-11 is shown in the Tables below:

**Table 6.29: True up of Gross AFC for FY 2008-09 (Rs. Crore)**

Station	Approved in Provisional True Up FY 2008-09	Claimed by UJVN Ltd. based on Audited Accounts	Approved by Commission in this Order	True Up (Excess/shortfall)	True up for UPCL	True Up for HPSEB
Dhakrani	6.61	6.72	6.72	0.11	0.08	0.03
Dhalipur	9.82	9.03	10.01	0.19	0.15	0.05
Chibro	25.87	27.49	26.36	0.49	0.37	0.12
Khodri	17.71	17.85	17.91	0.20	0.15	0.05
Kulhal	6.60	5.97	6.69	0.09	0.07	0.02
Ramganga	14.73	18.34	14.85	0.12	0.12	-
Chilla	25.85	29.21	25.85	0.00	0.00	-
MB-I	26.68	29.29	26.58	-0.10	-0.10	-
Khatima	7.61	8.13	7.54	-0.07	-0.07	-
<b>Total</b>	<b>141.48</b>	<b>152.04</b>	<b>142.50</b>	<b>1.02</b>	<b>0.75</b>	<b>0.26</b>

**Table 6.30: True up of Gross AFC for FY 2009-10 (Rs. Crore)**

Particulars	Approved in Tariff Order FY 2009-10	Claimed by UJVNL based on Audited Accounts	Approved by Commission in this Order	True Up (Excess/shortfall)	True up for UPCL	True Up for HPSEB
Dhakrani	8.81	13.78	11.22	2.41	1.81	0.60
Dhalipur	13.12	13.84	13.52	0.40	0.30	0.10
Chibro	33.40	36.36	35.89	2.49	1.87	0.62
Khodri	21.36	23.23	22.68	1.32	0.99	0.33
Kulhal	8.36	8.79	8.57	0.21	0.17	0.04
Ramganga	18.27	26.25	22.36	4.09	4.09	-
Chilla	30.94	37.14	33.52	2.58	2.58	-
MB-I	30.69	41.48	31.99	1.30	1.30	-
Khatima	10.12	10.55	10.52	0.40	0.40	-
<b>Total</b>	<b>175.07</b>	<b>211.42</b>	<b>190.26</b>	<b>15.19</b>	<b>13.50</b>	<b>1.70</b>

**Table 6.31: True up of Gross AFC for FY 2010-11 (Rs. Crore)**

Particulars	Approved in Tariff Order FY 2010-11	Claimed by UJVNL based on Audited Accounts	Approved by Commission in this Order	True Up (Excess/shortfall)	True up for UPCL	True Up for HPSEB
Dhakrani	9.14	12.83	10.59	1.45	1.09	0.36
Dhalipur	13.59	15.06	13.88	0.29	0.22	0.07
Chibro	35.00	38.65	37.89	2.89	2.17	0.72
Khodri	22.33	24.58	25.06	2.73	2.05	0.68
Kulhal	8.43	9.32	8.57	0.14	0.11	0.03
Ramganga	19.07	24.70	21.61	2.54	2.54	
Chilla	31.78	42.12	36.61	4.83	4.83	
MB-I	31.75	36.33	33.73	1.98	1.98	
Khatima	10.49	10.47	11.08	0.59	0.59	
<b>Total</b>	<b>181.57</b>	<b>214.06</b>	<b>199.03</b>	<b>17.46</b>	<b>15.59</b>	<b>1.87</b>

**6.1.2.11 Non-Tariff Income**

The Petitioner has submitted that the non-tariff income earned by it has been deducted from the Annual Fixed Charges to arrive at net Annual Fixed Charges for each year. The Petitioner submitted the details of the Non-Tariff Income for 9 LHPs for FY 2008-09, FY 2009-10 and FY 2010-11 as shown in the Table below:

**Table 6.32: Non-Tariff Income for Nine LHPs for FY 2008-09, FY 2009-10 and FY 2010-11 (Rs. Crore)**

Name of the Generating Station	FY 2008-09	FY 2009-10	FY 2010-11
Dhakrani	0.27	0.61	0.41
Dhalipur	0.36	0.81	0.54
Chibro	1.66	3.77	2.65
Khodri	0.92	1.91	1.27
Kulhal	0.21	0.47	0.31
Ramganga	1.37	3.08	2.01
Chilla	1.21	2.29	1.85
Maneri Bhali-I	0.64	1.45	1.14
Khatima	0.35	0.66	0.47
<b>Total</b>	<b>6.99</b>	<b>15.04</b>	<b>10.64</b>

As regards the treatment of non-tariff income, Regulation 21 (2) of the Tariff Regulations stipulates:

*"Income, other than that through charges permitted by the Commission, and involving utilisation of the generating company's assets may be suitably accounted for by the Commission while determining the tariff."*

Accordingly, the Commission has considered the plant-wise non-tariff income for truing up purposes. Further, as discussed in Commission's Order dated October 21, 2009, that the above 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 above said non-tariff income for adjustment in truing up of UPCL's share of AFC.

The summary of the truing up for FY 2008-09, FY 2009-10 and FY 2010-11 are shown in the Tables below:

**Table 6.33: Summary of Truing up for FY 2008-09 (Rs. Crore)**

Plants	UPCL			HPSEB	Total
	Expenses to be trued up for UPCL	Non-tariff income considered by Commission	Net Truing up for UPCL	Expenses to be trued up for HPSEB	Total Expenses to be trued up
Dhakrani	0.08	0.27	0.18	(0.03)	0.16
Dhalipur	0.15	0.36	0.21	(0.05)	0.16
Chibro	0.37	1.66	1.30	(0.12)	1.18
Khodri	0.15	0.92	0.77	(0.05)	0.73
Kulhal	0.07	0.21	0.14	(0.02)	0.12
Ramganga	0.12	1.37	1.25	0.00	1.25
Chilla	0.00	1.21	1.21	0.00	1.21
M Bhali I	-0.10	0.64	0.74	0.00	0.74
Khatima	-0.07	0.35	0.42	0.00	0.42
<b>Total</b>	<b>0.75</b>	<b>6.99</b>	<b>6.23</b>	<b>(0.26)</b>	<b>5.97</b>

**Table 6.34: Summary of Truing up for FY 2009-10 (Rs. Crore)**

Plants	UPCL			HPSEB	Total
	Expenses to be trued up for UPCL	Non-tariff income considered by Commission	Net Truing up for UPCL	Expenses to be trued up for HPSEB	Total Expenses to be trued up
Dhakrani	1.81	0.61	(1.20)	(0.60)	(1.80)
Dhalipur	0.30	0.81	0.51	(0.10)	0.41
Chibro	1.87	3.77	1.90	(0.62)	1.28
Khodri	0.99	1.91	0.92	(0.33)	0.59
Kulhal	0.17	0.47	0.30	(0.04)	0.26
Ramganga	4.09	3.08	(1.01)	0.00	(1.01)
Chilla	2.58	2.29	(0.29)	0.00	(0.29)
M Bhali I	1.30	1.45	0.15	0.00	0.15
Khatima	0.40	0.66	0.26	0.00	0.26
<b>Total</b>	<b>13.50</b>	<b>15.04</b>	<b>1.55</b>	<b>(1.70)</b>	<b>(0.15)</b>

**Table 6.35: Summary of Truing up for FY 2010-11 (Rs. Crore)**

Plants	UPCL			HPSEB	Total
	Expenses to be trued up for UPCL	Non-tariff income considered by Commission	Net Truing up for UPCL	Expenses to be trued up for HPSEB	Total Expenses to be trued up
Dhakrani	1.09	0.41	(0.68)	(0.36)	(1.04)
Dhalipur	0.22	0.54	0.32	(0.07)	0.25
Chibro	2.17	2.65	0.48	(0.72)	(0.24)
Khodri	2.05	1.27	(0.78)	(0.68)	(1.46)
Kulhal	0.11	0.31	0.20	(0.03)	0.18
Ramganga	2.54	2.01	(0.53)	0.00	(0.53)
Chilla	4.83	1.85	(2.99)	0.00	(2.99)
M Bhali I	1.98	1.14	(0.84)	0.00	(0.84)
Khatima	0.59	0.47	(0.12)	0.00	(0.12)
<b>Total</b>	<b>15.59</b>	<b>10.64</b>	<b>(4.95)</b>	<b>(1.87)</b>	<b>(6.82)</b>

**6.1.2.12 Net Impact on Account of Truing up of FY 2008-09 to FY 2010-11**

The Commission has Trued-up the Surplus/(Gap) for 9 LHPs pertaining to FY 2008-09, FY 2009-10 and FY 2010-11 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 has been summarized in the Table below:

**Table 6.36: Summary of net amount Trued up by the Commission for FY 2008-09, FY 2009-10 and FY 2010-11 (Rs. crore)**

Financial Year	Net Amount Trued up- Surplus/(Gap)		
	UPCL	HPSEB	Total
FY 2008-09	6.23	(0.26)	5.97
FY 2009-10	1.55	(1.70)	(0.15)
FY 2010-11	(4.95)	(1.87)	(6.82)
<b>Total</b>	<b>2.83</b>	<b>(3.83)</b>	<b>(1.00)</b>

The Commission allows UJVN Ltd. to adjust the above approved amount on account of Truing up of FY 2008-09, FY 2009-10 and FY 2010-11, from UPCL and HPSEB in 11 equal monthly installments commencing from May 2013 to March 2014.

**6.2 MYT for the first Control Period from FY 2013-14 to FY 2015-16****6.2.1 Physical Parameters****6.2.1.1 Design Energy and Saleable Primary Energy**

### A. Old Nine Large Generating Stations

As discussed in detail in Chapter 5 and for reasons spelt out therein, 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 and capitalised. Thereafter, for ascertaining the saleable primary energy, normative auxiliary consumption including transformation losses as specified in the UERC Tariff Regulations, 2011 is deducted from the Design Energy to arrive at the saleable primary energy for the first Control Period. The design energy and saleable primary energy provisionally approved by the Commission is shown in the Table below.

**Table 6.37: Design Energy and Saleable Primary Energy approved for first Control Period from FY 2013-14 to FY 2015-16 (MU)**

Station	Design Energy for the Control Period				Auxiliary Consumption (including transformation losses)		Saleable Primary Energy
	Approach I of the Petitioner	Approach II of the Petitioner	Proposed	Approved	%	MU	MU
Dhakrani	122.50	119.38	119.38	156.88	0.70%	1.10	155.78
Dhalipur	190.70	182.23	182.23	192.00	0.70%	1.34	190.66
Chibro	586.00	628.18	628.18	750.00	1.20%	9.00	741.00
Khodri	311.20	301.15	301.15	345.00	1.00%	3.45	341.55
Kulhal	123.94	127.55	127.55	153.91	0.70%	1.08	152.83
Ramganga	256.70	-	256.70	311.00	0.70%	2.18	308.82
Maneri Bhali - I	370.61	394.05	394.05	671.29	1.00%	6.71	664.58
Chilla	778.90	718.98	718.98	395.00	0.70%	2.77	392.24
Khatima	233.70	152.57	152.57	194.05	0.70%	1.36	192.69
<b>Total</b>			<b>2880.79</b>	<b>3169.13</b>		<b>28.98</b>	<b>3140.15</b>

Recognising the fact, that most of the 9 LHP's are old & have outlived their lives, the Commission has not considered the Original Design Energy for calculation of energy charge rate (ECR) as it would have resulted in under-recovery of the AFC of the Petitioner. The Commission has accordingly relaxed the requirement of the UERC Tariff Regulations, 2011 for calculation of ECR. The ECR will be calculated based on the approved saleable primary energy. 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. Further, recovery from Energy Charges shall in no case exceed 50% of the Annual Fixed Cost upto the Original Design Energy.

*B. Maneri Bhali-II*

With regard to the design energy UJVN Ltd. submitted that due to barrage level restriction and improper evacuation of water through TRC, presently the capacity of the plant is restricted to 280 MW. UJVN Ltd. further submitted that due to technical reasons and availability of reduced quantity of water, which is beyond the control of the Petitioner, the net generation is less than the expected generation. UJVN Ltd. in its MYT Petition has proposed that the design energy for the station be considered as the average of billed energy during FY 2008-09 to FY 2011-12.

This issue has already been discussed by the Commission in Para 6.1.1.1.B, and also in Chapter 5 of the Order, the Commission at this stage approves the original design energy as per the DPR of the station as 1566.10 MU and saleable primary energy after deducting the normative auxiliary consumption including transformation losses of 1% as 1550.44 MU.

**6.2.2 Financial Parameters**

**6.2.2.1 Apportionment of Common Expenses**

The Commission, in line with the proposal of the Petitioner, in its previous Tariff Orders, had been allocating common/indirect expenses on 9 LHPs, MB-II and SHPs in the ratio of 80:10:10.

As discussed in True-up section, the Commission for the purpose of this Tariff Order has again adopted the same approach followed by it in previous Tariff Orders for apportionment of common expenses for projecting the expenses for the first Control Period from FY 2013-14 to FY 2015-16.

**6.2.2.2 Capital Cost**

*A. Old Nine Generating Stations*

As detailed earlier in Truing up section, pending the 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 January 14, 2000, as Rs. 506.17 Crore. Since, the Transfer

Scheme is yet to be finalized, the Commission for the purposes of tariff determination of first Control Period from FY 2013-14 to FY 2015-16 is considering the opening GFA of nine old LHPs, as on January 14, 2000, as Rs. 506.17 Crore only as per the details given below:

**Table 6.38: Approved Capital Cost (Rs Crore)**

Name Of the Generating Station	Claimed	Approved
Dhakrani	12.4	12.4
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
Maneri Bhali-I	111.93	111.93
Khatima	7.19	7.19
<b>Total</b>	<b>506.17</b>	<b>506.17</b>

#### B. Maneri Bhali-II

The issues related to Capital Cost of MB-II generating station as on CoD have been discussed in detail in Chapter 4 and in Truing up section of this Chapter. The Commission for the reasons discussed in the above mentioned sections of this Order is of the view that there is no merit in re-determining the capital cost as on CoD and shall take a view on this issue while approving the Capital Cost of MB-II Project as on CoD once the Commission completes its prudence check on Capital Cost determination of MB-II after submission of the relevant information/details by the Petitioner. The Commission at this stage has, therefore, considered the already approved capital cost of Rs. 1741.72 Crore and financing as on CoD, for determining the tariff of MB-II for first Control Period.

**Table 6.39: Approved Capital Cost and Financing for MB-II as on CoD (Rs Crore)**

Name of the Generating Stations	Claimed	Approved
Capital Cost	1958.13	1741.72
Means of Financing		
PFC Loan	1200	1200
Govt. Loan	0	0
PFC Additional Loan	0	0
Unpaid liability	142.49	0
Guarantee Fee Payable	18.81	0
Total debts	1361.3	1200
Equity by UJVN Ltd.	596.83	541.72
<b>Total Loan and Equity</b>	<b>1958.13</b>	<b>1741.72</b>



### **6.2.2.3 Additional Capitalisation**

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

The Petitioner in addition to the opening GFA of Rs. 506.17 Crore as on January 14, 2000, as approved by the Commission in the previous Tariff Order dated April 4, 2012, has claimed additional capitalisation of Rs. 83.24 Crore for the period 01.04.2001 to 31.03.2012.

As detailed earlier in the Truing up section and in Chapter 4 of this Order, the Commission is not carrying out the true up of R&M expenses in these proceedings, and accordingly, no adjustment of expenses of capital nature booked under R&M expenses is being made in additional capitalisation for respective years. Hence, the Commission for the purpose of Tariff Computation for first Control Period has considered the additional capitalisation till FY 2011-12 as submitted by the Petitioner based on the audited accounts. However, the necessary correction, if any, will be carried out based on the Expert Consultant's Final Report.

Further, the Commission in Chapter 4 of this Tariff Order has not carried out final truing up of additional capitalisation for FY 2008-09 to FY 2010-11.

Further, with regard to the additional capitalisation during the first Control Period, although UJVN Ltd. in its Business Plan has proposed the capitalisation for RMU works for its hydro generating Stations, it has not claimed such capitalisation while computing the tariff for the first Control Period. The Petitioner submitted that as the Commission has accepted only the actual capital cost incurred / accrued in its earlier tariff orders it has not claimed the additional capitalisation for first Control Period from FY 2013-14 to FY 2015-16. Accordingly, the Commission while computing the Tariff for first Control Period has not considered any capitalisation during first Control Period. However, the Commission may review the same during the first APR of the Control Period based on their submissions after prudence check.

Accordingly, for determining the Tariff for first Control Period from FY 2013-14 to FY 2015-16, and as discussed in Chapter 4 of this Order, the Commission has provisionally considered the value of year-wise and class-wise actual additional capitalisation only till FY 2011-12 as submitted by the Petitioner.

Based on the submissions made by the Petitioner the opening GFA including additional capitalisation as considered by the Commission for Tariff Determination for first Control Period is summarized in the Table below:

**Table 6.40: Opening GFA as considered by the Commission (Rs. Crore)**

Stations	Opening GFA
Dhakrani	14.43
Dhalipur	23.44
Chibro	97.20
Khodri	84.31
Kulhal	19.32
Ramganga	53.63
Chilla	154.55
Maneri Bhali-I	134.32
Khatima	8.21
<b>Total</b>	<b>589.40</b>

*B. Maneri Bhali-II*

As regards MB-II UJVN Ltd submitted the actual capitalisation from CoD till FY 2011-12 based on the audited accounts.

However, as the Commission is yet to approve the final Capital Cost as on CoD for reasons mentioned in Chapter 4 of this Order and in para 6.1.2.2 of this Chapter, the Commission has not considered any additional capitalisation after the CoD of the project.

#### **6.2.2.4 Depreciation**

*A. Old Nine Large Generating Stations*

Regulation 29 of the UERC Tariff Regulations, 2011 stipulates 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 submitted that UERC Tariff Regulations, 2011 are applicable from April 1, 2013. Hence, till FY 2012-13, Petitioner has calculated depreciation based on Tariff Regulations 2004. The Petitioner submitted that in order to calculate Depreciation from FY 2013-14 to FY 2015-16, the total assets have been divided into two parts:

- (i) **Depreciation on opening GFA as on January 2000:** The Petitioner submitted that due to unavailability of asset-wise classification of GFA, it has considered the same weighted average rate, as approved by Commission in the previous orders.

- (ii) **Depreciation on Actual Additional Capitalisation:** The Petitioner submitted that in accordance with the directions of Commission, it has claimed depreciation on actual Additional Capitalisation only.

The Petitioner submitted that the UERC Tariff Regulations, 2011 allows recovery of major portion of Depreciation in the initial 12 years and the Commission has approved depreciation till FY 2007-08 based on weighted average rate of 2.66% on Additional Capitalisation. From FY 2008-09 onwards, the Petitioner has claimed depreciation based on relevant category of asset. Hence, depreciation recovered till 2007-08 has been divided among relevant category of asset in proportion to the percentage of gross value of such category of asset in the total Additional Capitalisation.

The Petitioner in its Petition although submitted that it has claimed the depreciation on the opening GFA as on January, 2000 and on the additional capitalisation till FY 2011-12, however, it has been observed that while computing the total depreciation for the first Control Period, UJVN Ltd. erroneously has not included the depreciation on the opening GFA.

The Commission in accordance with Regulation 29 of UERC Tariff Regulations, 2011 has computed the depreciation for first Control Period as detailed below:

- (i) **Depreciation on Opening GFA as on January, 2000:** All the 9 LHPs are over 12 years old and 6 out of 9 stations have been depreciated 90% of the original cost. Depreciation allowed till date for Khodri, Chilla and MB-I LHPs have not reached 90%, the Commission has computed the accumulated depreciation on opening GFA till 1 April, 2013 to determine the remaining depreciable value for each LHP. The Commission for computing the accumulated depreciation till 1 April, 2013 has considered the depreciation rate of 2.38% as considered in previous tariff orders. Further, in accordance with UERC Tariff Regulation, 2011 and considering the life of 35 years from the COD, the Commission has equally divided the remaining depreciable value as on 1 April, 2013 on the remaining useful life of each LHP.
- (ii) **Depreciation on additional capitalisation:** In accordance with the UERC Tariff Regulations, 2011 the Commission has computed the balance depreciable value for asstes added in each year after January 2000 by deducting the cumulative

depreciation as admitted by the Commission upto 31.3.2013 from the gross depreciable value of the assets. The Commission further, computed the difference between the cumulative depreciation as on 31 March, 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.

The depreciation expenses will be trued up in accordance with the provisions of UERC Tariff Regulations, 2011 once the final truing up for all the years prior to the first Control Period is carried out. The summary of Depreciation Charges for the Control Period FY 2013-14 to FY 2015-16 as approved by the Commission is shown in the Table below:

**Table 6.41: Depreciation charges as approved by the Commission for 9 LHPs for first Control Period (Rs. Crore)**

Stations	FY 2013-14				FY 2014-15				FY 2015-16			
	Claimed	Approved			Claimed	Approved			Claimed	Approved		
		On Opening GFA	On Additional Capitalization	Total		On Opening GFA	On Additional Capitalization	Total		On Opening GFA	On Additional Capitalization	Total
Dhakrani	0.11	0.00	0.15	0.15	0.11	0.00	0.15	0.15	0.11	0.00	0.14	0.14
Dhalipur	0.17	0.00	0.23	0.23	0.17	0.00	0.22	0.22	0.16	0.00	0.21	0.21
Chibro	0.54	0.00	0.61	0.61	0.50	0.00	0.57	0.57	0.45	0.00	0.54	0.54
Khodri	0.58	0.59	0.70	1.29	0.58	0.59	0.68	1.28	0.52	0.59	0.66	1.25
Kulhal	0.10	0.00	0.14	0.14	0.10	0.00	0.13	0.13	0.09	0.00	0.12	0.12
Ramganga	0.22	0.00	0.24	0.24	0.18	0.00	0.24	0.24	0.17	0.00	0.22	0.22
Chilla	1.60	5.36	2.23	7.59	1.60	5.36	2.22	7.59	1.56	0.00	2.02	2.02
Maneri Bhali-I	0.87	2.58	0.96	3.54	0.87	2.58	0.96	3.54	0.85	2.58	0.95	3.53
Khatima	0.06	0.00	0.07	0.07	0.05	0.00	0.06	0.06	0.05	0.00	0.06	0.06
<b>Total</b>	<b>4.25</b>	<b>8.53</b>	<b>5.33</b>	<b>13.86</b>	<b>4.16</b>	<b>8.53</b>	<b>5.24</b>	<b>13.77</b>	<b>3.96</b>	<b>3.17</b>	<b>4.92</b>	<b>8.09</b>

#### B. Maneri Bhali - II

As regards the depreciation for MB-II for first Control Period, the Commission 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 31.3.2013 from the

gross depreciable value of the assets. The Commission further, computed the difference between the cumulative depreciation as on 31 March, 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 from CoD of MB-II. Further, as UERC Tariff Regulation does not provide for Advance Against Depreciation (AAD), the Commission while computing the depreciation for first Control Period has not allowed the AAD.

In line with the above approach, the Commission has computed the depreciation for first Control Period for MB-II on the approved GFA of Rs. 1741.72 Crore. The total depreciation for MB-II for first Control Period, accordingly, works out as shown in the Table below:

**Table 6.42: Depreciation charges as approved by the Commission for MB-II for first Control Period (Rs. Crore)**

Particular	FY 2013-14		FY 2014-15		FY 2015-16	
	Claimed	Approved	Claimed.	Approved	Claimed	Approved
Depreciation	74.79	66.04	74.79	66.04	74.79	66.04

#### 6.2.2.5 Return on Equity

##### 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.***

*..."*

The Petitioner submitted that UERC Tariff Regulations specifies that the Return on equity shall be computed on at the rate of 15.5% on post tax basis. The Petitioner further, submitted that, in accordance with Regulation 35 of UERC Tariff Regulations, 2011, income tax, for the generating

company, shall be reimbursed to the generating company as per actual income tax paid, based on the documentary evidence.

The Petitioner submitted that it pays income tax at company level and not project level and the bifurcation of tax which is paid at company level into projects level may be a complicated process and cause dissatisfaction among beneficiaries. The Petitioner requested the Commission that in this regard Regulation 15 of CERC (Terms and Conditions of Tariff Regulations) Regulations 2009 may be considered for computing Return on Equity for first Control Period. The Petitioner further requested that for the purpose of tariff computation for first Control Period, total tax liability may be computed and provisionally approved upfront based on present income tax rates. Based on the same, Petitioner computed the Return on Equity for first Control Period pre-tax rate of return of 23.10% ( $=15.50\% / (1-32.90\%)$ ) as against 15.50% specified by UERC Tariff Regulations, 2011.

The deviation sought by the Petitioner had been raised while submitting its comments on the Draft Tariff Regulations and the same has already been dealt with by the Commission in the Statement of Reasons forming part of UERC Tariff Regulations, 2011. The Commission cautions the Petitioner to adhere to the provisions of the Regulations and not seek any deviation in the Tariff Petitions. Income Tax liability, if any, devolving on the Petitioner is allowed to be recovered from the beneficiaries on actual basis. The same mechanism existed in Tariff Regulations, 2004 and is not a new provision because of which the Petition contemplates that recovery of the same from the beneficiaries would create problem. Hence, as Regulation 27 (2) of UERC Tariff Regulations, 2011 clearly specifies that the Return on equity shall be computed at the rate of 15.5% on a post-tax basis and the provisions of UERC Tariff Regulations, 2011 also allows income tax as a reimbursement to the generating company on actual basis, the Commission finds no material reasons to deviate from the provisions of UERC Tariff Regulations, 2011 and for the purpose of Tariff Determination for first Control Period has computed the Return on Equity at the rate of 15.50%.

Further, in accordance with the above explanation and provisions of the Regulations, pending finalisation of the Transfer Scheme of the Petitioner, the Commission has allowed RoE on the provisional value of opening equity of Rs. 151.19 Crore in accordance with the directions of the Hon'ble Appellate Tribunal for Electricity, as detailed in the Order dated March 14, 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 Regulations.

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 UERC Tariff Regulations, 2011. The summary of the Return on Equity approved for 9 LHPs for first Control Period is shown in the Tables given below:

**Table 6.43: Equity and Return on Equity for Nine Old LHPs for FY 2013-14 (Rs. Crore)**

Name of the Generating Station	Claimed	Approved		
		On Transferred Asset	On Additional Capitalisation	Total
Dhakrani	1.00	0.58	0.09	0.67
Dhalipur	1.62	0.95	0.14	1.09
Chibro	6.74	4.09	0.40	4.49
Khodri	5.84	3.44	0.47	3.91
Kulhal	1.34	0.81	0.08	0.90
Ramganga	3.72	2.33	0.17	2.49
Chilla	10.72	5.81	1.36	7.17
Maneri Bhali-I	9.31	5.10	1.04	6.14
Khatima	0.57	0.33	0.05	0.38
<b>Total</b>	<b>40.86</b>	<b>23.43</b>	<b>3.82</b>	<b>27.25</b>

**Table 6.44: Equity and Return on Equity for Nine Old LHPs for FY 2014-15 (Rs. Crore)**

Name of the Generating Station	Claimed	Approved		
		On Transferred Asset	On Additional Capitalisation	Total
Dhakrani	1.00	0.58	0.09	0.67
Dhalipur	1.62	0.95	0.14	1.09
Chibro	6.74	4.09	0.40	4.49
Khodri	5.84	3.44	0.47	3.91
Kulhal	1.34	0.81	0.08	0.90
Ramganga	3.72	2.33	0.17	2.49
Chilla	10.72	5.81	1.36	7.17
Maneri Bhali-I	9.31	5.10	1.04	6.14
Khatima	0.57	0.33	0.05	0.38
<b>Total</b>	<b>40.86</b>	<b>23.43</b>	<b>3.82</b>	<b>27.25</b>



**Table 6.45: Equity and Return on Equity for Nine Old LHPs for FY 2015-16 (Rs. Crore)**

Name of the Generating Station	Claimed	Approved		
		On Transferred Asset	On Additional Capitalisation	Total
Dhakrani	1.00	0.58	0.09	0.67
Dhalipur	1.62	0.95	0.14	1.09
Chibro	6.74	4.09	0.40	4.49
Khodri	5.84	3.44	0.47	3.91
Kulhal	1.34	0.81	0.08	0.90
Ramganga	3.72	2.33	0.17	2.49
Chilla	10.72	5.81	1.36	7.17
Maneri Bhali-I	9.31	5.10	1.04	6.14
Khatima	0.57	0.33	0.05	0.38
<b>Total</b>	<b>40.86</b>	<b>23.43</b>	<b>3.82</b>	<b>27.25</b>

*B. Maneri Bhali-II*

As discussed in Chapter 4 of the Order and Para 6.1.2.2 of this Chapter, the Commission has considered a Capital Cost of Rs. 1741.42 Crore on CoD. As per the financing considered by the Commission of the total approved Capital Cost of Rs. 1741.42 Crore, Rs. 541.72 Crore have been funded through equity. However, since, out of the total equity of Rs. 541.72 Crore, Rs. 341.39 Crore had come through PDF, the Commission has considered the balance equity of Rs. 200.33 Crore eligible for return purposes in the previous Tariff Orders for various reasons given therein. Further, as discussed earlier, the Commission has not re-determined the capital cost of MB-II and has not considered the additional capitalisation after CoD, the Commission for the purpose of computing the Return on Equity for first Control Period has considered the same equity base of Rs. 200.33 crore as considered in its Tariff Order dated 4 April, 2012 and has computed the RoE 15.50% as specified in UERC Tariff Regulations, 2011. The summary of the Return on Equity approved for MB-II for first Control Period is shown in the Table given below:

**Table 6.46: Equity and Return on Equity for MB-II for first Control Period (Rs. Crore)**

Particular	FY 2013-14		FY 2014-15		FY 2015-16	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Return on Equity	136.55	31.05	136.55	31.05	136.55	31.05

**6.2.2.6 Interest on Loans***A. Old Nine Generating Stations*

Regulation 28 of the UERC Tariff Regulations, 2011 stipulates as follows:

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

*(1) The loans arrived at in the manner indicated in Regulation 22 shall be considered as gross normative loan for calculation of interest on loan.*

*(2) The normative loan outstanding as on 1.4.2013 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2013 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.*

*(4) Notwithstanding any moratorium period availed by the Generating Company or the Transmission Licensee or the Distribution Licensee or the SLDC, as the case may be the repayment of loan shall be considered from the first year of commercial operation of the project and shall be equal to the annual depreciation allowed.*

*(5) The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each year applicable to the project:*

*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, 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 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.*

*(7) The Generating Company or the Transmission Licensee or the Distribution Licensee, or the SLDC as the case may be, shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the beneficiaries and the net savings on interest shall be shared between the beneficiaries and the Generating Company or the Transmission Licensee or the Distribution Licensee or the SLDC, as the case may be, in the ratio of 50:50.*

(8) *The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.*

..."

The Petitioner submitted that the, interest on normative debt has been considered on the value equivalent to 70% of additional capitalisation only.

As regards MB-II HEP, Petitioner submitted that the actual loan data is available for MB-II HEP and the actual weighted average rate of interest and finance charges of MB-II hydro electric project should also be considered for computing the interest expenses on normative loan for other large hydro projects.

The Petitioner submitted the details of loans for MB-II hydro power project as reflected in audited accounts of respective financial year. Summary of principal amount due and actual interest and finance charges paid during respective financial years as submitted by UJVN Ltd. are shown in the Table below:

**Table 6.47: Weighted Average Rate of Interest for MB-II HEP as submitted by Petitioner**

Year	Principle Due (Rs. crore)	Interest and Finance charges (Rs. crore)	Weighted Avg. Rate of Interest
FY 2008-09	1148.10	152.91	13.32%
FY 2009-10	1114.69	136.69	12.26%
FY 2010-11	993.69	129.26	13.01%
FY 2011-12	863.14	113.77	13.18%

For the purpose Tariff Determination for first Control Period the Commission has determined the normative loan in accordance with UERC Tariff Regulations, 2011.

With regard to the interest rate for first Control Period, only normative loans are outstanding for most of the stations and only small amount of APDP loans for Chibro, Khodri and Chilla LHPs and PFC loan for MB-II is outstanding. The Commission, in accordance with UERC Tariff Regulations, 2011 has computed the weighted average interest rate based on the outstanding APDP loans and PFC loans as admitted by the Commission up to 31 March, 2013. The interest rate based on the above works out to 11.59%. Thus, the Commission has considered the interest rate of 11.59% for computing the interest expenses for 9 LHP as well as MB-II station.

The Commission based on the closing loans for 9 LHPs as on 31 March, 2013 has computed the interest expenses for first Control Period. The Commission observed that UJVN Ltd. in its submissions has not considered any repayment while projecting the interest expenses, which is not correct as per provisions of UERC Tariff Regulations, 2011. The Commission in accordance with the Regulation 28(3) of UERC Tariff Regulations, 2011 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, 2011 the Commission has calculated the interest expense for 9 LHPs for first Control Period as shown in the Tables below:

**Table 6.48: Interest on Loan for Nine Old LHPs for FY 2013-14 (Rs. Crore)**

Name of the Generating Station	Interest Claimed	Approved			
		Opening Loan	Repayment	Closing Loan	Interest
Dhakrani	0.19	0.66	0.15	0.51	0.07
Dhalipur	0.28	1.00	0.23	0.77	0.10
Chibro	0.86	4.10	0.61	3.49	0.44
Khodri	0.96	4.53	1.29	3.24	0.45
Kulhal	0.17	0.59	0.14	0.45	0.06
Ramganga	0.33	1.13	0.25	0.88	0.12
Chilla	2.75	13.59	7.59	6.00	1.14
Maneri Bhali-I	2.06	13.09	3.54	9.55	1.31
Khatima	0.09	0.31	0.06	0.25	0.03
<b>Total</b>	<b>7.69</b>	<b>39.01</b>	<b>13.86</b>	<b>25.15</b>	<b>3.72</b>

**Table 6.49: Interest on Loan for Nine Old LHPs for FY 2014-15 (Rs. Crore)**

Name of the Generating Station	Interest Claimed	Approved			
		Opening Loan	Repayment	Closing Loan	Interest
Dhakrani	0.19	0.51	0.15	0.36	0.05
Dhalipur	0.28	0.77	0.22	0.55	0.08
Chibro	0.86	3.49	0.57	2.92	0.37
Khodri	0.96	3.24	1.28	1.96	0.30
Kulhal	0.17	0.45	0.13	0.32	0.05
Ramganga	0.33	0.88	0.24	0.64	0.09
Chilla	2.75	6.00	6.00	-	0.35
Maneri Bhali-I	2.06	9.55	3.54	6.01	0.90
Khatima	0.09	0.25	0.07	0.18	0.03
<b>Total</b>	<b>7.69</b>	<b>25.15</b>	<b>12.19</b>	<b>12.96</b>	<b>2.21</b>

**Table 6.50: Interest on Loan for Nine Old LHPs for FY 2015-16 (Rs. Crore)**

Name of the Generating Station	Interest Claimed	Approved			
		Opening Loan	Repayment	Closing Loan	Interest
Dhakrani	0.19	0.36	0.14	0.22	0.03
Dhalipur	0.28	0.55	0.21	0.34	0.05
Chibro	0.86	2.92	0.54	2.38	0.31
Khodri	0.96	1.96	1.25	0.71	0.15
Kulhal	0.17	0.32	0.12	0.20	0.03
Ramganga	0.33	0.64	0.21	0.43	0.06
Chilla	2.75	-	-	-	-
Maneri Bhali-I	2.06	6.01	3.53	2.48	0.49
Khatima	0.09	0.18	0.06	0.12	0.02
<b>Total</b>	<b>7.69</b>	<b>12.96</b>	<b>6.08</b>	<b>6.88</b>	<b>1.15</b>

*B. Maneri Bhali-II*

As discussed above, the Commission has computed the weighted average interest rate of 11.59% based on the outstanding APDP loans and PFC loan as admitted by the Commission up to 31 March, 2013. The Commission for computing interest for MB-II station for the first Control Period has considered above mentioned interest rate.

The Commission based on the closing loan for MB-II as on 31 March, 2013 has computed the interest expenses for first Control Period. The Commission in accordance with the Regulation 28(3) of UERC Tariff Regulations, 2011 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, 2011, the Commission has calculated the interest expense for MB-II for first Control Period as shown in the Tables below:

**Table 6.51: Interest on Loan for MB-II for first Control Period (Rs. Crore)**

Particular	FY 2013-14		FY 2014-15		FY 2015-16	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Interest on Loan	181.82	78.61	181.82	70.29	181.82	61.98

**6.2.2.7 Operation & Maintenance (O&M) Expenses***A. Old Nine Generating Stations*

The Petitioner in its MYT Petition for projecting the O&M Expenses for the first Control Period had escalated the O&M Expenses for FY 2011-12 (as per provisional accounts) at the rate of

7.04% as approved by the Commission in its Tariff Order dated 4 April, 2012. As regard the same, the Commission asked the Petitioner to submit the projections of O&M expenses for first Control Period in accordance with Regulation 52 of UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011. UJVN Ltd. in its reply submitted that as the True-up of actual O&M expenses for the past 5 years as per the Audited Accounts had not been done by the Commission, it finds that the approach followed for Tariff Order of FY 2012-13 would be more suitable for projecting O&M expenses for the first Control Period. UJVN Ltd. further, submitted that necessary adjustments may be done at the time of Truing Up for the respective years. The Commission during the first TVS held on 19 February, 2013 again asked the Petitioner to project the O&M Expenses for first Control Period as per Regulation 52 of UERC Tariff Regulations, 2011 which clearly specifies the methodology for determining the O&M Expenses for the Control Period based on the actual O&M expenses for last five years.

The Petitioner in its reply submitted that, the audited/actual data for O&M expenses is available for the past four years from FY 2007-08 to FY 2010-11 and in order to arrive at the O&M expenses for the base year FY 2011-12, the Petitioner has considered the CAGR of previous four years O&M expenses. The Petitioner further, submitted that the O&M expenses of previous years are exclusive of adjustments due to colony power supply, 6th pay commission arrears etc.

As specified in UERC Tariff Regulations, 2011, the O&M expenses for the first Control Period shall comprise of the following:

- 1) Employee Expenses
- 2) A & G Expenses
- 3) R&M Expenses

Further, in accordance with the UERC Tariff Regulations, 2011 the O&M Expenses for Generating Stations in operation for more than 5 years shall be approved by the Commission taking into account the actual O&M expenses for last five years till base year subject to prudence check and any other factors considered appropriate by the Commission. Accordingly, while projecting the O&M expenses for 9 LHPs for the first Control Period, the Commission has considered the actual data of the past five years, i.e. from FY 2007-08 to FY 2011-12.

Further for realistic assessment of O&M expenses for the Control Period for FY 2013-14 to FY 2015-16, the Commission asked the Petitioner to submit the details of actual Employee expenses, A&G expenses and R&M expenses for FY 2011-12.

The Commission has calculated the annual growth in values of CPI (overall) for Industrial Workers and WPI (overall) based on the average of FY 2010-11 to FY 2012-13 and has considered the same for determination of indices during the base year and the first Control Period. The summary of the same is provided in the Table below:

**Table 6.52: Projected Inflation considering CPI and WPI**

Index	CPI	WPI
Avg. for last 3 years	8.75%	7.77%

The submissions of the Petitioner and the approach adopted by the Commission for approving the various components of O&M expenses for the first Control Period from FY 2013-14 to FY 2015-16 are discussed below.

#### **6.2.2.8 Employee Expenses**

The Petitioner in its revised submissions submitted the projections of employee based on the actual employee expenses for the last four years from FY 2007-08 to FY 2010-11 based on the CPI for last 3 years. The Petitioner in its submission has not considered the growth factor and has submitted that the growth factor has to be determined by the Commission.

For estimating the employee expenses for the first Control Period, the Commission first analysed the employee expenses for existing employees of last five years for the period FY 2007-08 to FY 2011-12 based on the actual employee expenses as submitted in the Audited Accounts. However, on analysis of the employee expenses, the Commission observed that the employee expenses for FY 2007-08 and FY 2008-09 does not include the impact of 6<sup>th</sup> Pay Commission and considering the employee expenses of FY 2007-08 and FY 2008-09 for projecting the Employee expenses for first Control Period would not be realistic. Therefore, the Commission has considered the average of actual Employee Expenses for previous three years from FY 2009-10 to FY 2011-12 to arrive at the O&M Expenses for FY 2010-11. The Commission has escalated the employee expenses so arrived for FY 2010-11 at the rate of 6.29% as approved by the Commission in its Tariff Order for FY 2011-12.

Further for computing the Growth factor, the Commission asked the Petitioner to submit the details regarding expected number of recruitments and retirements during the first Control Period. The Petitioner in its reply submitted the details of the number of recruitments and retirements during the first Control Period. The Commission based on the submissions of the Petitioner has worked out the growth factor based on the opening and closing number of employees. Further, in case there is reduction in the number of employees due to higher retirements, the Commission has considered the growth factor for such year as zero.

The Commission is of the view that if the actual addition to number of employees is lower than the number of employees addition considered in this Order, the impact of 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.

Based on the above, the Growth Factor as per the Regulations works out as under:

**Table 6.53: Gn Factor as considered by the Commission**

FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
1.05%	0.63%	0.00%	0.00%

For projecting the employee expenses for first Control Period, the Commission has considered the average increase in CPI for last three years as 8.75%. The following Table shows the summary of the projected and approved employee expenses for FY 2013-14 to FY 2015-16:

**Table 6.54: Employee expenses for 9 LHPs for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14			FY 2014-15			FY 2015-16		
	Projected	Revised Projected	Approved	Projected	Revised Projected	Approved	Projected	Revised Projected	Approved
Dhakrani	6.30	8.07	6.33	6.74	8.92	6.88	7.22	9.87	7.49
Dhalipur	9.52	12.19	9.55	10.19	13.48	10.39	10.91	14.91	11.29
Chibro	29.24	32.54	26.41	31.30	35.99	28.72	33.50	39.80	31.23
Khodri	16.21	19.49	14.58	17.35	21.56	15.86	18.57	23.84	17.25
Kulhal	5.60	7.17	5.63	5.99	7.93	6.12	6.42	8.77	6.65
Ramganga	17.83	22.70	17.72	19.09	25.10	19.27	20.43	27.76	20.95
Chilla	19.95	26.54	19.30	21.35	29.35	20.98	22.86	32.46	22.82
Maneri Bhali-I	14.94	16.94	14.11	15.99	18.73	15.34	17.12	20.72	16.68
Khatima	8.04	10.20	7.84	8.61	11.28	8.53	9.21	12.48	9.27
<b>Total</b>	<b>127.63</b>	<b>155.85</b>	<b>121.46</b>	<b>136.61</b>	<b>172.35</b>	<b>132.08</b>	<b>146.24</b>	<b>190.59</b>	<b>143.63</b>



### 6.2.2.9 Repairs and Maintenance Expenses

The Petitioner in its revised submissions submitted the projections of Repairs and Maintenance Expenses based on the actual Repairs and Maintenance Expenses for last four years from FY 2007-08 to FY 2010-11 and considered the WPI for last 3 years. The Petitioner in its submission has not computed the K factor as specified in UERC Tariff Regulations, 2011 and had submitted that the K factor has to be determined by the Commission.

For estimating the R&M Expenses for the first Control Period, the Commission first analysed the R&M Expenses for last five years for the period FY 2007-08 to FY 2011-12 based on Audited Accounts. However, as discussed earlier in Truing up section, since the Commission has not scrutinised the R&M Expenses of FY 2011-12 and has also not trued up the R&M expenses for FY 2008-09 to FY 2010-11, the Commission for projecting the R&M Expenses for first Control Period has considered the approved R&M Expenses for past three years from FY 2008-09 to FY 2010-11. The Commission has worked out the K factor for the first Control Period as the average of the ratio of the approved R&M Expenses and the opening GFA for last three years. The K Factor so arrived by the Commission for first Control Period is as shown in the Table below:

**Table 6.55: K-Factor as determined by the Commission**

Station	K - Factor
Dhakrani	16.77%
Dhalipur	14.84%
Chibro	7.23%
Khodri	4.25%
Kulhal	11.06%
Ramganga	1.72%
Chilla	3.55%
M Bhali I	8.77%
Khatima	33.81%
<b>Weighted Average</b>	<b>6.75%</b>

For projecting the R&M Expenses for first Control Period, the Commission has multiplied the K Factor with the opening GFA approved for each year in First Control Period. The Commission has further considered the average increase in WPI for last three years as 7.77%. The Petitioner is undertaking the RMU works for its hydro generating stations and for the reasons discussed earlier in this Order, the Commission has not considered the capitalisation for such works while determining the GFA for first Control Period. The Commission is of the view that the RMU works

on the hydro generating stations shall result in reduced O&M Expenses in future. Further, as the final truing up for R&M expenses has not been carried out and the same is subject to the findings of the study carried out by expert consultant, the R&M figures may get revised for the base years which in turn will have an impact on K factor determined above. The Commission based on the above explanation, is of the view that K-Factor approved in this Order, shall be subject to adjustment based on the actual capitalisation on account of RMU works and findings of the expert consultant. The impact of same shall be adjusted while carrying out the truing up and will not be considered as reduction in R&M expenses on account of controllable factors.

The following Table shows the summary of the projected and approved R&M expenses for FY 2013-14 to FY 2015-16:

**Table 6.56: R&M Expenses for 9 LHPs for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14			FY 2014-15			FY 2015-16		
	Projected	Revised Projected	Approved	Projected	Revised Projected	Approved	Projected	Revised Projected	Approved
Dhakrani	3.95	3.55	2.61	4.23	3.80	2.81	4.53	4.07	3.03
Dhalipur	5.97	5.36	3.75	6.39	5.74	4.04	6.84	6.15	4.36
Chibro	14.39	10.36	7.57	15.40	11.10	8.16	16.49	11.89	8.80
Khodri	4.64	4.30	3.86	4.97	4.61	4.16	5.32	4.94	4.49
Kulhal	3.51	3.15	2.30	3.76	3.38	2.48	4.02	3.62	2.67
Ramganga	2.36	3.15	0.99	2.53	3.37	1.07	2.70	3.61	1.15
Chilla	14.14	10.38	5.92	15.14	11.12	6.38	16.21	11.91	6.87
Maneri Bhali-I	17.94	26.58	12.69	19.21	28.48	13.68	20.56	30.51	14.74
Khatima	3.62	3.77	2.99	3.88	4.04	3.22	4.15	4.33	3.47
<b>Total</b>	<b>70.52</b>	<b>70.61</b>	<b>42.69</b>	<b>75.51</b>	<b>75.64</b>	<b>46.00</b>	<b>80.82</b>	<b>81.03</b>	<b>49.58</b>

#### 6.2.2.10 Administrative and General Expenses (A&G expenses)

The Petitioner in its revised submissions submitted the projections of A&G Expenses based on the actual A&G Expenses for FY 2010-11. The Petitioner escalated the A&G Expenses of FY 2010-11 with the average increase in WPI for last 3 years and an additional 20% to arrive at the A&G Expenses for FY 2011-12. The Petitioner in its submission has not submitted any reason for considering the additional 20% escalation while arriving at the A&G Expenses for FY 2011-12 (base year). Further, for projecting the A&G Expenses for the first Control Period, Petitioner considered the escalation at average increase in WPI for last 3 years.

For estimating the Administrative and General expenses for the first Control Period, the Commission analysed the A&G expenses of last five years for the period FY 2007-08 to FY 2011-12 based on the actual expenses as submitted in the Audited Accounts. The Commission has observed that the A&G Expenses for past years include Regulatory fees of Rs. 10 Lakh for each station. As the regulatory fee should not be escalated, therefore, while estimating the A&G Expenses for first Control Period, the Commission has reduced the above mentioned amount, and the same shall be allowed as per actual at the time of Annual Performance Review or final truing up. The Commission, thus, based on the average of actual A&G expenses for last five years from FY 2007-08 to FY 2011-12 has arrived at the A&G expenses for FY 2009-10. The Commission has escalated the A&G expenses so arrived for FY 2009-10 at the rate of 6.51% and 6.29% as approved by the Commission in its Tariff Order for FY 2010-11 and FY 2011-12 to arrive at the A&G expenses for FY 2011-12.

Further, for projecting the A&G expenses for the first Control Period the Commission has considered the average increase in WPI for last three years as 7.77%.

The Commission is not allowing the additional 20% increase sought by the Petitioner as the Petitioner has not submitted any details/justifications in support of its claims. The Commission would also like to caution the Petitioner that the A&G expenses are controllable in nature and proper propriety and prudence should be exercised while incurring such expenditures. The following Table shows the summary of the projected and approved A&G expenses for FY 2013-14 to FY 2015-16:

**Table 6.57: A&G Expenses for 9 LHPs for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14			FY 2014-15			FY 2015-16		
	Projected	Revised Projected	Approved	Projected	Revised Projected	Approved	Projected	Revised Projected	Approved
Dhakrani	0.83	0.81	0.51	0.89	0.87	0.54	0.95	0.93	0.59
Dhalipur	1.25	1.23	0.83	1.34	1.32	0.90	1.43	1.41	0.97
Chibro	3.47	4.47	3.12	3.72	4.78	3.36	3.98	5.12	3.63
Khodri	1.49	2.01	1.38	1.59	2.16	1.48	1.70	2.31	1.60
Kulhal	0.74	0.72	0.43	0.79	0.78	0.47	0.84	0.83	0.50
Ramganga	2.19	3.35	2.16	2.34	3.59	2.33	2.51	3.85	2.51
Chilla	2.28	3.65	2.14	2.44	3.91	2.31	2.61	4.19	2.49
Maneri Bhali-I	1.77	2.34	1.34	1.90	2.50	1.44	2.03	2.68	1.55
Khatima	0.77	0.82	0.49	0.83	0.88	0.53	0.89	0.95	0.57
<b>Total</b>	<b>14.79</b>	<b>19.41</b>	<b>12.40</b>	<b>15.84</b>	<b>20.79</b>	<b>13.36</b>	<b>16.94</b>	<b>22.28</b>	<b>14.40</b>

**6.2.2.11 O&M Expenses**

The total O&M expenses claimed and approved for FY 2013-14 to FY 2015-16 based on the discussions above, are given in the following Table:

**Table 6.58: O&M Expenses for 9 LHPs for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14			FY 2014-15			FY 2015-16		
	Projected	Revised Projected	Approved	Projected	Revised Projected	Approved	Projected	Revised Projected	Approved
Dhakrani	11.08	12.43	9.44	11.86	13.60	10.24	12.69	14.87	11.10
Dhalipur	16.74	18.78	14.13	17.92	20.54	15.32	19.18	22.47	16.62
Chibro	47.10	47.37	37.10	50.42	51.87	40.24	53.97	56.81	43.65
Khodri	22.34	25.81	19.82	23.91	28.32	21.50	25.59	31.08	23.33
Kulhal	9.85	11.05	8.36	10.54	12.08	9.07	11.28	13.22	9.83
Ramganga	22.38	29.20	20.87	23.95	32.06	22.66	25.64	35.22	24.61
Chilla	36.37	40.57	27.36	38.93	44.38	29.67	41.67	48.56	32.18
Maneri Bhali-I	34.65	45.86	28.13	37.09	49.72	30.45	39.71	53.91	32.97
Khatima	12.43	14.80	11.32	13.31	16.21	12.28	14.25	17.75	13.31
<b>Total</b>	<b>212.94</b>	<b>245.87</b>	<b>176.54</b>	<b>227.93</b>	<b>268.78</b>	<b>191.44</b>	<b>243.98</b>	<b>293.90</b>	<b>207.61</b>

## B. Maneri Bhali-II

The Petitioner in its MYT Petition for projecting the O&M Expenses for MB-II for first Control Period submitted that the modified Capital Cost of Rs. 1958.13 crore proposed as on CoD of the project has been considered for estimating the O&M expenses for tariff determination from FY 2013-14 to FY 2015-16. The Petitioner submitted that to estimate the O&M expenses for FY 2011-12, 1.5% of capital cost of the project as on CoD of the project is further escalated with the same escalation rates as approved by the Commission in its previous tariff orders. Further, for projecting the O&M Expenses for the first Control Period, the Petitioner has escalated the O&M Expenses determined for FY 2011-12 at the rate of 7.04% as approved in Commission's Order dated April 04, 2012.

Regulation 52 of UERC Tariff Regulations, 2011 stipulates as follows:

*"52. Operation and Maintenance Expenses for Hydro Generating Stations*

*(3) For Generating Stations in operation for less than 5 years in base year:*

*In case of the hydro electric generating stations, which have not been in existence for a period of five years in the base year of FY 2011-12, the operation and maintenance expenses for the base year of FY 2011-12 shall be fixed at 1.5% 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 sub regulation (6) below.*

...

*(6) O&M expenses determined in sub-Regulation (3) & (4) above, shall be escalated for subsequent years to arrive at the O&M expenses for the control period by applying the Escalation factor (EF<sub>k</sub>) for a particular year (K<sup>th</sup> year) which shall be calculated using the following formula:*

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

..."

As MB-II hydro generating station is in operation for less than 5 years till FY 2011-12, the Commission in accordance with the above Regulation has first computed the O&M Expenses for MB-II for the base year of FY 2011-12 at 1.5% of the capital cost as admitted by the Commission for the first year of operation and has escalated the same from the subsequent years in accordance with

Regulation 52(6) of UERC Tariff Regulations, 2011 as weighted average increase in WPI and CPI in ratio of 55 (WPI) :45 (CPI) to arrive at the O&M Expenses for the first Control Period. On analysis the Commission found that with the above approach, the O&M Expenses for first Control Period is working out to be less than the O&M Expenses approved for FY 2012-13 in Tariff Order dated 4 April, 2012. Therefore, the Commission based on the approach followed by in its previous tariff Order has first calculated the base O&M expenses as 1.5% of the Capital Cost of Rs. 1,741.72 Crore as on CoD, and then suitably escalated it with escalation rate applicable for the years (6.51% for FY 2008-09 and FY 2009-10, 6.29% for FY 2010-11 and 7.04% for FY 2011-12) to arrive at the O&M Expenses for FY 2011-12 (base year). For escalating the O&M Expenses in subsequent years, the Commission in accordance with Regulation 52 (6) UERC Tariff Regulations, 2011 has considered the escalation rate of 8.21% based on the increase in Wholesale Price Index (WPI) and Consumer Price Index (CPI). The Commission has considered a weight of 55% to WPI and 45% to CPI. The Commission, accordingly, for MB-II generating station, approves an O&M cost of Rs. 39.06 crore, Rs. 42.26 crore and 45.73 crore respectively for FY 2013-14, FY 2014-15 and FY 2015-16. The summary of O&M Expenses for MB-II for first Control Period is as shown in the Table below:

**Table 6.59: O&M Expenses for MB-II for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particular	FY 2013-14		FY 2014-15		FY 2015-16	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
O&M Expenses	43.44	39.06	46.49	42.26	49.77	45.73

#### 6.2.2.12 Interest on Working Capital

##### A. Old Nine Generating Stations

Regulation 34 of the UERC Tariff Regulations, 2011 stipulates as follows:

*“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.*
- ... ”

The Petitioner has claimed that it has projected the working capital for each plant in accordance with the provisions of the Regulations on normative levels. The Petitioner for computing interest on working capital for first Control Period has considered the rate of interest as 14.75%. The Commission in its data gaps asked the Petitioner to submit the justification for the consideration of Rate of Interest for Interest on Working Capital as 14.75% for the first Control Period. The Petitioner in its reply submitted that it has considered the rate of interest of 14.75% as the SBI PLR as on September 2012.

#### *6.2.2.12.1 One Month O&M Expenses*

The annual O&M expenses, as approved by the Commission are Rs. 176.54 crore, Rs. 191.44 crore and Rs. 207.61 crore respectively for FY 2013-14, FY 2014-15 and FY 2015-16. Based on the approved O&M expenses, one month's O&M expenses works out to Rs. 14.71 crore, Rs. 15.95 crore and Rs. 17.30 crore respectively for FY 2013-14, FY 2014-15 and FY 2015-16. The same has been considered by the Commission for working out the working capital requirement.

#### *6.2.2.12.2 Maintenance Spares*

The Commission has considered the maintenance spares in accordance with UERC Tariff Regulations, 2011. The Commission has considered maintenance spares @ 15% of the approved O&M Expenses for each year of first Control Period. The value of maintenance spares, thus, works out as Rs. 26.48 Crore, Rs. 28.72 Crore and Rs. 31.14 Crore respectively for FY 2013-14, FY 2014-15 and FY 2015-16.

#### *6.2.2.12.3 Receivables*

Regulations envisage receivables equivalent to two months of fixed charges for sale of electricity as an allowable component of working capital. 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 approved AFC of Rs. 225.82 Crore, Rs. 239.97 Crore, Rs. 250.19 Crore respectively for FY 2013-14, FY 2014-15 and 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 MYT Petition has been filed on November 27, 2012, the Commission has considered the prevailing State Bank Advance Rate (SBAR) of State Bank of India as 14.50% on the mentioned date for computing the Interest on Working Capital.

Accordingly, the Commission has computed the Interest on working Capital for first Control Period from FY 2013-14 to FY 2015-16 as shown in the Tables below:

**Table 6.60: Interest on working Capital for Nine LHPs for FY 2013-14 (Rs. Crore)**

New Generating Stations	Approved				Interest on Working Capital	
	1 month O&M Expenses	15% of Maintenance Spares	2 months Receivables	Total Working Capital	Claimed	Approved
Dhakrani	0.79	1.42	1.77	3.98	0.84	0.58
Dhalipur	1.18	2.12	2.68	5.98	1.28	0.87
Chibro	3.09	5.57	7.21	15.87	3.65	2.30
Khodri	1.65	2.97	4.31	8.93	1.82	1.30
Kulhal	0.70	1.25	1.63	3.58	0.76	0.52
Ramganga	1.74	3.13	3.94	8.81	1.74	1.28
Chilla	2.28	4.10	7.34	13.72	3.04	1.99
M Bhali I	2.34	4.22	6.74	13.30	2.84	1.93
Khatima	0.94	1.70	2.02	4.66	0.93	0.68
<b>Total</b>	<b>14.71</b>	<b>26.48</b>	<b>37.64</b>	<b>78.83</b>	<b>16.89</b>	<b>11.43</b>



**Table 6.61: Interest on working Capital for Nine LHPs for FY 2014-15 (Rs. Crore)**

New Generating Stations	Approved				Interest on Working Capital	
	1 month O&M Expenses	15% of Maintenance Spares	2 months Receivables	Total Working Capital	Claimed	Approved
Dhakrani	0.85	1.54	1.91	4.30	0.90	0.62
Dhalipur	1.28	2.30	2.88	6.46	1.36	0.94
Chibro	3.35	6.04	7.75	17.14	3.89	2.49
Khodri	1.79	3.23	4.58	9.59	1.93	1.39
Kulhal	0.76	1.36	1.75	3.87	0.81	0.56
Ramganga	1.89	3.40	4.25	9.54	1.86	1.38
Chilla	2.47	4.45	7.61	14.53	3.23	2.11
M Bhali I	2.54	4.57	7.08	14.18	3.02	2.06
Khatima	1.02	1.84	2.19	5.05	0.99	0.73
<b>Total</b>	<b>15.95</b>	<b>28.73</b>	<b>39.99</b>	<b>84.67</b>	<b>17.99</b>	<b>12.28</b>

**Table 6.62: Interest on working Capital for Nine LHPs for FY 2015-16 (Rs. Crore)**

New Generating Stations	Approved				Interest on Working Capital	
	1 month O&M Expenses	15% of Maintenance Spares	2 months Receivables	Total Working Capital	Claimed	Approved
Dhakrani	0.93	1.67	2.06	4.65	0.96	0.67
Dhalipur	1.38	2.49	3.10	6.98	1.45	1.01
Chibro	3.64	6.55	8.33	18.52	4.15	2.69
Khodri	1.94	3.50	4.87	10.31	2.06	1.50
Kulhal	0.82	1.47	1.88	4.17	0.86	0.61
Ramganga	2.05	3.69	4.59	10.33	1.98	1.50
Chilla	2.68	4.83	7.05	14.55	3.42	2.11
M Bhali I	2.75	4.95	7.45	15.14	3.21	2.20
Khatima	1.11	2.00	2.37	5.48	1.06	0.79
<b>Total</b>	<b>17.30</b>	<b>31.14</b>	<b>41.70</b>	<b>90.14</b>	<b>19.16</b>	<b>13.07</b>

*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, 2011 and considering the prevailing State Bank Advance Rate (SBAR) of State Bank of India of 14.50% 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 Tables below:

**Table 6.63: Interest on working Capital for MB-II for FY 2013-14 (Rs. Crore)**

Particular	Approved				Interest on Working Capital	
	1 Month O&M Expenses	15% Maintenance Spares	2 Months Receivables	Total Working Capital	Claimed	Approved
Interest on Working Capital	3.25	5.86	36.55	45.66	13.08	6.62

**Table 6.64: Interest on working Capital for MB-II for FY 2014-15 (Rs. Crore)**

Particular	Approved				Interest on Working Capital	
	1 Month O&M Expenses	15% Maintenance Spares	2 Months Receivables	Total Working Capital	Claimed	Approved
Interest on Working Capital	3.52	6.34	35.70	45.56	13.31	6.61

**Table 6.65: Interest on working Capital for MB-II for FY 2015-16 (Rs. Crore)**

Particular	Approved				Interest on Working Capital	
	1 Month O&M Expenses	15% Maintenance Spares	2 Months Receivables	Total Working Capital	Claimed	Approved
Interest on Working Capital	3.81	6.86	34.89	45.56	13.55	6.61

**6.2.2.13 Non-Tariff Income**

Regulation 47 of the UERC Tariff Regulations, 2011 stipulates 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 in its Petition, while computing the AFC for hydro generating stations had not projected the Non-Tariff Income. As regard the same, the Commission in its data gaps asked the Petitioner to submit full details of its forecast of non tariff income for the first control Period. The Petitioner in its reply submitted the projections of non-tariff income for the first Control Period. The Petitioner in its projections proposed to consider the minimum non-tariff income of previous three years for projecting the non-tariff income for first Control Period from FY 2013-14, FY 2014-15 and FY 2015-16.

The Commission for the purpose of Tariff determination for first Control Period has considered the Non-Tariff Income as proposed by the Petitioner. The Non-Tariff income as approved by the Petitioner for first Control Period is shown in the Table below:

**Table 6.66: Non-Tariff Income for 9 LHPs for first Control Period (Rs. Crore)**

Name of the Generating Station	FY 2013-14	FY 2014-15	FY 2015-16
Dhakrani	0.27	0.27	0.27
Dhalipur	0.36	0.36	0.36
Chibro	1.66	1.66	1.66
Khodri	0.92	0.92	0.92
Kulhal	0.21	0.21	0.21
Ramganga	1.37	1.37	1.37
Chilla	1.21	1.21	1.21
Maneri Bhali-I	0.64	0.64	0.64
Khatima	0.35	0.35	0.35
<b>Total</b>	<b>6.99</b>	<b>6.99</b>	<b>6.99</b>

**Table 6.67: Non-Tariff Income for MB-II for first Control Period (Rs. Crore)**

Name of the Generating Station	FY 2013-14	FY 2014-15	FY 2015-16
MB-II	2.08	2.08	2.08

Further, as discussed in Truing Up section and the Commission's Order dated October 21, 2009, that 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 above said non-tariff income for adjustment in UPCL's share of AFC.

#### **6.2.2.14 Annual Fixed Charges, Capacity Charge and Energy Charge Rate (ECR) for FY 2013-14, FY 2014-15 and FY 2015-16**

##### **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 first Control Period 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 54 of UERC Tariff Regulations, 2011 specifies as under:

"54. ...

*(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, that is to say, 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

...

(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 :

$$(\text{Energy Charge Rate in Rs. / kWh}) \times \{ \text{Energy (ex-bus)} \} \text{ for the month in kWh} \times (100 - \text{FEHS}) / 100$$

(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:

$$ECR = AFC \times 0.5 \times 10 / \{ DE \times (100 - AUX) \times (100 - \text{FEHS}) \}$$

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 first Control Period for 9 LHPs as approved by the Commission is shown in the Tables below:

**Table 6.68: Approved AFC of UJVN Ltd. for FY 2013-14**

Name of the Generating Station	AFC of UJVN Ltd. for FY 2013-14									
	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	0.15	0.07	0.58	9.44	0.67	10.91	8.18	0.27	7.92	2.73
Dhalipur	0.23	0.10	0.87	14.13	1.09	16.42	12.32	0.36	11.96	4.11
Chibro	0.61	0.44	2.30	37.10	4.49	44.94	33.71	1.66	32.05	11.24
Khodri	1.29	0.45	1.30	19.82	3.91	26.77	20.08	0.92	19.16	6.69
Kulhal	0.14	0.06	0.52	8.36	0.90	9.98	7.98	0.21	7.77	2.00
Ramganga	0.24	0.12	1.28	20.87	2.49	25.00	25.00	1.37	23.63	-
Chilla	7.59	1.14	1.99	27.36	7.17	45.24	45.24	1.21	44.03	-
Maneri Bhali-I	3.54	1.31	1.93	28.13	6.14	41.06	41.06	0.64	40.42	-
Khatima	0.07	0.03	0.68	11.32	0.38	12.48	12.48	0.35	12.12	-
<b>Total</b>	<b>13.86</b>	<b>3.72</b>	<b>11.43</b>	<b>176.54</b>	<b>27.25</b>	<b>232.80</b>	<b>206.04</b>	<b>6.99</b>	<b>199.06</b>	<b>26.76</b>

**Table 6.69: Approved AFC of UJVN Ltd. for FY 2014-15**

Name of the Generating Station	AFC of UJVN Ltd. for FY 2014-15									
	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	0.15	0.05	0.62	10.24	0.67	11.73	8.80	0.27	8.53	2.93
Dhalipur	0.22	0.08	0.94	15.32	1.09	17.65	13.24	0.36	12.88	4.41
Chibro	0.57	0.37	2.49	40.24	4.49	48.16	36.12	1.66	34.46	12.04
Khodri	1.28	0.30	1.39	21.50	3.91	28.38	21.29	0.92	20.37	7.10
Kulhal	0.13	0.05	0.56	9.07	0.90	10.70	8.56	0.21	8.35	2.14
Ramganga	0.24	0.09	1.38	22.66	2.49	26.87	26.87	1.37	25.49	-
Chilla	7.59	0.35	2.11	29.67	7.17	46.88	46.88	1.21	45.67	-
Maneri Bhali-I	3.54	0.90	2.06	30.45	6.14	43.09	43.09	0.64	42.46	-
Khatima	0.06	0.03	0.73	12.28	0.38	13.48	13.48	0.35	13.13	-
<b>Total</b>	<b>13.77</b>	<b>2.21</b>	<b>12.28</b>	<b>191.44</b>	<b>27.25</b>	<b>246.95</b>	<b>218.33</b>	<b>6.99</b>	<b>211.34</b>	<b>28.62</b>

**Table 6.70: Approved AFC of UJVN Ltd. for FY 2015-16**

Name of the Generating Station	AFC of UJVN Ltd. for FY 2014-15									
	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	0.14	0.03	0.67	11.10	0.67	12.62	9.47	0.27	9.20	3.16
Dhalipur	0.21	0.05	1.01	16.62	1.09	18.98	14.24	0.36	13.88	4.75
Chibro	0.54	0.31	2.69	43.65	4.49	51.67	38.75	1.66	37.09	12.92
Khodri	1.25	0.15	1.50	23.33	3.91	30.14	22.61	0.92	21.68	7.54
Kulhal	0.12	0.03	0.61	9.83	0.90	11.49	9.19	0.21	8.98	2.30
Ramganga	0.22	0.06	1.50	24.61	2.49	28.88	28.88	1.37	27.51	-
Chilla	2.02	-	2.11	32.18	7.17	43.48	43.48	1.21	42.27	-
Maneri Bhali-I	3.53	0.49	2.20	32.97	6.14	45.33	45.33	0.64	44.69	-
Khatima	0.06	0.02	0.79	13.31	0.38	14.57	14.57	0.35	14.22	-
<b>Total</b>	<b>8.09</b>	<b>1.15</b>	<b>13.07</b>	<b>207.61</b>	<b>27.25</b>	<b>257.17</b>	<b>226.52</b>	<b>6.99</b>	<b>219.53</b>	<b>30.65</b>

The summary of Capacity Charge and Energy Charge Rate (ECR) for 9 LHPs for first Control Period is as given in the Tables below:

**Table 6.71: Approved Capacity Charge and Energy Charge Rate for 9 LHPs for FY 2013-14**

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	7.92	3.96	116.84	0.339	2.73	1.36	38.95	0.350
Dhalipur	11.96	5.98	143.00	0.418	4.11	2.05	47.67	0.431
Chibro	32.05	16.025	555.75	0.288	11.24	5.62	185.25	0.303
Khodri	19.16	9.58	256.16	0.374	6.69	3.35	85.39	0.392
Kulhal	7.77	3.885	122.26	0.318	2.00	1.00	30.57	0.326
Ramganga	23.63	11.815	308.82	0.383	-	-	-	-
Chilla	44.03	22.015	664.57	0.331	-	-	-	-
Maneri Bhali-I	40.42	20.21	392.23	0.515	-	-	-	-
Khatima	12.12	6.06	192.69	0.315	-	-	-	-
<b>Total</b>	<b>199.06</b>	<b>99.53</b>	<b>2,752.32</b>	<b>0.362</b>	<b>26.76</b>	<b>13.38</b>	<b>387.81</b>	<b>0.345</b>

**Table 6.72: Approved Capacity Charge and Energy Charge Rate for 9 LHPs for FY 2014-15**

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	8.53	4.265	116.84	0.365	2.93	1.47	38.95	0.377
Dhalipur	12.88	6.44	143.00	0.450	4.41	2.21	47.67	0.463
Chibro	34.46	17.23	555.75	0.310	12.04	6.02	185.25	0.325
Khodri	20.37	10.185	256.16	0.398	7.10	3.55	85.39	0.416
Kulhal	8.35	4.175	122.26	0.342	2.14	1.07	30.57	0.350
Ramganga	25.49	12.745	308.82	0.413	-	-	-	-
Chilla	45.67	22.835	664.57	0.344	-	-	-	-
Maneri Bhali-I	42.46	21.23	392.23	0.541	-	-	-	-
Khatima	13.13	6.565	192.69	0.341	-	-	-	-
<b>Total</b>	<b>211.34</b>	<b>105.67</b>	<b>2,752.32</b>	<b>0.384</b>	<b>28.62</b>	<b>14.31</b>	<b>387.81</b>	<b>0.369</b>

**Table 6.73: Approved Capacity Charge and Energy Charge Rate for 9 LHPs for FY 2015-16**

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	9.20	4.6	116.84	0.394	3.16	1.58	38.95	0.405
Dhalipur	13.88	6.94	143.00	0.485	4.75	2.375	47.67	0.498
Chibro	37.09	18.545	555.75	0.334	12.92	6.46	185.25	0.349
Khodri	21.68	10.84	256.16	0.423	7.54	3.77	85.39	0.441
Kulhal	8.98	4.49	122.26	0.367	2.30	1.15	30.57	0.376
Ramganga	27.51	13.755	308.82	0.445	-	-	-	-
Chilla	42.27	21.135	664.57	0.318	-	-	-	-
Maneri Bhali-I	44.69	22.345	392.23	0.570	-	-	-	-
Khatima	14.22	7.11	192.69	0.369	-	-	-	-
<b>Total</b>	<b>219.53</b>	<b>109.765</b>	<b>2,752.32</b>	<b>0.399</b>	<b>30.65</b>	<b>15.33</b>	<b>387.81</b>	<b>0.395</b>

**B. Maneri Bhali-II**

Based on the analysis for all the heads of expenses of AFC, the Commission has approved the Annual Fixed Charges (AFC) for MB-II for the first Control Period. The Commission to arrive at the Net AFC for MB-II has adjusted the Non-Tariff Income in the AFC of MB-II. The summary of



Annual Fixed Charge, Capacity Charge and Energy Charge rate for MB-II for the first Control Period is given in Table below:

**Table 6.74: Approved AFC, Capacity Charge and Energy Charge Rate for MB-II for first Control Period**

Year	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.)	Non-tariff Income (Rs. Cr.)	Net AFC (Rs. Cr.)	Capacity Charge (Rs. Cr.)	Saleable Primary Energy MU	Energy Charge Rate (ECR) (Rs./kWh)
FY 2013-14	66.04	78.61	6.62	39.06	31.05	221.38	2.08	219.30	109.65	1550.44	0.707
FY 2014-15	66.04	70.29	6.61	42.26	31.05	216.26	2.08	214.18	107.09	1550.44	0.691
FY 2015-16	66.04	61.98	6.61	45.73	31.05	211.41	2.08	209.33	104.67	1550.44	0.675

In accordance with the provisions of 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.

## 7 Commission's Directives

### 7.1 Compliance to the Directives Issued in Order dated October 21, 2009

#### 7.1.1 Performance Improvement Measures

The Commission in its Tariff Order dated October 21, 2009 directed the Petitioner to conduct a benchmarking study of its plants with other efficient utilities like NHPC, to explore further scope of improvement in technical losses and manpower rationalisation including incentive mechanism. The Petitioner was further directed to submit an action plan for implementation of efficiency improvement and manpower rationalisation measures giving target dates for completion of each milestone of proposed plan within six months of issuance of the Order dated October 21, 2009.

The Commission with respect to this direction, in its Tariff Order dated April 5, 2010 further observed as follows:

*"The Commission has so far not heard anything from the Petitioner in this regard. The Commission is, however, hopeful that UJVNL would conduct such a study in its own commercial interest and submit a report to the Commission within the timelines specified in the previous order."*

The Petitioner, during the tariff proceedings for FY 2011-12 submitted that the data obtained from NHPC is being analyzed by UJVNL Ltd. and the report would be submitted shortly. However, the Petitioner did not submit the report. Accordingly, the Commission issued the following directions:

*"The Commission directs the Petitioner to complete the benchmarking study for all its stations and submit the report to the Commission within 3 months from the date of this Order".*

The Petitioner, during the tariff proceedings for FY 2012-13 submitted that the Benchmarking studies of four power plants namely Chilla, Pathari, Mohamadpur and Khatima in comparison to Tanakpur power plant of NHPC were conducted and submitted to the Commission in June 2011. The Petitioner further submitted that NHPC and SJVNL were requested to provide benchmarking study report of their hydro plants and to provide key parameters of their Hydro Plants enabling the Petitioner to conduct such studies on the same lines with respect to the key parameters. The Petitioner submitted the copies of said letters. Further, the Petitioner submitted

that in spite of persuasion and follow up, no response has been received from NHPC and SJVNL till date and UJVN Ltd. is following up the matter with NHPC and SJVNL. The Commission in this regard in its previous Tariff Order dated April 04, 2012 stated as follows:

*"The Commission is of the view that comparison of performance parameters including per unit operating costs with only one station of NHPC cannot be considered as a Benchmarking study in true sense and, therefore, directs the Petitioner to pursue this matter and get the benchmarking study done for all its generating stations and submit a quarterly progress report to the Commission on the steps taken by the Petitioner in this regard."*

The Petitioner in its current filing has submitted that it has already submitted the benchmarking report for its five stations and benchmarking report for other stations is in progress and shall be submitted to the Commission.

The Commission as stated in previous Tariff Order dated April 04, 2012 reiterates that comparison of performance parameters including per unit operating costs with only one station of NHPC cannot be considered as a Benchmarking study in true sense and therefore few more stations should be considered while carrying out such benchmarking study.

**In light of above the Commission directs UJVN Ltd. to complete the benchmarking study for all its stations considering few more stations and submit the report to the Commission within three months from the date of issue of this Order.**

## **7.2 Compliance to the Directives Issued in Order dated April 05, 2010.**

### **7.2.1 Depreciation**

The Commission has given various directives in its Tariff Order dated 05.04.2010 contained in Para 5.2.3, 5.2.4, 5.2.5, 5.3.4, 5.3.6 and in Chapter 6 as reproduced below:

*"The Commission directs the Petitioner to claim depreciation in future filings based on the rates for various categories of assets as specified in the Tariff Regulations instead of claiming depreciation on weighted average rate for all the 10 large generating stations. "*

The Petitioner, during the tariff proceedings for FY 2012-13 submitted that in absence of category-wise asset classification, it has claimed depreciation against opening GFA at a weighted

average rate of 2.38% and that against additional capitalization at a weighted average rate of 2.66%, in accordance with the approach of the Commission in the previous Tariff Orders. The Commission in this regard in its Tariff Order dated April 04, 2012 again directed the Petitioner as reproduced below:

*"The Commission, however, directs the Petitioner to claim the depreciation on additional capitalisation from the next Tariff filing in accordance with the rates specified under the Regulations for different class of assets instead of claiming it at 2.66%."*

In this regard, the Petitioner in the current Petition has claimed the depreciation on additional capitalisation in accordance with the rates specified under the Regulations for different class of assets instead of claiming it at 2.66%.

### **7.2.2 Return on Equity**

The Commission in its Tariff Order dated April 05, 2010 had directed the Petitioner as under:

*"The Commission, accordingly, directs the Petitioner to make all out efforts in the FY 2010-11 so as to ensure finalization of Transfer Scheme within the next financial year itself. "*

With respect to the above direction, the Commission in its Tariff Order dated May 10, 2011 stated as follows:

*"The Commission again directs the Petitioner to approach the State Government for early finalization of the transfer scheme and to provide them all necessary details/assistance in this regard. The Petitioner is directed to submit a report on steps taken by it and the status of transfer scheme within 3 months of the issuance of this Tariff Order."*

The Commission in its Tariff Order dated April 4, 2012 again directed the Petitioner as follows,

*"The Commission once again directs the Petitioner to take necessary steps for the finalisation of the transfer scheme without further delay and submit the report to the Commission."*

The Petitioner in its current Petition submitted that this matter has been appraised to GoU from time to time. However, the transfer scheme between UPJVNL & UJVN Ltd. is still not

finalized. Petitioner submitted that even after rigorous follow-up with UPJVNL, it could not get the required information. UJVN Ltd. submitted that getting such information from other departments is beyond the control of the Petitioner and in order to speed up the process of finalisation of transfer scheme, the Petitioner has appointed a consultant.

**The Commission in view of the above once again directs UJVN Ltd. to take steps to coordinate with UPJVNL for finalisation of transfer scheme without further delay and submit quarterly progress report to the Commission.**

### **7.3 Compliance to directives issued in Order dated May 10, 2011**

#### **7.3.1 Apportionment of Common/Indirect Expenses.**

The Commission vide its Tariff Order dated October 21, 2009, had directed the Petitioner to submit the probable alternatives for rationally allocating the common/indirect expenses in the present context as well as considering future scenarios within a period of three months along with actual data, if any.

In the Tariff Order dated May 10, 2011, the Commission directed the Petitioner as follows:

*"The Commission, accordingly, directs the Petitioner to examine the practices being followed in similar utilities in other States as well as Centre Sector utilities like NTPC, NHPC, etc. and submit it a report for the consideration of the Commission within 6 months from issuance of this Order."*

The Commission in its Tariff Order dated April 4, 2012 gave following direction to the Petitioner,

*"The Commission re-iterates its direction to complete the exercise of examining the practices being followed in similar Utilities in Other States as well as Central Sector utilities and submit the report to the Commission within 3 months from the date of this Order."*

UJVN Ltd. in this regard has submitted that it has been pursuing the matter in the past and had also submitted correspondences with NHPC and SJVNL alongwith its earlier tariff filings. However, no response was received from either NHPC or SJVNL. UJVN Ltd. further submitted that getting such information from other utilities is beyond its control and it had also made efforts to look for such information in public domain however, the same was unavailable.

**The Commission hereby again directs the Petitioner to complete the exercise of examining the practices being followed in similar Utilities in Other States as well as Central Sector utilities and if required, take this matter at highest level and submit the report to the Commission within three months from the date of this Order.**

### **7.3.2 Utilisation of Expenses approved by the Commission**

The Commission in its Order dated May 10, 2011 directed the Petitioner as follows:

*“The Commission directs UJVNL to prepare an annual budget for FY 2011-12 for each and every plant and submit the same to the Commission within one month of the issuance of this Order.”*

The Petitioner in during the Tariff Preceding of FY 2012-13, submitted that the copy of Annual Budget has already been submitted to the Commission. The Commission in its Order dated April 4, 2012 again directed UJVN Ltd. to prepare an annual budget for FY 2012-13 for each and every plant and submit the same to the Commission within one month of the issuance of this Order.

Petitioner submitted that the Annual budget for FY 2012-13 has already been provided to the Commission vide letter no. 1691 MD/UJVNL/U-6 dated April 25, 2012.

**The Commission directs UJVN Ltd. to submit annual budget for future financial years by 30<sup>th</sup> of April of the respective financial year.**

### **7.3.3 Colony Consumption**

The Commission in its order dated May 10, 2011 stated as follows:

*“The Commission observed that the data submitted for colony consumption was erroneous and therefore, the prudence check cannot be done on the basis of this data.*

*Further, it was also evident that the auxiliary consumption and transformation losses incurred on the stations were excessively high when compared to the norms specified in the Regulations. For instance in Dhakrani the auxiliary consumption is 1.49% and transformation losses is 12.17% against the norm of 0.2% and 0.5% respectively. This indicates that either the data collected is incorrect or there is some problem in the equipments installed in the stations which require immediate attention.*

*Therefore, the Commission directs the Petitioner to reconcile the data and submit a report on the same to the Commission within 3 months of the issuance of this Order along with the corrective steps to be taken in this regard.”*

The Petitioner in this regard in the previous filing for FY 2012-13 submitted that the data has been reconciled and such reconciled data has already been submitted to Commission.

The Commission in its previous Tariff Order for FY 2012-13 observed that not only the employees of UJVN Ltd. are being supplied electricity without meters but almost other consumers such as street lights, tube wells, non-residential buildings are also receiving un-metered supply.

The Commission accordingly in its previous Tariff Order dated April 04, 2012 stated that there is no merit in including consumption of other employees/consumers except the departmental employees of UJVN Ltd. in colony consumption. Accordingly, the directed as reproduced below:

*“The Commission directs the Petitioner to segregate the consumption of employees of other departments, offices, etc. and also install the meters in all the un-metered connections including connections given to its employees. Further, the Petitioner is also directed not to include the consumption of consumers other than its departmental employees, while claiming cost of colony consumption in future. Further, the Petitioner should submit the compliance report for the same within three months from the date of issue of this order.”*

The Petitioner in the current Petition submitted that the segregation of consumption of employees of other departments, offices etc. and meter installation is still in process.

**The Commission hereby directs UJVN Ltd. to install the meters for all un-metered connections and submit quarterly status report for steps taken and activities completed in this regards.**

#### **7.3.4 Cost of Consumption of the employees of UJVN Ltd., residing outside the colonies**

The Commission in its Tariff Order dated May 10, 2011 observed that since, UPCL was not raising bills for electricity consumption of the employees of UJVN Ltd. residing outside the colonies, the Commission directed UJVN Ltd. to remit this additional amount allowed by it to UPCL as it is in lieu of electricity supplied by UPCL to UJVN Ltd's employees residing outside the colonies. The Commission, further, directed UJVN Ltd. to submit the details of total amount collected from its employees from 01.04.2007 to 31.03.2011 along with the details of amount remitted to UPCL.

The Petitioner, in its Petition for tariff determination for FY 2012-13, submitted the details of Electricity charges and Electricity duty remitted to UPCL. The Commission observed that the details submitted by the Petitioner provided the amount of EC/ED remitted by it to UPCL for the period April, 2007 To September, 2010 in respect of officers/staff posted at Head Quarter, Dehradun. However it was not clear that the amount realised from all the employees have been remitted to UPCL. Accordingly, the Commission in its Tariff Order dated April 4, 2012 directed the Petitioner as follows,

*“Therefore, the Commission directs the Petitioner to submit a complete compliance report within three months from the date of issue of this Tariff Order.”*

The Petitioner in this regards is yet to submit its compliance to the above directions. **The Commission hereby again directs the Petitioner to submit the required compliance report within one month from the date of issuance of this Order.**

### **7.3.5 Income from electricity distribution to Sundry Consumers**

The Commission in its Tariff Order dated May 10, 2011 observed that the Petitioner is maintaining distribution works in three of its Plant colonies and supplying power to sundry consumers in these colonies. Since, sale of power to other consumer by a generating company is not permissible under the Act, the Commission directed the Petitioner as follows:

*“The Commission directs the Petitioner as well as UPCL to resolve this issue amongst them and report compliance to the Commission within 6 months of the date of this Order. The Commission further directs the Petitioner to transfer the net revenue realized upto 2010-11 after deducting its costs to UPCL as revenue earned from sale of power to sundry consumers is legally not allowed to it in absence of proper licence for the same.*

*Further, the Commission directs the Petitioner that the electricity supplied by UJVNL to its employees staying in the colonies should also be metered and recorded separately and the same cannot be considered as auxiliary consumption. The Commission further directs the UJVNL to submit the consumption data of all the employees residing in colonies and outside based on meter readings along with the next Tariff Petition.”*



The Petitioner in its Tariff Petition for FY 2012-13 submitted that it has approached UPCL to take over the distribution of other consumers and further enclosed the copy of correspondence exchanged in this regard. The Petitioner further submitted that the matter shall be pursued with UPCL. Further, with respect to the consumption data, the Petitioner submitted that the consumption data of the employees residing in the colonies shall be submitted separately. However, as regards consumption data pertaining to employees residing outside, the Petitioner submitted that the meters are installed by UPCL and, hence, if deemed appropriate, suitable directives may be given to UPCL in this regard. The Commission accordingly, in its Tariff Order dated April 4, 2012 directed the Petitioner as,

*“The Petitioner is hereby directed to follow up this matter closely to handover the distribution of other consumer to UPCL and submit quarterly progress report to the Commission. ”*

The Petitioner in its current Petition submitted that regarding handover of power distribution network in plant colony to UPCL, it has requested to UPCL to complete necessary formalities related to the transfer of the distribution network. Petitioner also requested the Commission to give necessary directions to UPCL to expedite the process of transfer of such distribution network.

**The Commission in this regard hereby directs the Petitioner, to hand over all of its distribution business to UPCL within six months of this Order. The Commission also directs UPCL to take charge of the distribution business carried out by UJVN Ltd., within six months of this Order. The Petitioner is further, directed to submit a detailed action plan for the same within 30 days of this Order. The Petitioner is also required to submit the bi-monthly reports for complying with the above directions of the Commission. It is further clarified that the non-compliance of the above direction of the Commission within the specified timelines would attract action under Section 142 of the Electricity Act, 2003.**

#### **7.4 Compliance to directives issued in Order dated April 4, 2012**

##### **7.4.1 Expert Committee Report on Capital Cost of Maneri Bhali-II**

The Commission in its Order Dated May 10, 2011 stated as follows:

*“.....Accordingly, for thorough prudence check of the Capital Cost of MB-II project, the Commission will constitute a High Level Expert Committee to examine in details the reasons for time and cost over-run, impact of time-over run on Capital Cost and for proper identification of various factors leading to time and cost over-runs into controllable and un-controllable factors. The Commission will take a final view with respect to actual Capital Cost and Means of Finance for MB-II Project after submission of report by the Committee. The Commission also directs the Petitioner to extend all possible help to the members of the Committee in ascertaining the final project cost of the MB-II project.”*

The Petitioner in its Petition for tariff determination of FY 2012-13 submitted that it shall be submitting the said report to the Commission shortly. However, the said report has not been submitted during the previous filing. In this regard, the Commission in its Tariff Order dated April 4, 2012 directed the Petitioner as below,

*“In this regard, the Commission directs the Petitioner to submit the report of the Expert Committee based on the views expressed by the Commission in its earlier tariff Order dated May 10, 2011 to ascertain the Capital Cost of MB-II Project within 3 months from the date of this Order.”*

The Petitioner in its current Petition submitted the report of the Expert Committee on the Capital Cost of MB-II Project has been submitted to the Commission vide letter no. 3487/MD/UJVNL/U-6 dated June 25, 2012.

The Commission after going through the report of High-level Committee asked additional clarifications on deficiencies observed through its letter no. UERC/6/TF/12-13/2012/606 dated July 11, 2012. Upon, non receipt of such information the Commission sent a reminder through its letter no. UERC/6/TF-160/11-12/2012/1143 dated November 27, 2012 asking UJVN Ltd. to submit the replies within 10 days from receipt of the letter. UJVN Ltd. till date has not submitted its reply to the queries sent on the deficiencies observed regarding Capital Cost of Maneri Bhali-II Project. **The Commission in this regard, directs UJVN Ltd. to submit its replies to the above mentioned letter within one month from the date of issuance of this Order.**

#### **7.4.2 GPF Trust and Interest on GPF Trust**

As regard the Interest on GPF Trust, the Petitioner in its Tariff Petition for FY 2012-13, submitted that it has been consistently pursuing the matter with UPJVNL for remitting the amount

to UJVN Ltd. The Commission based on the submissions of the Petitioner observed that the Petitioner's claim of consistently pursuing the matter with the concerned authorities of UPJVNL cannot be justified by the correspondence letters submitted by the Petitioner. The Commission in view of this directed the Petitioner as below,

*"Therefore the Commission is of the view that the Petitioner has not been following up this matter seriously and regularly. Therefore, the Commission directs the Petitioner to consistently pursue this matter and report the status to the Commission on half yearly basis till the matter is resolved."*

*Further, for reasons stated in Chapter 5 of the Order, the Commission observed that, out of total revenue of Rs. 16.80 Crore made available to the Petitioner till FY 2005-06 for meeting the cash shortfall, the Petitioner/Trust has utilised only Rs. 4.91 Crore till FY 2011-12 and would still be left with a cash of Rs. 11.89 Crore after FY 2011-12.*

*The Petitioner is again directed to keep the funds allowed by the Commission in a separate account for utilisation in the specified manner and to settle its claims with UP and immediately intimate the same to the Commission so that the amount of Rs. 16.80 Crore may be adjusted in future ARR's."*

The Commission during the proceedings of the current Petition asked the Petitioner to submit the current status in the matter of the Interest on GPF Trust. The Petitioner in its reply submitted the letter of Govt. of Uttar Pradesh dated May 29, 2012 vide which UJVN Ltd. was informed that fund is not available with GPF trust of Uttar Pradesh, therefore, it is not possible to settle the claim of UJVN Ltd.

The Commission is of the view that the letter from Govt. of Uttar Pradesh informing that there is no fund available with GPF trust of Uttar Pradesh does not establish that the interest paid to GPF trust can simply be passed on to the consumers of Uttarakhand. Merely stating that the funds cannot be transferred to UJVN Ltd. from the UPPSET as the Trust does not have funds does not absolve the Trust of its liability. As advised by the Commission in its earlier Orders, the Uttarakhand Trust and the Petitioner should make concerted efforts to get their share of bonds or an equivalent sum of money from UPPSET/GoUP.

### **7.4.3 Segregation of Insurance Policies**

The Commission in its Tariff Order dated April 4, 2012 directed the Petitioner as follows,

*“Therefore, the Commission hereby directs the Petitioner to separate and segregate insurance policies taken by the Petitioner and allocate them to 9 LHPs, Maneri Bhali-II and SHPs while seeking Truing Up for FY 2012-13.”*

Petitioner in its current Petition submitted that it has separated the insurance policies taken for the hydro projects and allocated them to 10 large hydro projects and SHPs. Petitioner also submitted the supporting details in this regard.

## **7.5 New Directives Issued**

### **7.5.1 Design Energy**

With regard to Maneri Bhali-II (MB-II) large hydro generating station, Petitioner in the current Petition submitted that due to barrage level restriction and improper evacuation of water through TRC, presently the capacity of the plant is restricted to 280 MW. UJVN Ltd. further submitted that due to technical reasons and availability of reduced quantity of water, which is beyond the control of the Petitioner, the net generation is less than the expected generation. UJVN Ltd. in its MYT Petition has proposed the design energy for the station as the average of billed energy during FY 2008-09 to FY 2011-12.

In this regard, the Commission is of the view that the issue of lower barrage level and improper evacuation of water through TRC is pending since long. The issue has not been addressed even after five years from the date of commercial operation of the plant. The Commission is of the view that such reasons cannot be a ground for lowering of the design energy. **The Commission directs UJVN Ltd. to overcome this constraint at the earliest. UJVN Ltd. is directed to submit the quarterly progress report on the progress made by it to address this issue.**

As regard to 9 LHPs, Petitioner submitted that the DPRs for existing 9 LHPs are not available with it and expressed its inability to submit the same. The Commission also asked UJVN Ltd. to submit the 10 day daily discharge data for each of the stations for past 20 years. UJVN Ltd. expressed its inability to submit the same and did not submit the data for past 20 years for all the stations. As detailed in the Chapter 5 of this Order, **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.**

### 7.5.2 *Submission of wrong and misleading information*

As detailed in Chapter 5 of this Order, the Petitioner has submitted some facts regarding the type of hydro generating stations. The Commission has gone through the submissions made by UJVN Ltd. in this regard and is of the strong view that UJVN Ltd. instead of representing wrong facts and misleading the Commission and consumers at large should submit all the information correctly. **UJVN Ltd. is hereby directed not to make such submissions which are factually incorrect in future as this could attract legal actions against the Petitioner.**

### 7.5.3 *Segregation of Accounts*

As discussed in Chapter 6 of this Order, the Commission is of the view that the proper prudence check of expenses for all the stations can be carried out if the accounts of expenses and revenue is maintained separately for each Station. As a first step in this direction, the Commission directs the UJVN Ltd. to prepare two separate Accounts from FY 2013-14 onwards, one for its large hydro generating stations including Maneri Bhali-II and the other for its small hydro plants and submit the same alongwith truing up for FY 2013-14. Further, as a next step the Petitioner should further segregate the accounts and prepare separate accounts for its 9 old LHPs, Maneri Bhali-II and SHPs and submit the same along with truing up petition for FY 2014-15 onwards. **The Commission directs the Petitioner to submit a detailed methodology for segregation of accounts for its large hydro generating stations and small hydro plants within two months from the date of this Order for the Commission's approval.**

### 7.5.4 *Repair & Maintenance (R&M) Expenses*

As detailed in Chapter 4 & 6 of this Order, the Commission had appointed an Expert Consultant to examine the R&M Expenses of UJVN Ltd. The Petitioner despite of numerous opportunities has not submitted the complete & timely information for examination of R&M Expenses. In view the above and as detailed earlier the Commission is not carrying out the truing up of R&M expense for FY 2008-09 to FY 2010-11. However, it is brought to the notice of the Petitioner that the exercise of examination of R&M expenses is not closed, and the **Petitioner is directed to submit the details as sought by the Commission within one month from the date of issue of this Order.**

### **7.5.5 Additional Capitalisation**

As discussed in Chapter 4 of this Order, the Commission is of the view that any additional capitalisation after cut-off date can be permitted only in case it is substantiated that such expenses have been incurred under one of the provisions of Regulation 16(2) of the UERC Tariff Regulations, 2004.

The Commission is, therefore, of the view that in the absence of complete details of expenses incurred and works/services procured therefrom out of additional capitalisation indicated for FY 2008-09 to FY 2010-11 alongwith the justification in view of the Tariff Regulations, 2004, prudence of such expenditure cannot be examined and hence, final truing up of additional capitalisation for these years cannot be carried out. This is all the more necessary considering the amount of capital expenditure proposed to be incurred by the Petitioner under RMU measures for these 9 old generating stations. However, for the current proceedings the Commission is provisionally accepting the additional capitalisation as submitted by the Petitioner for FY 2008-09 to FY 2010-11. The Commission on receipt of satisfactory information shall carry out the final truing up of additional capitalisation for FY 2008-09 to FY 2010-11 alongwith such other additions to additional capitalisation as may be determined by the Expert Consultant on scrutiny of R&M expenses as the expenses of capital nature booked under repairs and maintenance expenses . **The Commission, therefore, directs UJVN Ltd. to submit the station wise details of additional capitalisation for FY 2008-09 to FY 2010-11 giving details of works/services procured, their validity for inclusion in additional capitalisation as per provisions in regulation and amount spent there on for Commission's scrutiny within one month from the date of issue of this Order.**

### **7.5.6 Return On Power Development Fund (PDF)**

The contention of the Petitioner that power development fund, in past, has been funded through contribution from, State Government vide Section 5 of the PDF Act, in addition to being funded by the Cess on Hydro Generation has not been substantiated by the Petitioner and it has failed to provide any documentary evidence by way of related Vidhan Sabha's resolution or the State Government's Orders. At this point of time it would be difficult to give credence to the contention of the Petitioner. The Commission recognising that this issue has substantial financial

implication mainly on the Return on Equity of assets partly funded by this fund, decides to keep in abeyance final view in the matter.

The Commission in past has not been allowing Return on Equity on funds deployed by the GoU out of PDF fund for various reasons recorded in the previous Tariff Orders. With regard to the submissions of the Petitioner in this Petition on this matter, and as discussed earlier in Chapter 4 of this Order 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. 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.

Keeping this in view, the Commission has decided to give another opportunity to the Petitioner to bring up evidence in support of its contention that this fund, also included the contributions made by the State Government and if so, the extent thereof. For the present, practice of not permitting return on equity on the fund utilised out of PDF assistance is being continued. **The Petitioner is directed to bring up the above mentioned evidence within six month of the date of Order.** The Commission shall take a final view in the matter in the 1<sup>st</sup> APR of the control period.

#### 7.5.7 Views of State Advisory Committee

The Commission 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 taken decision and given its ruling in the previous Tariff Orders. In this regard, **the Commission 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, failing which, the Commission may reject the Petition upfront.**

The AFC for the control period shall be deemed to be recoverable in accordance with the mechanism specified in UERC Tariff Regulations, 2011. The tariffs approved in this Order shall be applicable from April 01, 2013 and shall continue to apply till further Orders of the Commission.


(K.P. Singh)  
Member

(C.S. Sharma)  
Member

(Jag Mohan Lal)  
Chairman

## 8 Annexures

### 8.1 Annexure 1: Public Notice on MYT Petition for FY 2013-14 to FY 2015-16

<div>  <b>UJVN LIMITED,</b>  H. O. "UJJWAL" MAHARANI BAGH, GMS ROAD DEHRADUN-248006 (Telephones.: 0135-2763508, 2763808) </div>											
<b>Inviting Comments on Petition filed by UJVN Limited before the Uttarakhand Electricity Regulatory Commission for Determination of Generation Tariff for its 10 main generating stations for FY 2013-14 to FY 2015-16</b>											
<b>Salient Points of the ARR/Tariff Petition</b>											
1. UJVN Limited, a Government owned company, has filed the petitions for the determination of generation tariff for the financial year 2013-14 to FY 2015-16 for its 10 main generating stations before the Hon'ble Uttarakhand Electricity Regulatory Commission (Commission). Through the above petitions, UJVN Ltd. has also proposed truing up of its expenses for FY 2008-09 to 2010-11 for its 9 old generating stations based on the audited balance sheet and for Maneri Bhali-II, truing up for FY 2007-08 to 2010-11 based on the audit of capital cost and report of the High Level Committee. The gist of tariff petitions filed by UJVN Ltd. for FY 2013-14 to FY 2015-16 for its 10 main generating stations, with comparative figures for the financial year 2012-13 are given in the table below:											
Station	Installed Capacity (MW)	Year of Commissioning	Particulars	Operation & Maintenance Expenses (Rs. Cr.)	Interest on working Capital (Rs. Cr.)	Interest on loan Capital (Rs. Cr.)	Return on Equity (Rs. Cr.)	Depreciation including AAD (Rs. Cr.)	Annual Fixed Charges	Saleable Energy (MUs)	Primary Energy (p/u)
Dhakrani	33.75	1965	Approved for 2012-13	8.02	0.33	0.08	0.61	0.06	9.09	155.78	58.35
			Projected for 2013-14	11.08	0.84	0.19	1.00	0.11	13.22	118.54	111.52
			Projected for 2014-15	11.86	0.90	0.19	1.00	0.11	14.06	118.54	118.61
			Projected for 2015-16	12.69	0.96	0.19	1.00	0.11	14.95	118.54	126.12
Dhalpur	51	1965	Approved for 2012-13	12.07	0.50	0.13	0.99	0.08	13.76	190.66	72.17
			Projected for 2013-14	16.74	1.28	0.28	1.62	0.17	20.09	180.95	111.03
			Projected for 2014-15	17.92	1.36	0.28	1.62	0.17	21.35	180.95	117.99
			Projected for 2015-16	19.18	1.45	0.28	1.62	0.16	22.70	180.95	125.45
Chibro	240	1975	Approved for 2012-13	33.01	1.48	0.43	4.02	0.22	39.16	741.00	52.85
			Projected for 2013-14	47.10	3.65	0.86	6.74	0.54	58.89	620.64	94.89
			Projected for 2014-15	50.42	3.89	0.86	6.74	0.50	62.41	620.64	100.56
			Projected for 2015-16	53.97	4.15	0.86	6.74	0.45	66.16	620.64	106.60
Khodri	120	1984	Approved for 2012-13	17.11	0.94	0.52	3.52	2.03	24.12	341.55	70.62
			Projected for 2013-14	22.34	1.82	0.96	5.84	0.58	31.53	298.14	105.76
			Projected for 2014-15	23.91	1.93	0.96	5.84	0.58	33.22	298.14	111.42
			Projected for 2015-16	25.59	2.06	0.96	5.84	0.52	34.97	298.14	117.29
Kulhal	30	1975	Approved for 2012-13	7.12	0.31	0.07	0.81	0.05	8.37	152.83	54.77
			Projected for 2013-14	9.85	0.76	0.17	1.34	0.10	12.21	126.66	96.40
			Projected for 2014-15	10.54	0.81	0.17	1.34	0.10	12.96	126.66	102.32
			Projected for 2015-16	11.28	0.86	0.17	1.34	0.09	13.75	126.66	108.56
Rangange	198	1975	Approved for 2012-13	19.21	0.85	0.13	2.25	0.09	22.54	308.82	72.99
			Projected for 2013-14	22.38	1.74	0.33	3.72	0.22	28.38	254.90	111.34
			Projected for 2014-15	23.95	1.86	0.33	3.72	0.18	30.03	254.90	117.81
			Projected for 2015-16	25.64	1.98	0.33	3.72	0.17	31.84	254.90	124.91
Chilla	144	1980	Approved for 2012-13	26.69	1.50	0.73	5.90	3.40	38.23	664.58	57.53
			Projected for 2013-14	36.37	3.04	2.74	10.71	1.59	54.44	711.79	76.48
			Projected for 2014-15	38.93	3.22	2.74	10.71	1.59	57.19	711.79	80.35
			Projected for 2015-16	41.67	3.42	2.74	10.71	1.55	60.08	711.79	84.41
Maneri Bhali-I	90	1984	Approved for 2012-13	28.43	1.46	0.49	4.89	2.84	38.12	392.24	97.19
			Projected for 2013-14	34.65	2.84	2.06	9.31	0.87	49.74	391.29	127.12
			Projected for 2014-15	37.09	3.02	2.06	9.31	0.87	52.36	391.29	133.81
			Projected for 2015-16	39.71	3.21	2.06	9.31	0.85	55.14	391.29	140.92
Khatima	41.4	1956	Approved for 2012-13	11.18	0.41	0.04	0.34	0.03	12.00	192.69	62.28
			Projected for 2013-14	12.43	0.93	0.09	0.57	0.06	14.09	151.50	93.00
			Projected for 2014-15	13.31	0.99	0.09	0.57	0.05	15.01	151.50	99.08
			Projected for 2015-16	14.25	1.06	0.09	0.57	0.05	16.02	151.50	105.74
Maneri Bhali-II	304	2008	Approved for 2012-13	36.09	9.69	86.87	28.05	120.00	280.70	1,550.44	181.05
			Projected for 2013-14	43.44	13.08	181.82	136.55	74.79	449.67	1,221.57	368.11
			Projected for 2014-15	46.49	13.31	181.82	136.55	74.79	452.95	1,221.57	370.79
			Projected for 2015-16	49.77	13.55	181.82	136.55	74.79	456.46	1,221.57	373.67
Total	1252.15		Approved for 2012-13	198.93	17.47	89.50	51.38	128.81	486.09	4,690.57	103.63
			Projected for 2013-14	256.38	29.98	169.50	177.40	79.03	732.29	4,075.96	179.66
			Projected for 2014-15	274.42	31.29	189.50	177.40	78.94	751.55	4,075.96	184.39
			Projected for 2015-16	293.75	32.70	189.50	177.40	78.75	772.10	4,075.96	189.43



2. The details of truing up sought by UJVNL Ltd. for its 09 old generating stations and Maneri Bhal-I are given below:									
Station	Particulars	Operation & Maintenance Expenses (Rs. Cr.)	Interest on Working Capital (Rs. Cr.)	Interest on Loan Capital (Rs. Cr.)	Return on Equity (Rs. Cr.)	Depreciation including AAD (Rs. Cr.)	Annual Fixed Charges	Less: Non Tariff Income	Annual Fixed Charges (Rs. Cr.)
Dhakrani	Approved for 2008-09	5.86	0.16	0.02	0.53	0.01	6.61	0.01	6.60
	Claimed for 2008-09	5.74	0.19	0.15	0.59	0.06	6.72	0.27	6.46
	Approved for 2009-10	7.95	0.29	0.02	0.54	0.01	8.81	—	8.81
	Claimed for 2009-10	12.53	0.44	0.15	0.59	0.06	13.78	0.61	13.16
	Approved for 2010-11	8.27	0.29	0.02	0.54	0.01	9.14	—	9.14
Dhailpur	Claimed for 2010-11	11.69	0.39	0.17	0.60	0.07	12.83	0.41	12.42
	Approved for 2008-09	8.62	0.28	0.04	0.88	0.01	9.82	0.01	9.81
	Claimed for 2008-09	7.50	0.25	0.23	0.96	0.09	9.03	0.36	8.67
	Approved for 2009-10	11.78	0.43	0.04	0.88	0.01	13.12	—	13.12
	Claimed for 2009-10	12.10	0.45	0.23	0.97	0.10	13.84	0.81	13.03
Chibro	Approved for 2010-11	12.21	0.43	0.03	0.89	0.02	13.59	—	13.59
	Claimed for 2010-11	13.24	0.47	0.26	0.98	0.11	15.06	0.54	14.52
	Approved for 2008-09	20.91	0.77	0.29	3.82	0.10	25.89	0.01	25.88
	Claimed for 2008-09	21.99	0.81	0.48	3.91	0.30	27.49	1.66	25.83
	Approved for 2009-10	28.03	1.16	0.28	3.83	0.11	33.40	—	33.40
Khodri	Claimed for 2009-10	30.22	1.24	0.57	3.97	0.36	36.36	3.77	32.60
	Approved for 2010-11	29.40	1.17	0.35	3.91	0.16	35.00	—	35.00
	Claimed for 2010-11	32.27	1.27	0.89	4.01	0.41	38.65	2.65	36.00
	Approved for 2008-09	11.95	0.53	0.20	3.20	1.82	17.70	0.09	17.61
	Claimed for 2008-09	11.66	0.53	0.41	3.29	1.95	17.85	0.92	16.93
Kulhal	Approved for 2009-10	15.34	0.75	0.21	3.22	1.84	21.36	—	21.36
	Claimed for 2009-10	16.29	0.81	0.65	3.43	2.05	23.23	1.91	21.32
	Approved for 2010-11	16.02	0.76	0.33	3.32	1.90	22.33	—	22.33
	Claimed for 2010-11	17.26	0.82	0.87	3.51	2.12	24.50	1.27	23.31
	Approved for 2008-09	5.22	0.19	0.02	0.75	0.43	6.60	0.01	6.59
Ranganga	Claimed for 2008-09	4.40	0.17	0.14	0.80	0.47	5.97	0.21	5.76
	Approved for 2009-10	7.09	0.28	0.02	0.75	0.23	8.36	—	8.36
	Claimed for 2009-10	7.09	0.29	0.13	0.80	0.47	8.79	0.47	8.31
	Approved for 2010-11	7.36	0.27	0.02	0.75	0.01	8.43	—	8.43
	Claimed for 2010-11	7.77	0.30	0.15	0.81	0.29	9.32	0.31	9.00
Chilla	Approved for 2008-09	11.79	0.44	0.14	2.19	0.05	14.61	0.02	14.59
	Claimed for 2008-09	15.21	0.53	0.24	2.21	0.16	18.34	1.37	16.97
	Approved for 2009-10	15.24	0.64	0.14	2.19	0.06	18.27	—	18.27
	Claimed for 2009-10	22.72	0.88	0.26	2.22	0.18	26.25	3.06	23.17
	Approved for 2010-11	16.08	0.64	0.10	2.20	0.06	19.07	—	19.07
Maneri Bhal-I	Claimed for 2010-11	21.18	0.80	0.29	2.23	0.20	24.70	2.01	22.69
	Approved for 2008-09	15.44	0.79	0.70	5.67	3.25	25.85	0.18	25.67
	Claimed for 2008-09	18.32	0.87	1.00	5.70	3.33	29.21	1.21	28.00
	Approved for 2009-10	20.24	1.11	0.66	5.67	3.25	30.94	—	30.94
	Claimed for 2009-10	25.84	1.30	0.95	5.71	3.34	37.14	2.29	34.84
Khatima	Approved for 2010-11	20.99	1.11	0.63	5.75	3.30	31.78	—	31.78
	Claimed for 2010-11	29.14	1.41	1.86	6.10	3.60	42.12	1.85	40.27
	Approved for 2008-09	18.27	0.80	0.26	4.66	2.89	26.67	0.02	26.65
	Claimed for 2008-09	20.84	0.86	0.10	4.75	2.74	29.29	0.64	28.66
	Approved for 2009-10	22.01	1.08	0.24	4.66	2.70	30.69	—	30.69
Maneri Bhal-II	Claimed for 2009-10	32.33	1.41	0.18	4.79	2.77	41.40	1.45	40.03
	Approved for 2010-11	23.08	1.09	0.21	4.67	2.70	31.75	—	31.75
	Claimed for 2010-11	25.68	1.23	1.19	5.25	2.99	36.33	1.14	35.19
	Approved for 2008-09	7.13	0.20	0.05	0.33	0.02	7.72	0.07	7.65
	Claimed for 2008-09	7.46	0.22	0.08	0.34	0.05	8.13	0.35	7.78
Total	Approved for 2009-10	9.41	0.32	0.05	0.33	0.02	10.12	—	10.12
	Claimed for 2009-10	9.75	0.33	0.08	0.34	0.05	10.55	0.66	9.90
	Approved for 2010-11	9.78	0.32	0.04	0.33	0.02	10.49	—	10.49
	Claimed for 2010-11	9.67	0.32	0.09	0.34	0.08	10.47	0.47	10.00
	Approved for 2007-08	1.21	0.34	6.33	1.30	2.07	11.25	—	11.25
Total	Truing up claimed for 2007-08	0.12	2.40	7.33	3.83	2.20	15.88	—	15.88
	Approved for 2008-09	27.17	8.31	131.19	28.05	87.93	282.65	—	282.65
	Truing up claimed for 2008-09	26.09	8.78	182.66	82.29	69.00	368.82	15.35	353.47
	Approved for 2009-10	30.32	8.99	120.42	28.05	120.00	307.78	—	307.78
	Truing up claimed for 2009-10	32.17	11.99	188.30	82.35	136.16	430.98	7.03	423.95
Total	Approved for 2010-11	32.30	8.55	106.91	28.05	120.00	295.81	—	295.81
	Truing up claimed for 2010-11	37.61	12.11	178.94	82.54	139.29	450.49	2.08	448.40
	Approved till 2010-11	476.45	42.51	369.96	151.91	354.79	1395.61	0.42	1395.19
	Truing up claimed till 2010-11	545.78	53.87	648.82	320.21	375.04	1843.68	57.15	1786.53


3. UJVNL Ltd. has proposed a hike of about 50.65% for FY 2013-14 on the existing AFC for 2012-13. Further, the impact of truing up would lead to an additional increase of about 92.18% implying a total increase of about 142.83%. In case the entire claim of UJVNL Ltd. is accepted by the Commission, an additional hike of 16.52% in consumer tariff shall be required over and above the hike proposed by UPCL and PTCUL.

4. Detailed proposals as submitted by UJVNL Ltd. can be seen free of cost on any working day at the Commission's office at Secretary, Uttarakhand Electricity Regulatory Commission, either in person, or by post at First Floor, Institution of Engineers (India) Building, Near I.S.B.T., Saharanpur Road, Clement Town, Dehradun 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.

5. The proposals filed by the UJVNL are also available at the website of the Commission ([www.uerc.gov.in](http://www.uerc.gov.in)) and at the UJVNL Ltd.'s website ([www.uttarakhandelectricity.com](http://www.uttarakhandelectricity.com)).

6. Responses/suggestions, if any are sought from all consumers and other stakeholders on the above proposals. Responses may be sent to the Secretary, Uttarakhand Electricity Regulatory Commission, either in person, or by post at First Floor, Institution of Engineers (India) Building, Near I.S.B.T., Saharanpur Road, Clement Town, Dehradun or through e-mail to [uttarakhanderc@rediffmail.com](mailto:uttarakhanderc@rediffmail.com) as a statement of objections or

8.2 Annexure 2: Public Notice on Business Plan for FY 2013-14 to FY 2015-16

**UJVN LIMITED**  
H.Q: "UJJWAL" Maharani Bagh, GMS Road, Dehradun- 248006  
Telephone: 0135-2523100 & Fax: 0135-2763507

**PUBLIC NOTICE**  
**Inviting Comments on Petition filed by UJVN Limited for approval of the Business Plan for FY 2013-14 to FY 2015-16**

1. UJVN Limited, a Government owned company, has filed the Petition for approval of its Business Plan for FY 2013-14 to FY 2015-16 giving details of the activities proposed to be carried out by it during this Control Period.
2. Detailed proposals as submitted by UJVN Ltd. can be seen free of cost on any working day at the Commission's office at **First Floor, Institution of Engineers (India) Building, Near I.S.B.T., Saharanpur Road, Clement Town, Dehradun** or at the office of UJVN Ltd., "UJJWAL", Maharani Bagh, GMS Road, Dehradun. Relevant extracts can also be obtained from the above mentioned office of UJVN Ltd.
3. The proposals filled by the UJVN Ltd. are also available at the website of the Commission ([www.uerc.gov.in](http://www.uerc.gov.in)) and at the UJVN Ltd.'s website ([www.uttarakhandjalvidyut.com](http://www.uttarakhandjalvidyut.com)).
4. Responses/suggestions, if any are sought from all consumers and other stakeholders on the above proposals. Responses may be sent to the Secretary, Uttarakhand Electricity Regulatory Commission, either in person, or by post at First Floor, Institution of Engineers (India) Building, Near I.S.B.T., Saharanpur Road, Clement Town, Dehradun or through e-mail to [uttaranchalerc@rediffmail.com](mailto:uttaranchalerc@rediffmail.com) as a statement of objections or comments with copies of documents and evidence in support thereof so as to reach the Secretary, UERC by 15.03.2013.

पत्र सं० 216/यूजेवीएन लि./म.प्र. (प्र.नि.का.) विज्ञापन दिनांक 05.02.2013.

**Avoid wasteful use of Electricity**

**8.3 Annexure 3: List of Respondents**

Sl. No.	Name	Designation	Organization	Address
1.	Sh. S.P. Joshi	-	-	Village & Post-Nakraunda, Near IDEA Tower, Nakraunda, Dehradun
2.	Sh. Pankaj Gupta	President	M/s Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun
3.	-	-	M/s Asahi India Glass Ltd.	Integrated Glass Plant, Village-Latherdeva Hoon, Manglaur-Jhabrera Road, P.O. Jhabrera, Tehsil Roorkee, Distt. Haridwar, Uttarakhand
4.	Sh. Pratap Singh	President	Vasant Vihar Members Welfare Association (Regd.)	95, Vasant Vihar, Phase-I, P.O.-New Forest, Dehradun-248006
5.	Sh. G.S. Bedi	General Manager	M/s Indian Drugs & Pharmaceuticals Ltd.	Virbhadra-249202, Rishikesh, Uttarakhand

**8.4 Annexure 4: List of Participants of Public Hearing****List of Participants in Hearing at Ranikhet on 14.03.2013**

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Hem Chowdhary	Vice President	Cantt Board	Ranikhet
2.	Sh. Ajay Kumar	General Secretary	Nagar Congress Committee	Ranikhet
3.	Sh. Harish Chandra Bavadi	-	-	Shree Bhawan, Mall Road, Ranikhet
4.	Sh. Kailash Pandey	-	-	151, Khadi Bazaar, Ranikhet
5.	Sh. Jagdish Agrawal	-	-	761, Sadar Market, Ranikhet
6.	Sh. A.L. Shah	-	-	205, Khadi Bazaar, Ranikhet
7.	Sh. Deep Bhagat	-	-	Bhagat Store, Sadar Market, Ranikhet
8.	Sh. G.S. Bisht	-	-	Hotel Ranikhet Grant, Ranikhet
9.	Sh. Bhaskar Bisht	-	-	Village & Post-Ganiya Dholi, Ranikhet
10.	Sh. Anand Aggarwal	-	-	Sadar Market, Ranikhet

**List of Participants in Hearing at Ranikhet on 14.03.2013**

Sl. No.	Name	Designation	Organization	Address
11.	Sh. Vivek Agarwal	-	-	13, Windy House, Mall Road, Ranikhet
12.	Sh. Deepak Garg	-	-	456, Sadar Market, Ranikhet
13.	Sh. Girish Pandey	-	-	C/o-J.P. Pandey & Sons, Sadar Market, Ranikhet

**List of Participants in Hearing at Rudrapur on 15.03.2013**

Sl. No.	Name	Designation	Organization	Address
1.	Mohammad Imran	-	M/s Star Auto Industries Pvt. Ltd.	Sector-11, IIE, SIDCUL, Pant Nagar, Udham Singh Nagar, Uttarakhand
2.	Sh. Diwakar Pant	-	M/s Amul Auto Component Pvt. Ltd.	Plot No. 40, Sector-11, IIE, SIDCUL, Pantnagar, Udham Singh Nagar, Uttarakhand
3.	Sh. Mukesh Jha	-	M/s Ultra Tech Suspensions Pvt. Ltd.	Plot No. 29, Sector-11, Pantnagar, Udham Singh Nagar, Uttarakhand
4.	Sh. R.S. Rawat	-	M/s Mayur Industries Ltd.	Plot No. 7, Sector-11, Tata Vendor Park, Sidcul, Pantnagar - 263153, Udham Singh Nagar, Uttarakhand,
5.	Sh. Sunil Nayal	-	M/s Autoline Industries Ltd.	Plot No. 5,6,8, Sector-11, SIDCUL, Pant Nagar, Udham Singh Nagar - 263153, Uttarakhand
6.	Sh. Amit Sharma	-	M/s Autoline Industries Ltd.	Plot No. 5,6,8 Sector-11, SIDCUL, Pant Nagar, Udham Singh Nagar - 263153, Uttarakhand
7.	Sh. J.C. Kandpal	-	M/s Mayur Industries Ltd.	SIDCUL, Rudrapur, Udham Singh Nagar, Uttarakhand
8.	Sh. Sachin Bhandari	-	M/s Bajaj Motors Ltd.	41/11, IIE, SIDCUL, Pantnagar, Uttarakhand
9.	Sh. Sagar Tyagi	-	M/s BST Textile Mills	Plot No. 9, Sector-9, SIDCUL, Pantnagar, Rudrapur, Udham Singh Nagar
10.	Sh. D.N. Jaiswal	-	M/s Archidply Ind. Ltd.	Plot No. 7, Sector-9, SIDCUL, Pantnagar, Rudrapur, Udham Singh Nagar

**List of Participants in Hearing at Rudrapur on 15.03.2013**

Sl. No.	Name	Designation	Organization	Address
11.	Sh. P.C. Pant	-	M/s Kiran Udhyog Pvt. Ltd.	Plot No. 34, Sector-11, SIDCUL, Pantnagar, Udham Singh Nagar
12.	Sh. Munish Lath	-	M/s Badve Engineering Ltd.	Unit No. XII, IIE, Tata Vendor Park, Pantnagar, U.S. Nagar
13.	Sh. Anoop Singh	-	M/s KLT Automotive & Tube Ltd.	Plot No. 20, Sector-11, Tata Vendor Park, Pantnagar, Udham Singh Nagar
14.	Sh. Rupendra Singh	-	M/s Dali & Samir Engineering Pvt. Ltd.	Plot No. 43, Sector-11, Tata Vendor Park, IIE Pantnagar, Rudrapur - 263153, Uttarakhand
15.	Sh. Mor Singh	-	M/s Mangala Auto Engineering Pvt. Ltd.	Plot No. 1-C, Sector-11, IIE, SIDCUL, Tata Vendor Park, Pantnagar, U.S. Nagar, Uttarakhand
16.	Sh. Ashwini Kumar	-	M/s Perfect Dynamics Auto Pvt. Ltd.	Village - Fulsunga, Post - Transit Camp, Tahsil - Kichha, Rudrapur, Dist. Udham Singh Nagar
17.	Sh. Arunesh Kumar	-	M/s Om Sai Industries	Village - Fulsunga, Post - Transit Camp, Tahsil - Kichha, Rudrapur, Dist. Udham Singh Nagar
18.	Sh. Vivek Jha	-	M/s Sanjay Technoplast Pvt. Ltd.	Village - Fulsunga, Post - Transit Camp, Tahsil - Kichha, Rudrapur, Dist. Udham Singh Nagar
19.	Sh. A.L. Dandavate	-	M/s Bajaj Auto Ltd.	Plot No. 2, Sector-10, SIDCUL, Pantnagar, Rudrapur, Dist. Udham Singh Nagar, Uttarakhand
20.	Sh. Mayur Ghode	-	M/s Anusuya Auto Press Part Pvt. Ltd.	Plot No. 53, 54, Sector-11, IIE, Pantnagar, Rudrapur, Dist. Udham Singh Nagar, Uttarakhand
21.	Sh. Vikas Jindal	-	M/s Kumaon Garhwal Chamber of Commerce & Industry	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt.- Udham Singh Nagar
22.	Sh. Darbara Singh	-	M/s Kumaon Garhwal Chamber of Commerce & Industry	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt.- Udham Singh Nagar
23.	Sh. Pawan Agarwal	Chairman	Power Committee, M/s Kumaon Garhwal Chamber of Commerce & Industry	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt.- Udham Singh Nagar

**List of Participants in Hearing at Rudrapur on 15.03.2013**

Sl. No.	Name	Designation	Organization	Address
24.	Sh. Suresh Kumar	-	M/s La-opala RGLN	B-108, Eldeco, SIDCUL Industrial Park, Sitarganj, Distt.- Udham Singh Nagar
25.	Sh. R.K. Gupta	-	M/s Gujarat Ambuja Exports Ltd.	C-50, Eldeco, Sitarganj, Distt.- Udham Singh Nagar
26.	Sh. D.K. Singh	-	M/s Omega Ice Hill Pvt. Ltd.	Plot No. 37, Sector-4, SIDCUL, Rudrapur, Udham Singh Nagar-263153
27.	Sh. Amresh Dwivedi	-	M/s Varroc Engineering Pvt. Ltd.	Plot No.-20, Sector-9, Integrated Industrial Estate (IIE), SIDCUL, Pantnagar, Rudrapur, Udham Singh Nagar
28.	Sh. Dilip Mishra	-	M/s Wheels India Ltd.	Plot No.-56, Sector-11, Pantnagar, Rudrapur, Udham Singh Nagar
29.	Sh. Jagdish Chandra Singh	-	M/s Bhramari Steels Pvt. Ltd.	New Mandi Gate, Bareilly Road, Haldwani, Distt. Nainital
30.	Sh. Umesh Sharma	-	M/s Voltas Ltd.	Plot No. 2-5, Sector-8, IIE, Pantnagar Industrial Area, Rudrapur, Udham Singh Nagar-263153
31.	Sh. Yogesh K. Gautam	-	M/s UCP Ltd.	Plot No. 1, Sector-10, IIE, Pantnagar Industrial Area, Rudrapur, Udham Singh Nagar-263153
32.	Sh. Maneesh Gupta	-	M/s Shivani Locks Pvt. Ltd.	Plot No. 44, Sector-11, IIE, Pantnagar, Rudrapur, Udham Singh Nagar
33.	Dr. Ganesh Upadhyaya	-	-	Village & P.O.-Shantipuri No.-2, Kichha, Distt.-Udham Singh Nagar
34.	Sh. Bharat Saigal	-	M/s Innovative Textiles Pvt. Ltd. Pvt. Ltd.	Plot No. 8, Block-B, Phase-1, Sidcul Industrial Park, Sitarganj, Distt. Udham Singh Nagar, Uttarakhand-262405
35.	Sh. V.V. Joshi	-	M/s Tata Motors Ltd.	Plot No. 1, Sector 11, IIE, SIDCUL, Pant Nagar, Udham Singh Nagar
36.	Sh. R.K. Mahapalan	-	M/s Tata Motors Ltd.	Plot No. 1, Sector 11, IIE, SIDCUL, Pant Nagar, Udham Singh Nagar
37.	Sh. Manish Tanwar	-	M/s HCL Infosystems Ltd.	Plot No. 1&2, Sector-5, IIE, Pant Nagar, SIDCUL, U.S. Nagar

**List of Participants in Hearing at Rudrapur on 15.03.2013**

Sl. No.	Name	Designation	Organization	Address
38.	Sh. Parminder Singh Rattan	-	M/s Rattan Legal Associates	No. 10, Barlowganj, Mussoorie, Dehradun
39.	Sh. Mahesh Varma	-	M/s Jalpac India Ltd.	Village-Tularampur, P.O.-Mota Haldu, Haldwani, Nainital,
40.	Sh. Puneet Mohindra	-	M/s Kashi Vishwanath Steels Ltd.	Narain Nagar Industrial Estate, Nainital Road, Kashipur-244713, Distt. Udham Singh Nagar
41.	Sh. Ashok Bansal	-	M/s. Rudrapur Solvents Pvt. Ltd.	Lalpur, Kichha, Rudrapur, Distt.- Udham Singh Nagar
42.	Sh. Rajeev Gupta	-	M/s Galwalia Ispat Udyog Ltd.	Narain Nagar Industrial Estate, Nainital Road, Kashipur-244713, Distt. Udham Singh Nagar
43.	Sh. Mahendra Prasad	-	M/s Kortek Electronics India Ltd.	Plot No.-543, Village-Kishanpur, Tehsil-Kichha, Distt: Udham Singh Nagar, Uttarakhand (Rudrapur), Pincode - 263148
44.	Sh. Anurag Tiwari	-	M/s Ganesha Echosphere Ltd.	Plot No. 6, Sector-2, IIE Pantnagar, Rudrapur, Udham Singh Nagar
45.	Sh. Rais Ahmed	-	M/s Ganesha Echosphere Ltd.	Plot No. 6, Sector-2, IIE Pantnagar, Rudrapur, Udham Singh Nagar
46.	Sh. P.K. Dubey	-	M/s Ganesha Echosphere Ltd.	Plot No. 6, Sector-2, IIE Pantnagar, Rudrapur, Udham Singh Nagar
47.	Sh. V.P. Joshi	-	M/s Gee Cee Corp. Pvt. Ltd.	Plot No. 15, Sector-9, SIDCUL, Pantnagar, Udham Singh Nagar
48.	Sh. S.S. Rawat	-	M/s Nestle India Ltd.	Sector-1, Plot Number-1A, IIE, Pantnagar, Rudrapur, Udham Singh Nagar- 263145
49.	Sh. Sanjay Kr. Sharma	-	M/s Advik Hitech Pvt. Ltd.	Sector-9, Plot No.-7A, Integrated Industrial Estate (IIE), Pantnagar, Rudrapur, Udham Singh Nagar-263153
50.	Sh. Suresh Singh Yadav	-	M/s Autocomp Corporation Panes Pvt. Ltd.	Plot No. 38-39, Sector-11, IIE, Pantnagar, Rudrapur, Udham Singh Nagar
51.	Sh. R.B. Biradar	-	M/s Radico Khaitan Ltd.	B-3, UPSIDC, Industrial Area, Sultanpur Patti, Bazpur, Distt. Udham Singh Nagar
52.	Sh. Atul Mittal	-	M/s Radico Khaitan Ltd.	B-3, UPSIDC, Industrial Area, Sultanpur Patti, Bazpur, Udham Singh Nagar

**List of Participants in Hearing at Rudrapur on 15.03.2013**

Sl. No.	Name	Designation	Organization	Address
53.	Sh. R.S. Yadav	-	M/s India Glycols Ltd.	A-1, Industrial Area, Bazpur Road, Kashipur, Distt. Udham Singh Nagar-244713
54.	Sh. L.M.C. Bhatt	-	M/s Sravanthi Energy Pvt. Ltd.	Kashipur, Udham Singh Nagar
55.	Sh. A.K. Goel	Secretary General	M/s Kumaon Garhwal Chamber of Commerce & Industry	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt.- Udham Singh Nagar
56.	Sh. Amit Kapoor	-	M/s Minala Corporation Ltd.	Plot No. 9, Sector-10, SIDCUL, Rudrapur, Udham Singh Nagar
57.	Sh. Surendra Girdhar	-	-	Tarai Shoe Centre, Bhagat Singh Chowk, Rudrapur, Dist. Udham Singh Nagar
58.	Sh. Tushar Agrawal	-	M/s BTC Industries Ltd.	Village-Kishanpur, Post-Deoria, Tehsil- Kiccha, Dist. Udham Singh Nagar
59.	Sh. Ram Kumar Agarwal	-	M/s Umashakti Steels Pvt. Ltd.	Village-Vikrampur, Bannakheda Road, Bazpur, Distt. Udham Singh Nagar
60.	Sh. Balkar Singh	-	-	Raipur Khurd, P.O.-Kashipur, Distt. Udham Singh Nagar
61.	Sh. Bhupendra Singh	General Secretary	Bhartiya Kisan Union	Village & Post-Dhakia No. 1, Tehsil-Kashipur, Udham Singh Nagar
62.	Sh. Teeka Singh Saini	Chairman	Sayunkt Kisan Sangharsh Committee,	33-Katoratal, Kashipur, Distt.- Udham Singh Nagar
63.	Sh. Kuldeep Singh Cheema	-	Bhartiya Kisan Union	Village & Post-Dhakia No. 1, Tehsil-Kashipur, Udham Singh Nagar
64.	Sh. Jeet Singh Cheema	-	Bhartiya Kisan Union	Village & Post-Dhakia No. 1, Tehsil-Kashipur, Udham Singh Nagar
65.	Sh. Satnam Singh Cheema	-	Bhartiya Kisan Union	Village-Chanakpur Farm, P.O.-Kashipur, Udham Singh Nagar
66.	Sh. Karnail Singh	President	Bhartiya Kisan Union Committee	Guru Nanak Agri Clinic, Near Gurudwara, Gadarpur, Distt. Udham Singh Nagar
67.	Sh. H.D. Arora	President	Mohalla Swachata Samiti	Civil Lines, Doctors Colony, Rudrapur, Udham Singh Nagar



**List of Participants in Hearing at Dehradun on 18.03.2013**

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Mahesh Sharma	Secretary General	Uttarakhand Industrial Welfare Association	Off. G-31, UPSIDC, Industrial Area, Selaqui, Dehradun
2.	Sh. Rakesh Bhatia	Sr. Vice President	Uttarakhand Industrial Welfare Association	E-8, Govt. Industrial Area, Patel Nagar, Dehradun
3.	Sh. Naresh Bansal	-	Uttarakhand Industrial Welfare Association	Off. G-31, UPSIDC, Industrial Area, Selaqui, Dehradun
4.	Sh. Manoj Gupta	-	Uttarakhand Industrial Welfare Association	Off. G-31, UPSIDC, Industrial Area, Selaqui, Dehradun
5.	Sh. Pankaj Gupta	President	Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun
6.	Sh. Rajiv Agarwal	Sr. Vice-President	Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun
7.	Sh. P.K. Rajput	Executive Director	M/s Alps Industries Ltd.	Plot No. 1-A, Sector-10, IIE, SIDCUL, Roshnabad Road, Haridwar-249403
8.	Sh. Man Singh	General Manager (Engg.)	M/s Alps Industries Ltd.	Plot No. 1-A, Sector-10, IIE, SIDCUL, Roshnabad Road, Haridwar-249403
9.	Sh. Naval Duseja	AGM	M/s Flex Foods Ltd	Lal Tappar Industiral Area, Haridwar Road, Dehradun
10.	Sh. Vishnu Dutt Tyagi	Asst. General Manager (HR & A)	M/s Ultimate Flexipack Ltd.	Plot No. 12, Sector-11, IIE, SIDCUL, Haridwar-249403
11.	Sh. Gulshan Roy	-	Shri Ganesh Roller Flour Mill	Mohabbewala, Dehradun
12.	Sh. G.S. Manchanda	Proprietor	Hotel India	Library, Mussoorie - 248179
13.	Sh. Ajay Bhargava	Secretary General	Mussoorie Hotels Association	Hotel Surya Kiran, Mall Road, Mussoorie
14.	Sh. Rakesh Gupta	Accountant	Hotel Aketa	Rajpur Road, Dehradun-248001
15.	Sh. Rakesh Kr. Tyagi	-	M/s Creative Industries	Plot - 5/5A, Sector 3, SIDCUL, IIE, Haridwar
16.	Sh. R.K. Jalan	-	M/s Revati Print O Pack	Sector-2, Plot No. 37, IIE, SIDCUL, Haridwar

**List of Participants in Hearing at Dehradun on 18.03.2013**

Sl. No.	Name	Designation	Organization	Address
17.	Sh. Ashish Gupta	-	M/s GLS Electronics Industries Pvt. Ltd.	Plot No. 5, Sector-2, SIDCUL, Haridwar
18.	Sh. Yogendra Singh Rathi	Editor	M/s Unnati Times Daily	34&35, Mayur Vihar, Kandoli, Dehradun
19.	Sh. R.K. Rajwar	Unit Coordinator (Engg.)	Project Management Unit	Swajal (Drinking Water Dept.), Mussoorie Diversion Road, Dehradun
20.	Sh. G.C. Pande	Managing Director	Uttarakhand Peyjal Sansadhan Vikas & Nirman Nigam	11, Mohini Road, Dehradun
21.	Sh. P.K. Goel	Executive Engineer	State Water & Swachhata Mission	01, Bhagirathi Puram, Doon Vihar, Jhakkan, Dehradun
22.	Sh. Shanti Prasad Bhatt	-	Uttarakhand Kranti Dal	22, Mitralok, Colony, Dehradun
23.	Sh. Vishwamitra	-	-	36, Panchsheel Park, Chakrata Road, P.O.-Forest Research Institute (FRI), Dehradun
24.	Sh. M.S. Mehta	-	-	109/7, Dharampur, Dehradun
25.	Sh. S.P. Nautiyal	-	-	Nehru Gram-Lower, P.O.-Nehru Gram, Dehradun
26.	Sh. K.S. Pundir	-	-	Shanti Kunj, Lane : 1-A, Lower Natthanpur, P.O.-Nehrugram, Dehradun
27.	Sh. Vigyan Swarup Bhatnagar	-	-	98/3, Bell Road, Near Junior Hilton School, Clementown, Dehradun
28.	Sh. M.G. Trivedi	-	Commander Works Engineers	Mall Road, Dehradun Cantt., Dehradun
29.	Sh. K.K. Dhiman	GE	Commander Works Engineers	Garhi Cantt, Dehradun
30.	Sh. G.D. Madhok	-	-	146/1, Rajendra Nagar, Street No. 9, Kaulagarh Road, Dehradun
31.	Col. D. Singh	-	-	C-107, Sector-3, Defence Colony, Dehradun
32.	Col. S.P.S. Negi	-	-	B-262, Sector-4, Defence Colony, Dehradun
33.	Sh. O.P. Rank	-	-	104, Mahendra Vihar, Ballupur Road, Dehradun

**List of Participants in Hearing at New Tehri on 20.03.2013**

<b>Sl. No.</b>	<b>Name</b>	<b>Designation</b>	<b>Organization</b>	<b>Address</b>
1.	Sh. Umesh Gusain	Chairman	Nagar Palika	New Tehri
2.	Sh. Chiran Jeet Tiwari	Sabhasad	Nagarpalika	New Tehri
3.	Sh. Rajpal Singh Miya	Sabhasad	Nagarpalika	New Tehri
4.	Sh. Jeet Ram Bhatt	Member	District Panchayat	District Planning Committee, New Tehri
5.	Sh. Anil Uniyal	-	-	Sector-9B, 11/2, Bauradi, New Tehri
6.	Sh. Vijay Kathait	-	-	B/29, Near Main Market, New Tehri
7.	Sh. Gulab Singh Panwar	-	-	C/o Sh. Darshan Lal Bhatt, B-3, Covered Market, Bauradi, New Tehri
8.	Sh. Sohan Singh Chauhan	-	-	Sector-2, Flat No. 104, Near Soni Hotel, New Tehri
9.	Sh. Vikram Singh	-	-	Village-Nawagar, New Tehri
10.	Sh. Vinod Mamgain	-	-	Near R.S. Public School, New Tehri Road, Badshaithaul, New Tehri
11.	Sh. Roshan Singh Chauhan	-	-	Village-Painula, P.O.-Pangarkhal, New Tehri