

**Order on Generation Tariff  
for  
Uttarakhand Jal Vidyut Nigam  
Limited  
for  
FY 2009-10**

**October 21, 2009**

**Uttarakhand Electricity Regulatory Commission**

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

**Near ISBT Majra, Dehradun - 248006**



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**Before  
UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**

**Petitions No.: 05/2009 to 13/2009**

**In the Matter of:**

Determination of Generation Tariff for FY 2009-10 for nine medium and large hydro generating stations of Uttarakhand Jal Vidyut Nigam Limited (UJVNL), Government owned company in the State.

**AND**

**In the Matter of:**

Uttarakhand Jal Vidyut Nigam Limited.

Ujjwal, Maharani Bagh, G.M.S. Road, Dehradun - **Petitioner**

**Coram**

<b>Shri V. J. Talwar</b>	<b>Chairman</b>
<b>Shri Anand Kumar</b>	<b>Member</b>

**Date of Order: October 21, 2009**

This Order relates to Petition Nos. 05/2009 to 13/2009 (Petitions), for determination of tariff of nine medium and large hydro generating stations viz., Dhakrani, Dhalipur, Chibro, Khodri, Kulhal, Ramganga, Chilla, Maneri Bhali-I and Khatima of Uttarakhand Jal Vidyut Nigam Limited (hereinafter referred to as "UJVNL" or "Petitioner"), for FY 2009-10 under section 62 (1) (b) of the Electricity Act, 2003 (hereinafter referred to as "Act") read with Regulation 56 of the Uttaranchal Electricity Regulatory Commission (Conduct of Business) Regulations, 2004, admitted on July 02, 2009. For sake of convenience, this Order is divided into following 6 Chapters:

1. Background and Procedural History
2. Petitioner's Submissions and Proposals

3. Stakeholders' Response to the Proposals and Petitioner's Reply
4. Commission's Approach
5. Commission's Analysis, Scrutiny and Conclusions
6. Performance of Petitioner's Plants

## **1. Background and Procedural History**

UJVNL is a company wholly owned by the State Government and engaged in the business of generation of power in the State including nine medium and large hydro generating stations to which this Order relates. These nine hydro generating stations are Dhakrani, Dhalipur, Chibro, Khodri, Kulhal, Ramganga, Chilla, Maneri Bhali-I and Khatima. Electricity generated at these stations is supplied to another Government company namely Uttarakhand Power Corporation Ltd. (UPCL), which is the sole distribution licensee in the State and to Himachal Pradesh State Electricity Board (HPSEB) upto share in five of these stations. Tariff for supply of electricity generated at these generating stations is required to be determined by Uttarakhand Electricity Regulatory Commission ( hereinafter referred as the Commission or UERC) in accordance with section 62(1)(a) of the Electricity Act, 2003. section 86 requires the Commission not only to determine tariff for generation within the State but also to regulate purchase of electricity by the distribution licensee, including its price.

In exercise of powers conferred on it by section 181 of the Act, the Commission has issued detailed Regulations pertaining to determination of tariff viz., Uttaranchal Electricity Regulatory Commission (Terms & Conditions for Determination of Hydro Generation Tariff) Regulations, 2004 (hereinafter referred to as “Regulations”).

The Commission has notified the following Regulations, which specify tariff setting principles, norms and procedure of tariff setting:

- UERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2004 (hereinafter referred to as “Regulations”).
- UERC (Conduct of Business) Regulations, 2004
- UERC (Terms and Conditions for Determining Escalation Factor) Regulations, 2008.
- UERC (Terms and Conditions for Truing Up of Tariff) Regulations, 2008
- Order on Extension of UERC (Terms & Conditions for Determination of Generation, Transmission & Distribution) Regulations, 2004

The Commission vide its Previous Tariff Order issued on March 18, 2008 in the matter of determination of tariffs for these nine generating stations, on the Petitions filed by UJVNL, determined the Generation Tariff for these nine large hydro generating stations for

FY 2007-08 and FY 2008-09 which is presently in force.

Regulation 56(4) of the Uttaranchal Electricity Regulatory Commission (Conduct of Business) Regulations, 2004 on the time schedule for filing of the Aggregate Revenue Requirement (ARR) and Tariff Petitions is as reproduced below:

*"Subject to the provisions of the applicable Act, each year, the licensee or the generating company shall file with the Commission on or before 30th November or otherwise as may be directed by the Commission, in the format and in accordance with the guidelines and procedures issued by the Commission for this purpose, statements containing calculation for the ensuing financial year of the expected aggregate revenue from charges under its currently approved tariff and the expected cost of providing services."*

As UJVNL did not submit its Petitions for FY 2009-10 by the stipulated date i.e., November 30, 2008 The Commission vide its letter dated December 11, 2008 directed UJVNL to submit ARR and Tariff Petitions for its nine generating stations by December 15, 2008. UJVNL submitted the ARR and Tariff Petitions for Dhakrani, Dhalipur and Kulhal stations on December 31, 2008, for Khatima, Ramganga and Tiloth stations on January 1, 2009, for Khodri and Chibro stations on January 16, 2009 and Chilla Hydro station on January 21, 2009. However, the Commission observed that UJVNL did not submit the copy of approval of its Board of Directors for the Petitions. Subsequently, UJVNL in its submission dated February 17, 2009 submitted the post facto approval of its Board of Directors (BoD) for the 9 tariff Petitions submitted before the Commission. The Commission vide its letter dated March 23, 2009 directed UJVNL to revise its Tariff Petitions considering the impact of the implementation of Government Order on implementation of recommendations of VI Pay Commission and also pointed out certain deficiencies in the Petitions filed with the Commission. Upon delay in submission of the Petitions, the Commission vide its letter no. 175/UERC/ARR-07 of 09/09-10 dated May 11, 2009 directed UJVNL to submit the Petitions at the earliest.

UJVNL submitted its revised Petitions incorporating the Commission's directives on various issues and also overcoming the discrepancies on 25.06.2009. The Commission admitted the Petitions on July 02, 2009 and the Public Notice was issued by UJVNL in leading newspapers on July 05, 2009 and July 06, 2009 for inviting suggestions and objections from the stakeholders by July 27, 2009 (Copy of the Public Notice is enclosed at **Annexure 1**).

Copies of the summary of the proposals published by Petitioner were also sent to

members of the Advisory Committee and the details were made available at the Commission's office, and also on the Commission's website in easy downloadable format as well as at the UJVNL's offices.

The Commission received suggestions and objections from various stakeholders in writing on UJVNL's Tariff Petitions for the nine LHPs. The list of respondents who submitted their responses are enclosed at **Annexure-2**.

The Commission held common public hearings on Determination of Generation Tariff, Transmission Tariff and Retail Supply Tariff for FY 2009-10 with a view to give adequate opportunity of personal hearing to the objectors and the hearing was held not only on the representations/comments received but an opportunity was also given for open hearing to all the participants, irrespective of whether they had submitted written suggestions and objections on the tariff application or not at the following places in the State:

**Table 1.1 : Schedule of Hearings**

Sl.	Place	Date of pubic hearing
1.	Gopeshwar	13.07.2009
2.	Almora	14.07.2009
3.	Haldwani	15.07.2009
4.	Dehradun	20.07.2009

Meanwhile, the Commission vide its letter No. 403/UERC/UJVNL ARR-2009-10/09 dated July 02, 2009 directed UJVNL to provide the additional information and sought clarification on following key issues:

- UJVNL to provide the comparison for other expenses with the appropriate justification for deviations.
- Reasons for variation in the figures for asset capitalisation of previous years for all generating stations as submitted in previous years and submitted now in the current Petition.
- Detailed note on the Insurance charges as proposed for FY 2009-10 and the necessary supporting documents in this regard.
- Explain under which provisions of law and Regulations it is supplying power to Irrigation Department, Bank, Post Office, Hospital and other commercial consumers etc., clarify whether it has considered revenue from supply of such power for truing up purposes for FY 2007-08, submit details of the revenue received from sale to such establishments and clarify at what rate these establishments are being charged

- Provide the detailed computations of the cost of concessional supply to UJVNL's past and present employees for FY 2007-08 and all necessary details in this regard.
- Confirm whether it has received any tax refund for previous years or not. If received provide the necessary details in this regard.
- Submit the component wise break up of employee cost estimated for six months (October – March 2009) for the FY 2008-09.
- Reconcile the difference of the transformation losses as specified in the Petition and Format 2.1 and further submit the basis on which the transformation losses have been arrived at.

The first Technical Validation Session (TVS) was held with UJVNL on July 07, 2009 in which the issues raised in letter dated July 02, 2009 were discussed. Based on these discussions, the Commission further advised the Petitioner to submit additional information which was critical for processing the Tariff Petition for FY 2009-10 vide its letter No. 484/UERC/UJVNL ARR-2009-10/09 dated July 10, 2009.

The Petitioner filed its response to the queries raised by the Commission and submitted additional information on July 19, 2009. Based on Petitioner submissions, the Commission further advised the Petitioner to submit additional information vide its letter no 592/UERC/09 dated July 27, 2009 and 611/ UERC/ UJVNL ARR-2009-10/09 dated July 29, 2009. In reply, the Petitioner submitted the additional information through its letter dated August 12, 2009 which has been discussed in the subsequent Chapters. The Commission scheduled another TVS in the matter with UJVNL on August 19, 2009, wherein various issues were discussed. Copies of stakeholders' suggestions and objections were forwarded to UJVNL for their views/comments. UJVNL submitted its views on the various issues raised by the stakeholders on September 23, 2009.

Petitioner's proposals were also discussed with Advisory Committee. The responses received by the Commission were sent to the Petitioner for comments. All the issues raised by stakeholders and the Petitioner's reply on responses are detailed in Chapter 3 of this Order. All the issues raised by the stakeholders and the Petitioner's reply have been kept in view by the Commission while examining the proposals.

## 2. Petitioner's Submissions and Proposals

The Petitioner, in its Petitions, for nine large hydro generating stations has proposed the Annual Fixed Charges (AFC) for FY 2009-10 on the basis of projected expenses for FY 2009-10. The Petitioner has claimed AFC of Rs. 147.87 Crore for FY 2009-10 for truing up purposes against the approved AFC of Rs. 131.63 Crore for FY 2007-08. As regards the AFC for FY 2008-09, UJVNL has submitted the revised estimate of AFC of Rs. 161.28 Crore as against the approved AFC of Rs. 140.82 Crore for FY 2008-09. As regards the truing up for FY 2008-09, UJVNL submitted that Accounts for FY 2008-09 are in process of finalization and the true up for FY 2008-09 would be requested, if required on actuals based on Annual Accounts through a separate Petition.

The Petitioner has further claimed AFC of Rs. 178.45 Crore for FY 2009-10 against the approved AFC of Rs. 131.63 Crore for FY 2007-08 and Rs. 140.82 Crore for FY 2008-09. Main features of Petitioner's submissions in the Petitions are summarized hereafter.

### 2.1 Generation

#### 2.1.1 Installed Capacity

UJVNL has a total installed capacity of 948.15 MW of the nine major generating stations for which this Order relates. Out of these 9 major generating stations, Himachal Pradesh has a share in 5 major generating stations. The installed capacity and UPCL's share in generating stations of UJVNL are provided in the Table below:

**Table 2.1: Installed capacity and Capacity Allocation**

Station	Capacity	UPCL's Capacity Allocation	
	MW	%	MW
Dhakrani	33.75	75%	25.31
Dhalipur	51.00	75%	38.25
Chibro	240.00	75%	180.00
Khodri	120.00	75%	90.00
Kulhal	30.00	80%	24.00
Ramganga	198.00	100%	198.00
Chilla	144.00	100%	144.00
M Bhali I	90.00	100%	90.00
Khatima	41.40	100%	41.40
<b>Total (MW)</b>	<b>948.15</b>		<b>830.96</b>

#### 2.1.2 Capacity Index

UJVNL has projected the capacity index on normative basis considering the norms for storage hydro stations and run of the river stations with pondage and has not sought any

deviation in the normative capacity index as stipulated in the Regulations. The capacity index as submitted by UJVNL for FY 2007-08, FY 2008-09 and FY 2009-10 for all generating stations has been provided in the following Table:

**Table 2.2: Normative capacity Index proposed by the Petitioner (%)**

Station	Capacity	Normative Capacity Index (%)		
	MW	FY 2007-08	FY 2008-09	FY 2009-10
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%
M Bhali I	90.00	85%	85%	85%
Khatima	41.40	90%	90%	90%

### 2.1.3 Projected Generation

The station-wise expected generation during FY 2009-10 is given in the Table below:

**Table 2.3: Projected Generation proposed by the Petitioner (MU)**

Station	Expected generation (MU)
Dhakrani	156.88
Dhalipur	192.00
Chibro	750.00
Khodri	345.00
Kulhal	153.91
Ramganga	311.00
Chilla	671.29
Maneri Bhali I	395.00
Khatima	194.05
<b>Total</b>	<b>3169.13</b>

This expected generation has been treated as Primary Energy by the Petitioner for computation of Saleable Primary Energy and its rate.

### 2.1.4 Auxiliary Energy Consumption and Transformation Losses

The Petitioner has claimed that it has computed transformation losses and auxiliary consumption at the normative levels specified by the Commission. However, for Chilla HEP, UJVNL submitted that the Commission had earlier allowed the auxiliary consumption at 0.2% of the energy generated considering rotating excitation system. UJVNL further submitted that during the FY 2005-06 static excitation system was installed at the generating station. In accordance with Regulation 13(2) of the Tariff Regulations, 2004, in case of underground generating stations with static excitation system, an auxiliary consumption of 0.5% of the energy generated is permissible. Accordingly, UJVNL projected auxiliary

consumption of 0.5% for Chilla HEP during FY 2009-10. Similarly, on account of same reasons i.e., installation of static excitation system, UJVNL projected the auxiliary consumption of 0.5% for Khodri HEP and 0.7% for Chibro HEP.

The station-wise position of the Auxiliary Consumption and Transformation Losses for FY 2009-10 is given in the Table below:

**Table 2.4: Auxiliary consumption and Transformation loss proposed by the Petitioner for FY 2009-10**

Station	Auxiliary Consumption		Transformation Loss	
	%	MU	%	MU
Dhakrani	0.20%	0.31	0.50%	0.78
Dhalipur	0.20%	0.38	0.50%	0.96
Chibro	0.70%	5.25	0.50%	3.75
Khodri	0.50%	1.73	0.50%	1.73
Kulhal	0.20%	0.31	0.50%	0.77
Ramganga	0.20%	0.62	0.50%	1.56
Chilla	0.50%	3.36	0.50%	3.36
Maneri Bhali I	0.20%	0.79	0.50%	1.98
Khatima	0.20%	0.39	0.50%	0.97
<b>Total</b>		<b>13.14</b>		<b>15.85</b>

### 2.1.5 Total Saleable Units

After deducting from the expected generation, the above mentioned figures of Auxiliary Consumption and Transformation Losses, the Petitioner has computed total saleable units to be 3,140.15 MU for FY 2009-10 as shown in the following Table.

**Table 2.5: Energy generation and Saleable Energy proposed by the Petitioner for FY 2009-10**

Plant	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>3140.15</b>

## 2.2 Capital Cost and Additional Capitalisation

### 2.2.1 Capital Cost

The Petitioner in its Petitions submitted that there has been limited transfer of historical data from Uttar Pradesh Jal Vidyut Nigam Limited (UPJVNL) to UJVNL and despite repeated requests and follow-up, complete technical details and studies conducted over the years on these projects have not been passed on by UPJVNL. Certain essential documents such as the Detailed Project Reports (DPR), Central Electricity Authority (CEA) clearances or Project Completion Reports have also not been provided. The Petitioner is, therefore, not in a position to provide details regarding the break-up of original costs of fixed assets and those approved by a competent authority on COD (i.e., Date of Commercial Operation). The Petitioner submitted that Transfer Scheme giving the asset details for UJVNL are still not finalised, though a decision is expected shortly from the Government of India (GoI) on this matter.

The Petitioner further submitted that the approach adopted by the Commission in its Tariff Order dated December 16, 2004 for determining the capital costs of these stations is acceptable on provisional basis pending finalization and notification of the Transfer Scheme. Thus, UJVNL has accepted the value of Gross Fixed Assets (GFA) of Rs. 503.96 Crore as determined by the Commission in its Order dated December 16, 2004 for 9 Large Hydro Power Stations (LHPs) transferred to UJVNL. The Capital costs of these projects, as claimed by the Petitioner, is given in the Table below:

**Table 2.6: Original capital cost considered by the Petitioner (Rs. Crore)**

Station	Capital Cost
Dhakrani	12.40
Dhalipur	20.37
Chibro	87.89
Khodri	73.97
Kulhal	17.51
Ramganga	50.02
Chilla	124.89
Maneri Bhali I	109.72
Khatima	7.19
<b>Total</b>	<b>503.96</b>

### 2.2.2 Additional Capitalisation

UJVNL has stated that additional investments have also been made in these plants to ensure continued operations considering the life of the projects and the investments necessary for operating the plants.

UJVNL submitted that figures of Additional Capitalisation are based on Audited Financial Statements for FY 2001-02 and onwards up to FY 2003-04. The figures for FY 2004-05 and onwards are based on un-audited Financial Statements. UJVNL 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. UJVNL 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 LHPs 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.

UJVNL has projected the plant-wise additional capital expenditure and asset addition in FY 2008-09 and FY 2009-10, which is given in the Table below:

**Table 2.7: Additional capitalisation considered by the Petitioner (Rs. Crore)**

Station	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Dhakrani	0.020	0.042	0.082	0.026	0.041	0.054	0.055	0.800	6.000
Dhalipur	0.030	0.063	0.124	0.039	0.062	0.082	0.084	0.343	0.420
Chibro	0.146	0.500	0.613	0.283	0.273	1.336	0.534	0.318	3.370
Khodri	0.070	0.169	0.479	0.217	0.289	0.228	0.982	1.030	4.397
Kulhal	0.017	0.037	0.073	0.023	0.036	0.048	0.037	2.570	3.460
Ramganga	0.053	0.131	0.515	0.398	0.254	0.272	0.428	0.107	0.000
Chilla	0.038	1.178	2.102	2.579	2.334	1.917	0.335	0.287	0.904
M Bhalli-I	0.024	0.060	0.251	0.078	0.120	0.513	0.094	0.130	9.000
Khatima	0.011	0.028	0.095	0.110	0.076	0.052	0.272	0.038	0.000
<b>Total</b>	<b>0.409</b>	<b>2.208</b>	<b>4.333</b>	<b>3.751</b>	<b>3.486</b>	<b>4.502</b>	<b>2.822</b>	<b>5.623</b>	<b>27.551</b>

UJVNL submitted that the Financial Year-wise additional capitalisation figures as detailed above, may not strictly match with the additional capitalisation submitted by the Petitioner and considered by the Commission in its Tariff Order dated March 18, 2008 on account of the fact that the additional capital expenditure incurred by such accounting divisions serving more than one stations, namely, Head Office, General Manager Office/DGM/Civil Division, etc., have now been allocated on the 9 LHPs and such allocation was not considered in the earlier submission.

UJVNL submitted that Detailed Project Report (DPR) for Renovation, Modernisation and Upgradation (RMU) works in total amounting to Rs. 78.50 Crore was approved by

Central Electricity Authority (CEA) for Chilla, Chibro and Khodri Power Houses under Accelerated Power Development Programme (APDP) scheme of Government of India. An amount of Rs. 39.25 Crore (90% in the form of Grant- Rs. 35.33 Crore and 10% i.e., Rs. 3.92 Crore as loan) being 50% of the approved cost for RMU works were released during FY 2002-03 and FY 2003-04. UJVNL submitted that for the purpose of determining the Return on Equity (RoE) and depreciation, the amount of grant received under APDP scheme has been reduced from the total value of GFA.

### 2.3 Interest on Loans

UJVNL has submitted that in accordance with the Regulations of the Commission, interest on normative debt has been considered on the value of additional capitalisation only. The rate of interest for such debt has been considered on the basis of the prevalent Prime Lending Rate (PLR) of State Bank of India which is 12.25% p.a. The station-wise interest on loan considered by the Petitioner is given in the following Table:

**Table 2.8: Interest on loan proposed (Rs. Crore)**

Station	FY 2007-08		FY 2008-09		FY 2009-10
	Approved	Actual	Approved	Estimated	Proposed
Dhakrani	0.04	0.03	0.04	0.10	0.61
Dhalipur	0.01	0.05	0.01	0.07	0.11
Chibro	0.53	0.46	0.52	0.49	0.78
Khodri	0.05	0.21	0.05	0.30	0.68
Kulhal	0.01	0.02	0.01	0.24	0.54
Ramganga	0.06	0.18	0.06	0.18	0.18
Chilla	0.63	0.89	0.61	0.91	1.04
M Bhali I	0.10	0.10	0.10	0.11	0.88
Khatima	0.02	0.06	0.03	0.06	0.06
<b>Total</b>	<b>1.45</b>	<b>1.99</b>	<b>1.43</b>	<b>2.46</b>	<b>4.89</b>

### 2.4 Return on Equity (RoE)

UJVNL has submitted that it has claimed Return on Equity (RoE) on the opening GFA assuming a normative debt-equity ratio of 70:30 in accordance with the Tariff Regulations, 2004.

Thus, UJVNL has claimed RoE at 14% for all the stations as shown in the Table below:

**Table 2.9: Return on equity (Rs. Crore)**

Station	2007-08		2008-09		2009-10
	Approved	Claimed	Approved	Claimed	Proposed
Dhakrani	0.55	0.53	0.55	0.57	0.82
Dhalipur	0.86	0.88	0.86	0.89	0.91
Chibro	3.96	3.85	3.97	3.86	4.00
Khodri	3.12	3.21	3.12	3.25	3.44
Kulhal	0.74	0.75	0.74	0.85	1.00
Ramganga	2.13	2.19	2.14	2.19	2.19
Chilla	5.56	5.69	5.56	5.70	5.74
M Bhali I	4.66	4.66	4.67	4.66	5.04
Khatim	0.31	0.33	0.32	0.33	0.33
<b>Total</b>	<b>21.89</b>	<b>22.07</b>	<b>21.93</b>	<b>22.31</b>	<b>23.46</b>

## 2.5 Depreciation

UJVNL has claimed depreciation separately for the asset value of opening GFA of Rs. 503.96 Crore and assets added on account of additional capitalisation. UJVNL has stated that while computing depreciation, it has considered the depreciation upto 90% of the opening GFA in accordance with the provisions of Clause 23(2) of the UERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2004.

UJVNL has claimed that it has computed the depreciation expense for FY 2007-08, FY 2008-09 and FY 2009-10 for additional capitalisation based on the asset classification and the applicable depreciation rates specified in the Schedule provided as Appendix-I to the UERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2004. UJVNL has not claimed any depreciation on assets created under the APDP grant. Based on these principles, the station-wise depreciation considered by the Petitioner is given in the Table below.

**Table 2.10: Depreciation charges proposed by the Petitioner (Rs. Crore)**

Station	FY 2007-08		FY 2008-09		FY 2009-10
	Approved	Claimed	Approved	Claimed	Proposed
Dhakrani	0.02	0.02	0.02	0.04	0.20
Dhalipur	0.00	0.03	0.00	0.04	0.05
Chibro	0.18	0.26	0.18	0.27	0.36
Khodri	1.77	1.88	1.78	1.94	2.05
Kulhal	0.42	0.44	0.42	0.51	0.40
Ramganga	0.02	0.15	0.02	0.15	0.15
Chilla	3.20	3.31	3.20	3.32	3.34
M Bhali	2.65	2.68	2.65	2.68	2.92
Khatima	0.01	0.04	0.01	0.04	0.04
<b>Total</b>	<b>8.26</b>	<b>8.82</b>	<b>8.28</b>	<b>9.00</b>	<b>9.51</b>

## 2.6 Operation and Maintenance (O&M) Expenses

UJVNL submitted that there is an increase in actual O&M expenses for FY 2007-08 as compared to O&M expenses approved by the Commission in its Tariff Order. The actual O&M expenses for FY 2007-08 are Rs. 122.95 Crore as against Rs. 98.92 Crore approved by the Commission. The increase is on account of increase in employee cost, repairs & maintenance of plant & machinery.

UJVNL submitted that except for the Employees Cost, the balance O&M expenses allowed for FY 2008-09 may kindly be considered with an escalation of 4% in accordance with Regulation 26 of Tariff Regulations, 2004 (exclusive of Regulatory fee, insurance charges, cost of energy consumption of colonies, Terminal Benefits and likely financial impact of arrears on account of Pay Revision) for FY 2009-10. Accordingly, the O&M expenses excluding employee cost have claimed by the Petitioner as shown in the following Table:

**Table 2.11: O&M expenses claimed for 2009-10 by the Petitioner (Rs. Crore)**

Particulars	O&M Expense Approved for FY 09	Less: Employee cost included in the approved O&M expense For FY 09	Net Other O&M expense for FY 09	A&G and R&M claimed for 2009-10 @ 4% escalation	Employee expense Claimed for FY10	Total O&M Expense Claimed for FY 10
Dhakrani	5.11	2.84	2.27	2.37	4.05	6.42
Dhalipur	7.58	4.29	3.30	3.43	6.122	9.55
Chibro	18.71	11.20	7.51	7.81	15.295	23.10
Khodri	10.33	6.65	3.67	3.82	8.709	12.53
Kulhal	4.46	2.52	1.94	2.02	3.601	5.62
Ramganga	10.53	8.43	2.10	2.18	10.22	12.40
Chilla	13.45	8.36	5.09	5.29	11.236	16.53
M Bhali I	15.82	6.88	8.94	9.29	8.84	18.13
Khatima	6.16	3.62	2.55	2.65	4.921	7.57
Sub-Total	92.15	54.79	37.36	38.86	72.99	111.85

UJVNL further submitted that it has computed the employee cost after taking into consideration the likely impact of Pay Revision consequent upon the report of Sixth Pay Commission for FY 2009-10.

UJVNL submitted that in addition to above, the expenses under the head regulatory fees, insurance, cost of concessional supplies of electricity to employees residing in Colonies, Cost of Concessional Supplies to Past & Present Employees of UJVNL residing in areas outside the Colonies and Terminal Benefits as approved by the Commission in its earlier Tariff Order dated March 18, 2008 may kindly be considered and allowed while determining the O&M expenses.

UJVNL submitted that it has estimated an amount of arrears of Pay Revision w.e.f.,

January 1, 2006 to March 31, 2009 in accordance with the recommendations of the Sixth Pay Commission. The total arrears estimated by UJVNL is Rs 52.08 Crore. In accordance with the said recommendations, 40% of the arrears have been considered to be payable by the end of FY 2009-10 and the balance to be payable during FY 2010-11 and 2011-12.

The summary of the O&M expenses as submitted by UJVNL for FY 2007-08, FY 2008-09 and FY 2009-10 against those approved by the Commission are shown in the Table below:

**Table 2.12: O&M charges (Rs. Crore)**

Particulars	FY 2007-08		FY 2008-09		FY 2009-10
	Approved	Claimed	Approved	Claimed	Proposed
Dhakrani	4.91	4.91	5.11	5.94	6.42
Dhalipur	7.29	7.41	7.58	9.24	9.55
Chibro	17.99	21.84	18.71	21.94	23.11
Khodri	9.93	10.79	10.33	11.55	12.53
Kulhal	4.29	4.36	4.46	6.11	5.62
Ramganga	10.13	11.75	10.53	11.81	12.40
Chilla	12.93	16.71	13.45	18.95	16.54
M Bhali I	15.21	15.55	15.82	21.41	18.14
Khatima	5.93	6.64	6.16	7.63	7.57
<b>Sub-Total</b>	<b>88.61</b>	<b>99.96</b>	<b>92.15</b>	<b>114.58</b>	<b>111.87</b>
Colony Consumption	1.40	6.12	1.50	4.51	4.34
Terminal Benefits	2.05	2.05	2.05	2.05	2.05
Regulatory Expenses	0.90	0.90	0.00	0.90	0.90
Insurance	3.00	1.60	3.12	0.74	0.88
Cost of Concessional supply to past and present employees of UJVNL	0.17	0.17	0.17	0.17	0.17
Provisioning for 6 <sup>th</sup> Pay Commission			6.00		15.36
<b>Total</b>	<b>96.12</b>	<b>110.80</b>	<b>104.98</b>	<b>122.95</b>	<b>135.57</b>

## 2.7 Interest on Working Capital

UJVNL has stated that it has claimed interest on working capital in accordance with the provisions of UERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2004 and projected the working capital for each of the generating stations 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 a 6% annual escalation in value;
- Receivables at two months of revenue from sale of electricity

UJVNL has claimed interest on working capital at 10.25% on the basis of the PLR of the State Bank of India (SBI) as on April 1, 2004 in accordance with Tariff Regulations, 2004.

**Table 2.13: Interest on working capital (Rs. Crore)**

Station	FY 2007-08		FY 2008-09		FY 2009-10
	Approved	Claimed	Approved	Claimed	Proposed
Dhakrani	0.17	0.17	0.18	0.20	0.25
Dhalipur	0.25	0.25	0.27	0.30	0.35
Chibro	0.75	0.84	0.82	0.84	0.97
Khodri	0.50	0.52	0.53	0.54	0.64
Kulhal	0.17	0.17	0.18	0.23	0.24
Ramganga	0.42	0.47	0.47	0.47	0.55
Chilla	0.75	0.84	0.79	0.90	0.92
Maneri Bhali I	0.73	0.78	0.77	0.91	0.91
Khatima	0.18	0.15	0.19	0.17	0.19
<b>Total</b>	<b>3.91</b>	<b>4.19</b>	<b>4.20</b>	<b>4.56</b>	<b>5.02</b>

## 2.8 Annual Fixed Charges (AFC) and Tariff

Based on the above claims, the Petitioner has projected Rs. 147.87 Crore, Rs. 161.28 Crore and Rs. 178.45 Crore as the Annual Fixed Charges for FY 2007-08, FY 2008-09 and FY 2009-10 respectively.

The station-wise summary of AFC for FY 2007-08 and FY 2008-09 as approved and submitted by UJVNL is shown in the Table below:

**Table 2.14: Annual Fixed Charges for FY 2007-08 and FY 2008-09 (Rs. Crore)**

Particulars	FY 2007-08		FY 2008-09	
	Approved	Claimed	Approved	Claimed
Dhakrani	5.96	6.12	6.36	7.27
Dhalipur	8.80	9.10	9.40	10.97
Chibro	25.30	29.18	27.44	29.05
Khodri	16.38	17.63	17.50	18.47
Kulhal	5.89	6.19	6.25	8.36
Ramganga	14.21	16.16	15.79	16.14
Chilla	24.18	28.86	25.52	30.87
M Bhali I	24.17	26.78	25.32	31.30
Khatima	6.75	7.87	7.26	8.84
<b>Total</b>	<b>131.63</b>	<b>147.87</b>	<b>140.82</b>	<b>161.28</b>

The station-wise breakup of the AFC for FY 2009-10 is given in the Table below. The Petitioner has computed the per unit rates payable by UPCL by dividing the Annual Fixed Charges it has attributed to UPCL in proportion of UPCL's allocation in nine large hydel stations and by considering energy proposed to be sold to UPCL. The plant-wise breakup of the Annual Fixed Charges for FY 2009-10 allocated to UPCL and rates so proposed by the Petitioner are given in Tables below:

**Table 2.15: Annual Fixed Charges proposed by the Petitioner for FY 2009-10**

Station	Depn and AAD (Rs. Crore)	Interest on Loan (Rs. Crore)	O&M Expenses (Rs. Crore)	Interest on Working Capital (Rs. Crore)	RoE (Rs. Crore)	Total Annual Fixed Charges (Rs. Crore)	Total Saleable Units	Per Unit Tariff (Rs./kWh)
Dhakrani	0.20	0.61	7.53	0.25	0.82	9.41	155.78	0.60
Dhalipur	0.05	0.11	11.27	0.35	0.91	12.69	190.66	0.67
Chibro	0.36	0.78	27.98	0.97	4.00	34.10	741.00	0.46
Khodri	2.05	0.68	15.37	0.64	3.44	22.18	341.55	0.65
Kulhal	0.40	0.54	6.79	0.24	1.00	8.97	152.83	0.59
Ramganga	0.15	0.18	15.89	0.55	2.19	18.96	308.82	0.61
Chilla	3.34	1.04	20.00	0.92	5.74	31.04	664.58	0.47
M Bhali-I	2.92	0.88	21.53	0.91	5.04	31.27	392.24	0.80
Khatima	0.04	0.06	9.22	0.19	0.33	9.84	192.69	0.51
<b>Total</b>	<b>9.51</b>	<b>4.89</b>	<b>135.57</b>	<b>5.02</b>	<b>23.46</b>	<b>178.45</b>	<b>3140.15</b>	<b>0.57</b>

### **3. Stakeholders' Response to the Proposals and Petitioner's Reply**

The Commission has received 3 suggestions and objections on the proposals of UJVNL. Details of respondents who have submitted the responses in writing are given in **Annexure-2** and the respondents who raised the issues in the public hearings are enclosed at **Annexure-3**. Shri Rajiv Agrawal, the consumer representative appointed by the Commission, made detailed oral submissions before the Commission in the hearing held in Dehradun covering most of the points raised by other stakeholders discussed in detail hereunder. The Commission has obtained replies from UJVNL on the responses received from stakeholders. Since several issues are common issues and have been raised by more than one respondent, all responses have been clubbed issue-wise and are summarised below. These issues have also been duly considered while analysing the factors affecting the tariff determination in the later Chapters in this Order.

#### **3.1 Approach to be adopted while determining ARR**

##### **3.1.1 Stakeholders' Response**

Kumaun Garhwal Chamber of Commerce and Industry (KGCCI) has requested the Commission to follow the cost plus approach for approving the Generation Tariff for the nine plants of UJVNL as done in the Tariff Order for FY 2007-08 and FY 2008-09 dated March 18, 2008.

KGCCI has submitted that UJVNL is operating since last seven years in the State of Uttarakhand which is a considerable time for any company to sustain and improve its operations. Further, the Commission has also allowed the capital expenditure and R&M expenses on actual basis as incurred by UJVNL during last seven years. Any loss due to delay or shift in expenses should be attributable to UJVNL and should not be levied on the consumers. The approach adopted in the previous year tariff orders should be revisited as the same accounts for underestimating the performance of UJVNL and burdening the tariff for retail consumers.

Industries Association of Uttarakhand submitted that in case of multi-purpose hydro electric projects, with irrigation, flood control and power components, the capital cost chargeable to power components only should be considered for determination of tariff.

Industries association of Uttarakhand further quoted the various provisions of the Tariff Regulations, 2004 and requested the Commission to consider the same while determining the AFC of HEPs.

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

UJVNL submitted that the petitions for determination of tariff for 9 LHPs filed with the Commission are based on facts and applicable Regulations and it has not attempted to somehow increase the tariff. In fact all attempts have been made to place the facts before the Commission and to compute the tariff in accordance to the applicable Regulations. UJVNL further submitted that it strives for strict commercial discipline in all the areas and as the organization is progressing, continuous efforts are being made to strengthen the weak areas.

## **3.2 Saleable Primary Energy**

### **3.2.1 *Stakeholders' Response***

KGCCI submitted that the approach adopted in earlier Tariff Orders for estimating the saleable primary energy needs to be revisited as the under-estimates of the performance of the UJVNL stations burdens the consumers' retail supply tariffs. KGCCI also suggested that greater of 15 years average annual generation and the plant-wise design energy mutually agreed between UPJVNL and UPPCL shall be considered as gross energy available before deducting the auxiliary consumption and transformation losses.

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

UJVNL submitted that Design Energy based on Detail Project Report (DPR) of any operational Power Station of UJVNL cannot be achieved because most of the power stations are very old and require Renovation, Modernization and Up-gradation (RMU) for life enhancement, better functioning and increase in generation. Further, Design energy can only be achieved after completion of comprehensive RMU of power stations. Moreover, owing to tunnel discharge limitations, capacities of Chibro and Khodri Power stations are restricted to 185 MW and 83 MW instead of 240 MW and 120 MW respectively. RMU of the generating stations have been planned and are under implementation.

In view of the above, UJVNL submitted that the average generation of last 15 years instead of Design Energy is appropriate until completion of comprehensive RMU of all Power stations.

### **3.3 Gross fixed assets, Capitalisation and Depreciation**

#### **3.3.1 Stakeholders' Response**

KGCCI and others have submitted that the opening GFA should be considered as Rs. 503.96 Crore subject to finalisation of transfer scheme. The Capitalisation and claims of Depreciation should be in accordance with the UERC Tariff Regulations, 2004. KGCCI requested that no depreciation should be allowed on Khatima, Dhakrani, Dhalipur and Chibro plants as the accumulated depreciation till March 31, 2007 has reached 90% of the assets. KGCCI submitted that UJVNL has considered the maximum rate of depreciation as provided in Appendix-I of the Tariff Regulations, 2004 due to unavailability of sub-classification of assets, which is burdening the consumers unnecessarily. KGCCI requested the Commission to consider a longer life of UJVNL assets and allow a lower depreciation rate while computing the AFC.

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

UJVNL submitted that in case of those HEPs where accumulated depreciation has reached 90% of the asset cost as allowed by the Commission no depreciation has been claimed.

UJVNL further submitted that in spite of vigorous persuasion and efforts of UJVNL, relevant details pertaining to HEPs, have not been made available by UJVNL. In the absence of such details, the rate of depreciation has been claimed on average basis. UJVNL submitted that depreciation has been claimed on opening value of gross fixed assets as allowed by the Commission only on four generating stations, which have not achieved the accumulated depreciation of 90% of their value in accordance with the applicable Regulations. Overall depreciation claimed for the FY 2009-10 is Rs. 9.51 Crore which also includes depreciation on additional capitalization.

### **3.4 Capital Expenditure**

#### **3.4.1 Stakeholders' Response**

KGCCI submitted that a considerable portion of the capital expenditure done by UJVNL on renovating the head office and GM office demonstrates the lavish attitude of UJVNL. KGCCI requested the Commission to adjust such expenses towards RoE to be allowed to UJVNL and not to burden the consumers.

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

UJVNL submitted that well equipped and appropriate office buildings are required for smooth and efficient functioning. UJVNL has constructed low budget office structure at Head office level to minimize the capital cost. Such expenses incurred were a bare necessity hence no lavish expenditure was incurred.

## **3.5 Utilisation of Accumulated Depreciation and Return on Equity**

### **3.5.1 *Stakeholders' Response***

KGCCI submitted that accumulated depreciation may be utilised for procurement of capital assets, refurbishments, renovation or modernisation of plants or carrying out repairs and maintenance activities of the existing plants. KGCCI submitted that since the Commission allows depreciation, no other expense should be allowed for procurement of capital assets, refurbishments, renovation or modernisation of plants or carrying out repairs and maintenance activities of the existing plants. KGCCI submitted that UJVNL should be directed to meet such expenses from accumulated depreciation so that double accounting does not take place and the consumers are not burdened. RoE earned by UJVNL be utilised to finance new hydro power projects instead of diverting funds from the power development fund.

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

### **3.5.3 *Stakeholders' Response***

UJVNL submitted that all activities of major Repair & Maintenance of the plants are funded by UJVNL out of internal sources, which include the funds provided through depreciation. Since the plants inherited are very old major repairs are required to be carried out to maintain the health of the plant. Hence, any limitation on use of funds made available through depreciation would hamper the health of the plants thereby adversely effecting efficiency and safety.

RoE is provided on normative basis and provides the necessary working capital for day to day running of the business of the organization. Hence, no limitation on use of funds made available through RoE is desirable.

### **3.6 O&M expenses**

#### **3.6.1 Stakeholders' Response**

KGCCI requested the Commission to allow O&M expenses under ARR to UJVNL after carrying out a prudence check. The cost of personnel of irrigation department should not be included in the O&M cost of UJVNL. KGCCI further requested the Commission not to relax norms while allowing O&M expenses for FY 2009-10 and the same should be allowed on the basis of the Tariff Regulations, 2004.

Industries association of Uttarakhand has submitted that the extra cost is on account of Sixth Pay Commission arrears and no justification has been provided on measures taken by UJVNL for optimising the costs. They further suggested that UJVNL should ensure proper manpower planning for all the stations.

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

UJVNL submitted that all the expenses are subject to prudence check by the Commission for which all necessary information and documentary evidences along with justification as desired are provided.

UJVNL further submitted that cost of personnel of Irrigation Department i.e., employee cost and A&G expenses are not borne by UJVNL.

As regards O&M expenses for FY 2009-10, UJVNL submitted that except for the employee cost, O&M expenses have been claimed in accordance with the applicable Regulations.

As regards the contention raised regarding proper manpower planning, UJVNL submitted that currently it has working manpower strength of 2562 against the sanctioned strength of 3783 in various categories. The organization has already started rationalization of existing manpower by deploying them as per scientifically developed Management Organization Charts (MOCs)/Organograms. To meet the requirement of manpower in the existing and future projects, MOCs are being continually reviewed and updated. Thus, rationalization of manpower will result and continue through Job-rotation, proper placement, promotions, dual charge, training, succession planning, etc.

It is also stated that to manage manpower cost in establishment and operation, UJVNL has not made any recruitments in Ministerial Cadre and Operating Cadre (except 20 Technicians for Maneri Bhali-II in 2008) since its formation in the year 2001. Similarly, no recruitment of Assistant Engineers and Junior Engineers has been made since 2005 and 2006

respectively. Infact, UJVNL is carrying out its operations with the bare minimum manpower and optimum utilization of available manpower.

### **3.7 Income earned from other sources**

#### **3.7.1 Stakeholders' Response**

KGCCI has submitted that UJVNL earns a considerable income apart from sale of energy, which includes income from sale of scrap, interest income, penalty from contractors, etc. Income from these sources should be considered as part of ARR and should be deducted from the total expenses while determining AFC of the station.

#### **3.7.2 Petitioner's Reply**

UJVNL submitted that the relevant details pertaining to income earned from the other sources have been provided to the Commission.

### **3.8 Income tax**

#### **3.8.1 Stakeholders' Response**

KGCCI submitted that in case UJVNL is able to generate energy which is greater than the saleable primary energy assumed by the Commission, additional income is earned by UJVNL by means of sale of secondary energy. As the income so earned is not shared with the consumers so the tax liability on the same shall also not be allowed as pass through in tariff. The payment of income tax is a cost incurred by UJVNL for generation of electricity and such cost should also be shared with HPSEB.

#### **3.8.2 Petitioner's Reply**

UJVNL submitted that in accordance with the Regulations, income tax is a pass through and is required to be recovered from the beneficiary. UJVNL further submitted that income tax is not considered as a cost component for determination of the tariff.

As regards the suggestion made for recovery of income tax from HPSEB as well, UJVNL submitted that the Commission may kindly take a view on the issue.

### **3.9 Performance of Chibro HEP**

#### **3.9.1 Stakeholders' Response**

KGCCI submitted that performance of Chibro Plant has been low during FY 2007-08

and has recorded unplanned outages of 1103 hours. The outages during FY 2001-02 were 91 hours in a year which indicates that UJVNL has been recovering the depreciation cost and R&M costs of the plants from the consumers but have not carried out any refurbishment, renovation or modernization of the plant. While the cost has been passed on to the consumers the benefits have not been upto the standard, which reflects poor functioning of UJVNL. KGCCI requested the Commission to penalise UJVNL for poor performance in FY 2007-08 which could be by way of asking UJVNL to pay the difference of costs for the energy procured by UPCL during the hours of outage during the year from RoE or may be by way of linking RoE to a factor of minimum guaranteed performance of the generating station.

### **3.9.2 Petitioner's Reply**

UJVNL submitted that breakdown hours increased in FY 2007-08 to 1103 hours due to the problems in excitation system of Unit 2 and 3 of Chibro Power Station in July 2007. There was breakdown in Unit-3 also in the month of August 2007 due to Stator earth fault. However, these faults got rectified in the minimum possible time. Unit-1 also had the problems of Gland seal and leakage in the turbine pit during the monsoon which was rectified during the capital maintenance carried out in the FY 2007-08.

UJVNL submitted that all the above stated problems encountered in Chibro Power Station in the FY 2007-08 resulted in the increase of outage hours. All these are practical problems that may occur in any Power Station. However, vigorous efforts were made by Maintenance crew of the Power Station to attend and rectify them in the minimum possible time period. Thus, the point of penalizing UJVNL on this account for non performance in the FY 2007-08 is not justified.

## **3.10 Auxiliary consumption of Chibro HEP**

### **3.10.1 Stakeholders' Response**

KGCCI has requested Commission to consider the approved auxiliary consumption of 0.4% in the Tariff Order for 2007-08 as against 0.7% been claimed by UJVNL in its Petition.

### **3.10.2 Petitioner's Reply**

UJVNL submitted that Chibro Power Station is an underground Hydro Electric Power Station installed with Static Excitation System and in accordance with Regulations, auxiliary consumption for underground Hydro Electric Power Stations with Static Excitation system

is 0.7% of the energy generated. Hence, allowable auxiliary consumption as requested for Chibro HEP should be 0.7% of the energy generated.

### **3.11 Concessional electricity to employees**

#### **3.11.1 Stakeholders' Response**

KGCCI submitted that the concessional electricity provided to the employees of UJVNL should not be allowed in ARR and the same should be reduced from RoE. UJVNL should not unnecessarily burden its consumers by providing concessional electricity to its employees.

#### **3.11.2 Petitioner's Reply**

UJVNL submitted that in accordance to terms of settlement of "Amalen", the facilities of the employees/officers of all the three corporations, namely, UJVNL, UPCL and PTCUL cannot be reduced. Concessional supply of electricity to official/employees was being provided since the time of erstwhile Uttar Pradesh State Electricity Board (UPSEB).

As regards the contention raised for reduction in RoE for concessional supply, UJVNL submitted to refer to the above stated submission in this regard.

### **3.12 Normative Debt**

#### **3.12.1 Stakeholders' Response**

KGCCI submitted that concept of normative debt is illusory and no interest cost on such debt should be allowed.

#### **3.12.2 Petitioner's Reply**

UJVNL submitted that interest on normative debt has been claimed in accordance with the applicable Regulations.

### **3.13 Unavailability of Data referred in the Tariff Petition**

#### **3.13.1 Stakeholders' Response**

KGCCI submitted that Tariff Petition complete in all respect is not available on the website of the Petitioner. Neither the Commission's website nor UJVNL website provides the trial balance of accounting divisions of UJVNL.

### **3.13.2 Petitioner's Reply**

UJVNL submitted that though all efforts are made to post the relevant information on the website, any further document or information may be collected from the office of UJVNL/UERC.

## **3.14 Performance of Chilla HEP**

### **3.14.1 Stakeholders' Response**

KGCCI submitted that performance of Chilla Plant has been low during FY 2007-08 and has recorded unplanned outages of 2188 hours. The outages during FY 2002-03 were 194 hours in a year, which indicates that UJVNL has been recovering the depreciation cost and R&M costs of the plants from the consumers but have not carried out any refurbishment, renovation or modernization of the plant. While the cost has been passed to the consumers the benefits have not been upto the standard which reflects poor functioning of UJVNL. KGCCI requested Commission to penalise UJVNL for non-performance in FY 2007-08 which could be by way of asking UJVNL to pay the difference of costs for the energy procured by UPCL during the hours of outage during the year from RoE or may be by way of linking RoE to a factor of minimum guaranteed performance of the generating station.

### **3.14.2 Petitioner's Reply**

UJVNL submitted that breakdown hours increased in FY 2007-08 due to Guide Vane problem in Unit#2 in the month of December 2007 and Gland seal leakage in Unit 2 and 3 in the month of August 2007 and February 2008 respectively, and major breakdown of Unit-4 in the month of March 2007. UJVNL further submitted that in spite of this, the generation performance of Chilla Power Station during FY 2007-08 was excellent. During the year, most of the forced outages were in the lean discharge period, and hence, generation was not affected on this account. The total generation during FY 2007-08 was 826.018 MU whereas during FY 2002-03, the generation was merely 607.398 MU. UJVNL also provided the details of the generation of Chilla Power Station for the last ten years as under:

**Table 3.1: Details of Generation of Chilla Power Station for last Ten Years ( In MU)**

<b>Year</b>	<b>Generation</b>
1998-99	822.997
1999-2000	717.095
2000-01	518.029
2001-02	560.752
2002-03	607.398
2003-04	688.901
2004-05	746.072
2005-06	659.181
2006-07	740.464
2007-08	826.018

### **3.15 Auxiliary consumption of Chilla HEP**

#### **3.15.1 Stakeholders' Response**

KGCCI has requested Commission to consider the approved auxiliary consumption of 0.2% in the Tariff Order for 2007-08 as against 0.5% has been claimed by UJVNL in its Petition.

#### **3.15.2 Petitioner's Reply**

UJVNL submitted that Chilla Power Station is a Surface Hydro Electric Power Station installed with Static Excitation system and in accordance with Regulations, auxiliary consumption for Surface Hydro Electric Power Stations with Static Excitation system is 0.5% of the energy generated. In FY 2004-05, conventional rotatory excitation system has been replaced by static excitation system in all the four machines of Chilla Power Station. Hence, allowable auxiliary consumption as requested for Chilla HEP should be 0.5% of the energy generated.

### **3.16 Performance of Dhalipur HEP**

#### **3.16.1 Stakeholders' Response**

KGCCI submitted that performance of Dhalipur Plant has been low during FY 2007-08 and recorded unplanned outages of 1481 hours. The outages during FY 2002-03 were 30 hours in a year which indicates that UJVNL has been recovering the depreciation cost and R&M costs of the plants from the consumers but have not carried out any refurbishment, renovation or modernization of the plant. While the cost has been passed to the consumers the benefits have not been upto the standard which reflects poor functioning of UJVNL. KGCCI requested Commission to penalise UJVNL for non-performance in 2007-08 which

could be by way of asking UJVNL to pay the difference of costs for the energy procured by UPCL during the hours of outage during the year from RoE or may be by way of linking RoE to a factor of minimum guaranteed performance of the generating station.

### **3.16.2 Petitioner's Reply**

UJVNL submitted that the major outages in FY 2007-08 of Dhalipur Power Station were due to Stator winding damages, Governor Failure problem in Upper Guide Bearings and Rotor Earth faults. These faults occurred due to outlived life of components and these faults were rectified within minimum possible time period and available resources. The results of these repairs were found satisfactory as evident from the increased generation in the subsequent year i.e., Generation was 224.438 MU in FY 2008-09 as compared to 210.703 MU in the year 2007-08.

UJVNL further submitted that the process of investigation for comprehensive RMU of Power House is in progress and comprehensive RMU will definitely give stability in the operations and enhance the availability of plant.

## **3.17 Auxiliary consumption of Khodri HEP**

### **3.17.1 Stakeholders' Response**

KGCCI has requested Commission to consider the approved auxiliary consumption of 0.2% in the Tariff Order for 2007-08 as against 0.5% claimed by UJVNL in its Petition.

### **3.17.2 Petitioner's Reply**

UJVNL submitted that Khodri Power Station is a Surface Hydro Electric Power Station installed with Static Excitation System and in accordance with Regulations, auxiliary consumption for Surface Hydro Electric Power Stations with Static Excitation System is 0.5% of the energy generated. Hence, allowable auxiliary consumption as requested for Khodri HEP should be 0.5% of the energy generated.

## **3.18 Power Development cess**

### **3.18.1 Stakeholders' Response**

Industries association of Uttarakhand has submitted that the cess has increased from 30 paisa to 40 paisa. Industries association of Uttarakhand has requested that in event of increasing cost of supplies, the power development cess of Rs. 40 paisa should also be reviewed in case of upward revision of per unit cost of UJVNL.

KGCCI submitted that the Commission may issue statutory advice under section 86 (2) of the Electricity Act, 2003 to the Government of Uttarakhand to reduce the cess levied to create the Power Development Fund as the RoE on the nine stations is also available to finance new projects.

### **3.18.2 *Petitioner's Reply***

As regard the contention raised for reduction in cess, UJVNL submitted that the Commission may take a view in this regard.

### **3.19 Views of Advisory Committee**

The members of the Advisory Committee were of the view that with efficiency improvement in the Petitioner's operations the expenses and hence the burden on consumers can be reduced. The Committee was of the view that the claims for truing up of actual expenses, which are higher than the approved level, have been made by the Petitioner in a non serious manner without giving proper justifications for each increase. There is a need for having internal checks and balances and proper accountability of employees. The performance of employees also needs to be monitored including their training and skill development needs.

## **4. Commission's Approach**

### **4.1 Statutory Requirements**

Any exercise for tariff determination by the Commission is to be conducted in accordance with the terms and conditions for determination of tariff and the same has been specified in the Regulations issued by the Commission under section 181 of the Electricity Act, 2003. While specifying the above terms and conditions, the Commission was to be guided by the principles and methodologies specified by the Central Electricity Regulatory Commission (CERC) through its relevant Regulations, the National Electricity Policy and the Tariff Policy issued by the Central Government.

Accordingly, the Commission's approach is already defined in the Uttaranchal Electricity Regulatory Commission (Terms & Conditions for Determination of Hydro Generation Tariff) Regulations, 2004 (Tariff Regulations, 2004), notified by the Commission on May 14, 2004. The applicability of these Regulations has been extended by the Commission till December 12, 2009 through its Order Dated June 17, 2009. In the present exercise, the Commission is legally required to and will abide by these statutory Regulations. During the first tariff determination exercise for UJVNL, some relaxations in these requirements were allowed for reasons spelt out in the Commission's Order dated December 16, 2004 (read with Commission's Order dated March 14, 2007), July 12, 2006 and March 18, 2008. The Commission proposes to continue with the same approach, unless it comes across convincing reasons for doing otherwise.

The earlier CERC Tariff Regulations were applicable till FY 2008-09 and the CERC has issued the CERC (Terms and Conditions of Tariff) Regulations, 2009 which are applicable from April 1, 2009 for the period of five year. The Commission would like to highlight that it has also initiated the process of framing the new Tariff Regulations, however, as the new Tariff Regulations are yet to be finalized and issued, the Commission for the present exercise proposes to and is indeed obliged to abide by Uttaranchal Electricity Regulatory Commission (Terms & Conditions for Determination of Hydro Generation Tariff) Regulations, 2004. The Commission has analyzed the proposals and information provided by the Petitioner in its Petition as well as the information submitted subsequently including actual figures of FY 2007-08 and estimated figures of FY 2008-09 alongwith response of stakeholders and estimated expenditure under different heads to arrive at the Annual Fixed Cost for FY 2009-10 in accordance with the Regulations. In addition, the Commission has considered Petitioner's truing up proposals for FY 2007-08. In addition to the truing up for FY 2007-08, the Commission has also carried out the provisional truing up for FY 2008-09.

While these generating plants have been in operation for quite sometime, their

transfer from Uttar Pradesh State Electricity Board (UPSEB) to Uttar Pradesh Jal Vidyut Nigam Ltd. (UPJVNL) first 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 were considered in depth and decided by the Commission in its previous Tariff Orders, spelling out the rationale behind these findings. There is, therefore, no need for the Commission to revisit such issues in the present proceedings, unless some new facts are now brought out in these proceedings.

By and large, the Commission so far has been following the Cost Plus approach under which expenses incurred by the Petitioner, after prudence check, have been allowed to be recovered through tariffs.

## **4.2 Energy Generation and Saleable Primary Energy**

In absence of reliable information on Design Energy of these nine generating stations, the Commission had, in its Order dated December 16, 2004, considered lower of 15 years' average annual generation and the plant-wise Design Energy mutually agreed between UPJVNL and UPPCL and had deducted auxiliary consumption and transformation losses from it for the purpose of working out the Primary Energy Rate. The Commission had adopted the same principle during FY 2006-07 for determination of saleable primary energy. The Commission has already considered this issue in depth and decided the same in para 5.2.1 of its Order dated December 16, 2004 regarding the matter. The relevant extract of the same is reproduced below:

*"For computing the Primary Energy Rates for these nine plants, their average annual generation over 15 years presents a more reliable basis than the Petitioner's projections which are totally out of step both with last year's generation as well as with the average annual generation.*

*Commission has, therefore, assumed this average annual generation as projected generation for 2004-05. Lower of this projected generation and the plant wise design energy mutually agreed between UPJVNL and UPPCL, has been taken for the purpose of working out the Primary Energy Rate..."*

As regards the suggestions made regarding modification of the principles to consider the saleable energy for working out the primary energy rate, the Commission feels that in the absence of a technical study on presently available level of installed capacity/design energy, it would not be proper to modify the original installed capacity/design energy. In the absence of the same the Commission proposes to follow the approach already defined.

Further, as regards any revision in the Design Energy, the Commission, in its Tariff Order dated December 16, 2004 stipulated as under:

*"...The Commission finds that the concept and definition of Design Energy itself are sound and logical and feels that the same need not be diluted or tampered with. If genuine problem exists on account of degeneration of machines in some generating plant, as has been claimed, the right thing to do is to review and revise such plant's capacity. For doing so, the Petitioner is free to approach the Commission alongwith all supporting data. The Commission will take a view on each such request after taking into account all relevant factors and such other inputs as may be relevant."*

Accordingly, the Commission has not made any change at this stage. The Commission may review the principles for considering the design energy while notifying the new Tariff Regulations.

Further, the Commission had also defined its approach for computing Secondary Energy and Primary Energy Charges recoverable from Saleable Primary Energy in Para 5.3.9 of its Order dated 16.12.2004, relevant portion of which is reproduced below:

*".... Secondary Energy will be computed only when the actual generation exceeds Design Energy. As provided in Regulation 20(1), recovery from Primary Energy Charges shall in no case exceed the Annual Fixed Cost. ...."*

It is, therefore, amply clear that Secondary Energy has to be computed for the Petitioner only after the Original Design Energy is exceeded, which as stated above has not been changed till date and requires Commission's approval for the same. 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. The Commission has, therefore, directed the Petitioner to refund such excess amount to the concerned beneficiary.

### 4.3 Capitalisation of new assets

Regulation 16(2) dealing with the issue of additional capitalization and applicable to Petitioner's plants reads as follows:

*"16 (2) ...the capital expenditure of the following nature actually incurred after the cut off date may be admitted by the Commission subject to prudence check:*

*...*

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

Thus for tariff purposes, the Regulations recognize only the additional capital expenditure actually incurred. The Commission in relaxation to this stipulation had considered projected capitalizations in previous Tariff Orders for other Utilities. However, it was noticed that the approach of accepting and taking into account projections for commissioning and capitalisation of new assets was being misused by them and there was a wide gap between the value of assets projected to be capitalized and the value actually capitalized.

The Commission in para no 4.2 of its Order dated July 12, 2006 on ARR and Transmission Tariff Determination of PTCUL for FY 2006-07 has dealt with this issue and considered the actual asset capitalisation and not the projected asset capitalisation. The relevant extract of the Order is given below:

*"For determining capital related expenditure, in the last tariff Order the Commission had accepted and taken into account Petitioner's projections for commissioning and capitalisation of new assets. It has been noticed that this approach is being misused and there is wide gap between the value of assets projected to be capitalized and the value actually capitalized. Over-projection on this account results in inflating capital related costs and in turn the current tariffs. Therefore, the Commission is accepting only the capital cost of assets actually commissioned and capitalised and ignoring the value of assets projected for capitalisation. Further, additions in value of capital assets, if any, will be taken into account in the next tariff determination exercise with such truing up of related costs as may be warranted by facts of each such case."*

The Commission is of the view that the over-projection on this account results in inflating capital related costs and in turn the current tariffs. Therefore, the Commission, in accordance with the provisions of Regulations, is accepting only the capital cost of assets

actually commissioned and capitalized till March 2008 and for FY 2008-09, the Commission has considered the figures of actual capitalisation as given by UJVNL for period upto September 2008. Further additions in value of capital assets, if any, would be taken into account in the next tariff determination exercise with such truing up of related costs as may be warranted by facts of each such case.

#### **4.4 Depreciation**

The Commission has considered the claims of depreciation in accordance with the Tariff Regulations, 2004. Regulation 23 of the Tariff Regulations, 2004, which specifies the methodology and extent of depreciation to be allowed on the assets, stipulates that depreciation shall be allowed only upto 90% of the asset cost, which is also the normal practice. In Khatima, Dhakrani, Dhalipur, Ramganga and Chibro generating stations the accumulated depreciation upto March 31, 2009 has reached 90% of the assets' cost. Accordingly, the Commission has provided depreciation for other four stations only. However, for Kulhal the accumulated depreciation upto March 31, 2009 has reached 88.73%, accordingly, depreciation for FY 2009-10 has been restricted to the value where it reaches the 90% of the assets' cost.

#### **4.5 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*

*paaise/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 on opening equity of Rs. 151.19 Crore, the Commission has considered the same approach as was considered in its Tariff Order dated March 18, 2008. The Commission has considered the RoE on the equity portion of the additional capitalisation, in accordance with the Regulations. Further, for computing the RoE, the Commission has considered the rate of return @14% in accordance with Regulations. As regards the RoE on the opening equity of 151.19 Crore on the opening assests, the Commission continues with its stand given in para 12 of Tariff Order dated March 14, 2007 that the approval of the same is provisional and subject to adjustment based on actual values upon finalisation of transfer scheme. The relevant extract of the Tariff order dated March 14, 2007:

*"... As and when details of transfer of these assets from UPJVNL to UJVNL are finalised and UJVNL's actual investment in these assets is known, appropriate revision of this amount will be done and adjustments for the same will be done in future ARR..."*

As regards the cess for FY 2007-08 and FY 2008-09, the Commission has considered Rs. 0.30/kWh in accordance with the letter no. 1070/I(2)/2009-04(3)/22/2008 dated May 7, 2009 from GoU, which stipulates that in accordance with the Commission's Tariff Order for UPCL, the cess is being paid @Rs. 0.30/kWh w.e.f., April 1, 2007. The rate of cess has therefore, been allowed @Rs. 0.30/kWh from April 1, 2007 till the date of effectiveness of Tariff Order to be issued by the Commission for FY 2009-10. Also, GoU vide its letter no. 1069/I(2)/2009-04(3)/22/2008 stipulated that while deciding the tariff for FY 2009-10, cess to be considered as Rs. 0.40/kWh. The Commission has advised GoU in this regard not to enhance the cess back to Rs. 0.40/kWh and accordingly, the Commission has considered the cess as Rs. 0.30/kWh for FY 2009-10.

RoE on Additional Capitalisation has been allowed @ 30% on normative basis, where financing is not available and on actual basis in other cases subject to a cap of 30% as specified in the Regulations.

#### **4.6 Operation & Maintenance Expenses**

Regulation 26 of the Commission's (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2004 stipulates that O&M expenses for plants in

operation for more than 5 years have to be based on the actual expenses for the 5 year period 1998-99 to 2002-03. The average of these expenses, excluding abnormal expenses, represents mid-year expenses, which is FY 2000-01, are then to be escalated at compound rate of 4% p.a. in accordance with the Regulations to arrive at the allowable O&M expenses for the tariff year.

During the tariff proceedings for FY 2004-05, the Petitioner had claimed that O&M expenses should not be computed as per the above requirement as these plants had been neglected while under Uttar Pradesh's control. The Commission had, accordingly, relaxed the above Regulations and had taken average of 3 years' expenses to arrive at base year expenses for FY 2002-03 and allowed annual escalation on the same. The Commission had, accordingly, fixed the base level of total O&M expenses of Rs. 66.99 Crore for FY 2002-03. The Commission, for FY 2006-07, approved the O&M expenses with an annual increment of 4% on the base value of Rs. 66.99 Crore as determined for FY 2002-03. Thus, the Commission approved the base O&M expenditure for the year FY 2006-07 as Rs. 78.36 Crore. In addition, the Commission had approved Rs. 0.73 Crore to meet the cost of free supply to colonies, etc., and another Rs. 1.00 Crore for the Regulatory Expenses making a total of Rs. 80.09 Crore as the O&M expenses for FY 2006-07.

Further, during the previous tariff proceedings for FY 2007-08 and FY 2008-09, the Commission further relaxed the norm by taking base year as 2006-07 and base expense as actual expense in this year considering the fact that actual O&M expenses in 2006-07 have been higher than the approved level.

In these Petitions, the Petitioner has sought further relaxations/deviations from the above approach. In addition, the Petitioner has also sought arrears towards increase in salaries due to implementation of Sixth Pay Commission's recommendations. The Commission has analysed the actual employee, A&G and R&M expenses during the previous years as well as the impact of salary revision due to implementation of Sixth Pay Commission's recommendations and has, therefore, computed the O&M expenses for FY 2009-10 for each head separately. The detailed methodology of the same has been explained in Chapter 5 of the Order.

## 5. Commission's Analysis, Scrutiny and Conclusions

### 5.1 Physical Parameters

#### 5.1.1 Energy Generation and Saleable Primary Energy

The Petitioner in accordance with the approach adopted by the Commission in its previous Tariff Orders, while computing the Saleable Primary Energy, has subtracted auxiliary consumption and transformation loss on normative basis and projected the normative Saleable Primary Energy of 3140.15 MU for 2009-10 for tariff determination. However, as discussed in Chapter 2, for Chilla, Khodri and Chibro HEPs, UJVNL has claimed additional auxiliary consumption on account of commissioning of static excitation system.

The Commission in accordance with the approach already defined in the Order dated December 16, 2004 and Order dated July 12, 2006 approves the same figures of primary energy generation and saleable primary energy arrived at in the said Orders. However, for Chilla, Khodri and Chibro HEPs, the Commission has accepted UJVNL's claim for additional auxiliary consumption on account of commissioning of static excitation system. Accordingly, the Primary Energy Generation and Saleable Primary Energy for these nine generating plants approved for FY 2009-10, for Primary Energy Rate determination as shown in the Table below:

**Table 5.1: Energy generation and Saleable Energy approved by the Commission for FY 2009-10**

Plant	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>14.32</b>		<b>15.85</b>	<b>3140.15</b>

The Commission clarifies that the saleable primary energy as approved in the above Table has been used only for the purpose of computing the primary energy rate for FY 2009-10 for recovery of AFC. Accordingly, the original Design Energy of these plants would

remain the same.

In plants where the actual generation will be equal to or less than the Original Design Energy, the entire generation would be considered as Primary Energy and the revenue earned from such sale of energy would be considered for trueing up purposes. However, in plants, in which the actual generation will be higher than the Original Design Energy, Primary Energy generation will be only upto the Design Energy level and balance generation will be considered as Secondary Energy, on which Petitioner will earn Secondary Energy Charges over and above his Annual Fixed Charges and revenue earned from sale of such secondary energy would be treated as incentive to the Petitioner and the same would not be considered for trueing up purposes. This approach was also delineated in the Commission's Order dated December 12, 2004 at para 5.3.9, which read as under:

*"... As stated earlier in this order for working out the Primary Energy rates for these plants Commission has considered the Design Energy mutually agreed to between UPJVNL and UPPCL as well as the Annual Average generation of these plants for last 15 years and lesser of these two values has been taken as the projected Primary Energy generation for these plants, from which figures of saleable Primary Energy have been worked out and are also given in Table 5.23 below. Secondary Energy will be computed only when the actual generation exceeds Design Energy. As provided in Regulation 20(1), recovery from Primary Energy Charges shall in no case exceed the Annual Fixed Cost..."*

Since Primary Energy Rate has been worked out by considering lower of 15 years' average generation or mutually agreed Design energy as projected Primary Energy (which would in all cases be less than or equal to Original Design Energy), entire AFC is designed to be recovered at this projected Primary Energy generation. Therefore, for plants where actual Primary Energy generation is above this level and upto Original Design Energy, the recovery from Primary Energy charges exceeds the approved AFC. This excess recovery/revenue needs to be adjusted in the true up exercise for the relevant year. Accordingly, the Petitioner would in effect recover only the approved AFC for generation upto the Original Design Energy even though the projected saleable energy for working out the rate of primary energy had been taken to be less than the Design Energy. Thus, the concern of the stakeholders that this approach resulted into lowering of efficiency and burdening the consumers with higher cost is being addressed by the Commission based on the approach discussed above.

Further, as regards the contentions raised by various stakeholders regarding the performance of the generating stations and non-achievement of the design energy, UJVNL, in its reply, has submitted that it has not achieved the Design Energy because most of the power stations are very old and require Renovation, Modernisation and Up-gradation for life extension, better functioning and increase in generation. The Commission is very much concerned about the efficiency of operation of the stations and, accordingly, **the Commission directs UJVNL to carry out a comprehensive RMU analysis for life extension, enhancement of capacity (which the Petitioner has been claiming to have derated), better functioning and efficiency for increase in generation and submit a detailed report along with the Detailed Project Report, with proper cost-benefit analysis and proposed funding arrangement for each station for the Commission's approval within six months from the date of issuance of this Order.** The Commission clarifies that expenditure incurred on approved RMU works would form as a part of the capital cost of the project and would be suitably considered while working out the AFC for the relevant year based on the actual capital expenditure incurred.

## 5.2 Financial Parameters

### 5.2.1 Capital Cost

The Petitioner has again submitted that the data relating to capital cost of these plants on the date of their commercial operation is not available. However, UJVNL has accepted the approach adopted by the Commission in its Tariff Order dated December 16, 2004 for determining the capital costs of these stations as on January 14, 2000, on provisional basis pending finalization and notification of the Transfer Scheme.

The value of Gross Fixed Assets (GFA) for these nine stations as approved by the Commission in its Order dated December 16, 2004 and Order dated July 12, 2006 is given in the Table below:

**Table 5.2: GFA as on 14.01.2000 (Rs. Crore)**

Plant	Amount
Dhakrani	12.40
Dhalipur	20.37
Chibro	87.89
Khodri	73.97
Kulhal	17.51
Ramganga	50.02
Chilla	124.89
Maneri Bhali I	109.72
Khatima	7.19
<b>Total</b>	<b>503.96</b>

The Commission has considered the Capital Cost of Rs. 503.96 Crore as on January 14, 2000 as approved in the Tariff Order dated December 16, 2004 and Order dated July 12, 2006, which is also proposed by the Petitioner. However, the Petitioner subsequently submitted that as per decision taken by the Government of Uttarakhand, vide their letter no. 90/1/2005-06/77/2003 dated 29.06.07, an amount of Rs. 2.21 Crore paid by the Government is attributable to Maneri Bhali-I project on account of Hon'ble High Court's Order dated 14.05.07 in a case related to payment of contractor related to the period of construction of this plant. The letter of GoU and Minutes enclosed therewith state that this amount is 50% of the award and the decree has been stayed. Further, the Government in para 4(a) of these minutes has decided to consider this amount for capitalisation/loan and to recover interest thereupon through tariff of UJVNL as UJVNL is the successor to UPSEB in terms of the Reorganisation Act and GoI Order dated 05.11.2001. Pending final disposal of the matter, the Commission is provisionally considering this amount for Capitalisation on the date of commissioning of MB-I and is accordingly providing accumulated depreciation till 2006-07 and annual depreciations thereafter. The Commission is also treating this amount as loan to UJVNL advanced in June 2007 with terms similar to other new loans given by Government to UJVNL. Accordingly, the interest rate is considered at 9% per annum and repayment period is considered as 10 years. The values of GFA, thus considered by the Commission are presented in the following table:

**Table 5.3 Approved GFA as on 14.01.2000 (Rs. Crore)**

Plant	Amount
Dhakrani	12.40
Dhalipur	20.37
Chibro	87.89
Khodri	73.97
Kulhal	17.51
Ramganga	50.02
Chilla	124.89
Maneri Bhali I	111.93
Khatima	7.19
<b>Total</b>	<b>506.17</b>

### 5.2.2 Additional Capitalisation

Against opening GFA of Rs. 503.96 Crore as on January 14, 2000 as approved in the previous Tariff Orders, UJVNL has also claimed additional capitalisation apart from small capitalisations up to FY 2006-07. UJVNL in its Petitions has claimed the additional capital expenditure to the tune of Rs. 36 Crore during the period 2007-08 to 2009-10.

As regards the additional capitalisation for previous years, the Commission observed

that there was variation between the additional capitalisation as submitted by UJVNL in its Petitions for approval of Tariff for FY 2007-08 and FY 2008-09 and in the current Petitions. The Commission asked UJVNL to clarify the reasons for variation in the figures for capitalization of previous years for all generating stations as submitted in previous years and submitted now in the current Petitions. UJVNL submitted that the figures of additional capitalizations for previous years does not strictly match with the additional capitalisation Petitioned now and earlier, which were also considered by the Commission in the Tariff Order dated March 18, 2008, on account of the following reasons:

- Accounts are maintained centrally for various HEPs. In certain instances only, one-to-one correlation of the accounting division correlated accounts is possible with individual stations. However, for others, some form of apportionment is necessary for allocating certain expenses that are incurred by accounting units that serves more than one station.
- Additional capital expenses incurred by such accounting divisions serving more than one station are allocated as follows:-
  - Head Office/Corporate Office: 80% of the additional capital expenses apportioned on 9 LHPs which are further 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 are allocated to each LHP on the basis of the installed capacity.

Though the Commission has considered the allocation of additional capitalisation incurred by such accounting divisions serving more than one station for previous years as submitted by UJVNL, however, **the Commission directs UJVNL that it should maintain separate accounts for each plant and only common/indirect expenses should be apportioned to plants on rational basis. UJVNL is also directed to ensure that additional capitalisation for Tools and Plants items should only be booked against such stations for which such accounting unit incurs the capital expenditure.**

The Commission asked UJVNL to submit the actual capitalisation for FY 2008-09, UJVNL submitted that the Accounts for FY 2008-09 were under compilation and finalisation and the details of the actual capitalisation would be submitted subsequently.

The Commission has accepted the revised capitalisation details as provided by UJVNL for the period till FY 2006-07 as the variation in the total amount involved upto FY 2006-07 amounts to Rs. 11 Lakh only. The Commission has also considered the actual

additional capitalisation for FY 2007-08. However, UJVNL's accounts after FY 2003-04 are still provisional and yet to be audited. The capitalisation claimed on these accounts is, therefore, yet to be frozen. Further, UJVNL submitted that its accounts for FY 2008-09 are yet to be finalised. Since Accounts of UJVNL for FY 2008-09 are yet to be finalised, the Commission has considered the capitalization already undertaken as submitted by the Petitioner for FY 2008-09 which is subject to true-up based on the actuals, audit of accounts and prudence check. Further, the Commission has not considered the capitalisation for FY 2009-10 as submitted by UJVNL for reasons given in Chapter 4 and would consider the same based on the actual for the year subject to prudence check. The year-wise additional capitalisation is summarized in the Table below:

**Table 5.4: Additional Capitalisation as considered by the Commission (Rs. Crore)**

Year	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Dhakrani	0.0197	0.0420	0.0819	0.0255	0.0410	0.0543	0.0554	0.050
Dhalipur	0.0297	0.0635	0.1238	0.0386	0.0619	0.0821	0.0837	0.068
Chibro	0.1463	0.5001	0.6125	0.2830	0.2732	1.3356	0.5338	0.318
Khodri	0.0699	0.1687	0.4791	0.2169	0.2891	0.2284	0.9822	0.574
Kulhal	0.0175	0.0373	0.0728	0.0227	0.0364	0.0483	0.0372	0.040
Ramganga	0.0528	0.1306	0.5145	0.3979	0.2541	0.2715	0.4280	0.107
Chilla	0.0384	1.1778	2.1024	2.5786	2.3345	1.9171	0.3355	0.033
M Bhali I	0.0240	0.0602	0.2514	0.0779	0.1199	0.5126	0.0940	0.130
Khatima	0.0110	0.0276	0.0950	0.1096	0.0764	0.0522	0.2720	0.038
<b>Total</b>	<b>0.409</b>	<b>2.208</b>	<b>4.333</b>	<b>3.751</b>	<b>3.486</b>	<b>4.502</b>	<b>2.822</b>	<b>1.357</b>

The summary of the additional capitalisation as claimed by the Petitioner and approved by the Commission is shown in the Table below:

**Table 5.5: Additional Capitalisation as submitted (Rs. Crore)**

Particulars	Till FY 2006-07		FY 2007-08		FY 2008-09		FY 2009-10	
	UJVNL	Approved	UJVNL	Approved	UJVNL	Approved	UJVNL	Approved
Dhakrani	0.26	0.26	0.06	0.06	0.80	0.05	6.00	0.00
Dhalipur	0.40	0.40	0.08	0.08	0.34	0.07	0.42	0.00
Chibro	3.15	3.15	0.53	0.53	0.32	0.32	3.37	0.00
Khodri	1.45	1.45	0.98	0.98	1.03	0.57	4.40	0.00
Kulhal	0.24	0.24	0.04	0.04	2.57	0.04	3.46	0.00
Ramganga	1.62	1.62	0.43	0.43	0.11	0.11	0.00	0.00
Chilla	10.15	10.15	0.34	0.34	0.29	0.03	0.90	0.00
M Bhali I	1.05	1.05	0.09	0.09	0.13	0.13	9.00	0.00
Khatima	0.37	0.37	0.27	0.27	0.04	0.04	0.00	0.00
<b>Total</b>	<b>18.69</b>	<b>18.69</b>	<b>2.82</b>	<b>2.82</b>	<b>5.62</b>	<b>1.36</b>	<b>27.55</b>	<b>0.00</b>

### 5.2.3 Depreciation

The Petitioner has claimed a sum of Rs. 9.51 Crore for FY 2009-10 by way of depreciation in respect of these nine stations. UJVNL submitted that while computing the depreciation it has considered the 90% of the opening GFA as the permissible limit.

As far as the depreciation on opening value of GFA as on November 11, 2001 is concerned, UJVNL has claimed depreciation on opening GFA for four plants namely Khodri, Kulhal, Chilla and Maneri Bhali-I. The depreciation claimed for these four generating stations is of Rs. 7.57 Crore for FY 2009-10.

Out of these nine stations, in five stations namely Khatima, Dhakrani, Dhalipur, Ramganga and Chibro the accumulated depreciation has already reached 90%. The maximum depreciation that can be allowed on any asset is 90% of the historical cost. Hence, no depreciation can be allowed on these five stations. UJVNL has also not claimed any depreciation on the opening GFA for these five generating stations. However, for Kulhal generating station the accumulated depreciation upto March 31, 2009 has reached 88.73%, accordingly, depreciation for FY 2009-10 has been restricted to the value where it reaches 90% of the assets' cost.

As regards the category-wise classification of assets, UJVNL submitted that the sub-classification of asset category is not available with it, and, hence it has considered the maximum rate of depreciation as provided in **Annexure-I** of the Regulations for each category of the assets. The Commission asked UJVNL to confirm whether it has prepared asset register or not, and if prepared, asked it to submit the same and compute the depreciation in accordance with the assets register and rates of the depreciation as specified in the Regulations. UJVNL provided the asset register for the assets put to use during FY 2007-08 only and has not provided the asset register for the assets created from FY 2001-02 onwards. Further, UJVNL has also not provided the computation of depreciation in accordance with the assets register and rates of depreciation as specified in the Regulations.

In the absence of asset classification as specified in the Regulations, the Commission has worked out depreciation on the opening GFA and additional capitalisation separately. The permissible rate of depreciation on the opening GFA has been considered by the Commission as 2.38% as determined in its Previous Tariff Orders. However, for Kulhal the accumulated depreciation upto March 31, 2008 has reached 88.73%, accordingly, depreciation for FY 2009-10 has been restricted to the value where it reaches 90% of the assets' cost. Thus, the Commission has approved the total depreciation on the opening GFA for Khodri, Kulhal, Chilla and Maneri Bhali-I as Rs. 7.57 Crore for FY 2009-10. Further, the Commission has considered an average depreciation rate of 2.66% for additional capitalisation as considered by the Commission in the Tariff Order dated March 18, 2008. The Commission has provided the depreciation on the opening GFA in the year subsequent

to the year in which the assets are capitalised. **The Commission however, re-iterates its earlier direction given in para 5.3.3 of the Tariff Order dated December 12, 2004 to the Petitioner to prepare fixed assets registers and maintain asset-wise classification for claiming depreciation in the future years.**

As stated earlier, the depreciation on provisional capitalisation of Rs. 2.21 Crore in MB-I has been provided as Rs. 1.42 Crore in 2007-08 (Rs. 1.37 Crore as accumulated depreciation upto 2006-07 and Rs. 0.05 Crore for 2007-08) and Rs. 0.05 Crore for 2008-09 and 2009-10 respectively. The summary of depreciation as submitted by the Petitioner and approved by the Commission for FY 2007-08, FY 2008-09 and FY 2009-10 is shown in the Table below:

**Table 5.6: Depreciation for FY 2007-08 (Rs. Crore)**

Particulars	Depreciation on Opening GFA		Depreciation on Additional Capitalisation	
	Claimed	Approved after truing up	Claimed	Approved after truing up
Dhakrani	0.00	0.00	0.02	0.01
Dhalipur	0.00	0.00	0.03	0.01
Chibro	0.00	0.00	0.26	0.08
Khodri	1.76	1.76	0.12	0.04
Kulhal	0.42	0.42	0.03	0.01
Ramganga	0.00	0.00	0.15	0.04
Chilla	2.97	2.97	0.34	0.27
M Bhalli-I	2.61	4.03	0.07	0.03
Khatima	0.00	0.00	0.04	0.01
Total	7.76	9.18	1.05	0.50

**Table 5.7: Depreciation for FY 2008-09 (Rs. Crore)**

Particulars	Depreciation on Opening GFA		Depreciation on Additional Capitalisation	
	Claimed	Approved after provisional truing up	Claimed	Approved after provisional truing up
Dhakrani	0.00	0.00	0.04	0.01
Dhalipur	0.00	0.00	0.04	0.01
Chibro	0.00	0.00	0.27	0.10
Khodri	1.76	1.76	0.18	0.06
Kulhal	0.42	0.42	0.09	0.01
Ramganga	0.00	0.00	0.15	0.05
Chilla	2.97	2.97	0.35	0.28
M Bhalli-I	2.61	2.66	0.07	0.03
Khatima	0.00	0.00	0.04	0.02
Total	7.76	7.81	1.24	0.57

**Table 5.8: Depreciation for FY 2009-10 (Rs. Crore)**

Particulars	Depreciation on Opening GFA		Depreciation on Additional Capitalisation	
	Claimed	Approved	Claimed	Approved
Dhakrani	0.00	0.00	0.20	0.01
Dhalipur	0.00	0.00	0.05	0.01
Chibro	0.00	0.00	0.36	0.11
Khodri	1.76	1.76	0.29	0.08
Kulhal	0.22	0.22	0.18	0.06
Ramganga	0.00	0.00	0.15	0.28
Chilla	2.97	2.97	0.37	0.03
M Bhalli-I	2.61	2.66	0.30	0.02
Khatima	0.00	0.00	0.04	0.61
Total	7.57	7.62	1.95	0.61

#### 5.2.4 Return on Equity

Regulation 18(1) of the Commission's (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2004 stipulates as follows:

*"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 Regulation, the Commission has provisionally considered 30% of the provisional additional capitalisation amount as normative equity to allow return on the same. As discussed in Chapter 4, 30% of opening asset value has provisionally also been considered as equity.

In this regard, as stated in Chapter 4 also, the Commission would like to point out that the allowance of RoE on provisional value of opening equity of Rs. 151.88 Crore in accordance with the directions of the Hon'ble Appellate Tribunal for Electricity from FY 2004-05 as detailed in the Order dated March 14, 2007 is due to consideration of normative equity of 30% in the opening value of GFA pending finalisation of the transfer scheme of UJVNL. However, the Petitioner seems to have taken no serious step for getting the issue finalized through Governments of Uttarakhand and Uttar Pradesh and the issue is languishing for almost 8 years now. Although, the Petitioner on specifically being asked about the status of transfer scheme has submitted the steps taken by it in this regard, no concrete action has been taken after the allowance of provisional RoE in the above mentioned Order dated March 14, 2007.

The reason for this disinterest seems to be this provisional allowance on maximum allowable equity and the caveat being put every year in the Tariff Petitions of UJVNL that financial impact of finalization of transfer scheme should be allowed by the Commission as and when it takes place. It is pertinent to mention here that any financial impact due to change in the values of opening assets and liabilities on finalization of transfer scheme, if allowed to be passed through in tariff, would entail passing on its cumulative impact on Tariffs for each of the years from the date of effectiveness of transfer scheme, i.e., November 9, 2001, in the year of finalization. This cumulative impact would further multiply with delay in finalization of transfer scheme which may be exorbitantly high for passing on to consumers in one tariff year. It is therefore, necessary that the transfer issues are settled at the earliest possible. **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.**

Thus, the Commission has provisionally allowed return on this normative equity and the equity considered in opening value of assets transferred at 14% in accordance with Regulation 25 which reads as follows:

*“Return on equity shall be computed on the equity base determined in accordance with regulation 18 and shall be @ 14% per annum.*

The summary of the Return on Equity approved for UJVNL for FY 2007-08, FY 2008-09 and FY 2009-10 is shown in the Table below:

**Table 5.9: Equity and Return on Equity for FY 2007-08 (Rs. Crore)**

Station	Transferred Assets		FY 2007-08		
			Additional Capitalisation		Total RoE
	Normative Equity	RoE	Opening Equity	RoE	
Dhakrani	3.72	0.52	0.08	0.01	0.53
Dhalipur	6.11	0.86	0.12	0.02	0.87
Chibro	26.37	3.69	0.76	0.11	3.80
Khodri	22.19	3.11	0.37	0.05	3.16
Kulhal	5.25	0.74	0.07	0.01	0.75
Ramganga	15.00	2.10	0.49	0.07	2.17
Chilla	37.47	5.25	2.95	0.41	5.66
Maneri Bhali I	32.92	4.61	0.31	0.04	4.65
Khatima	2.16	0.30	0.11	0.02	0.32
<b>Total</b>	<b>151.19</b>	<b>21.17</b>	<b>5.26</b>	<b>0.74</b>	<b>21.90</b>

**Table 5.10: Equity and Return on Equity for FY 2008-09 (Rs. Crore)**

Station	Transferred Assets		FY 2008-09		
	Normative Equity	RoE	Additional Capitalisation		Total RoE
			Opening Equity	RoE	
Dhakrani	3.72	0.52	0.10	0.01	0.53
Dhalipur	6.11	0.86	0.14	0.02	0.88
Chibro	26.37	3.69	0.92	0.13	3.82
Khodri	22.19	3.11	0.66	0.09	3.20
Kulhal	5.25	0.74	0.08	0.01	0.75
Ramganga	15.00	2.10	0.61	0.09	2.19
Chilla	37.47	5.25	3.05	0.43	5.67
Maneri Bhali I	32.92	4.61	0.34	0.05	4.66
Khatima	2.16	0.30	0.19	0.03	0.33
<b>Total</b>	<b>151.19</b>	<b>21.17</b>	<b>6.11</b>	<b>0.85</b>	<b>22.02</b>

**Table 5.11: Equity and Return on Equity for FY 2009-10 (Rs. Crore)**

Station	Transferred Assets		FY 2009-10		
	Normative Equity	RoE	Additional Capitalisation		Total RoE
			Opening Equity	RoE	
Dhakrani	3.72	0.52	0.11	0.02	0.54
Dhalipur	6.11	0.86	0.17	0.02	0.88
Chibro	26.37	3.69	1.02	0.14	3.83
Khodri	22.19	3.11	0.84	0.12	3.22
Kulhal	5.25	0.74	0.09	0.01	0.75
Ramganga	15.00	2.10	0.65	0.09	2.19
Chilla	37.47	5.25	3.06	0.43	5.67
Maneri Bhali I	32.92	4.61	0.38	0.05	4.66
Khatima	2.16	0.30	0.20	0.03	0.33
<b>Total</b>	<b>151.19</b>	<b>21.17</b>	<b>6.51</b>	<b>0.91</b>	<b>22.08</b>

### 5.2.5 Income Tax

In this regard, Regulation 7 stipulates that :

*“(1) Tax on the income streams of the generating company from its core business shall be computed as an expense and shall be recovered from the beneficiaries.”*

Further, Regulation 10 stipulates that the recovery of income tax shall be done directly by the generating company from the beneficiaries without making any application before the Commission and provided that in case of any objection by the beneficiaries to the amounts claimed on account of income tax, the generating company may make an appropriate application before the Commission for its decision.

As the Regulations provide for the recovery of income tax directly by the generating company from the beneficiaries without making any application, the Commission has not considered the Income Tax while determining the tariff of these generating stations for FY 2009-10. The Income Tax may be billed by UJVNL separately in addition to the tariff approved by the Commission. As regards the contention raised by the objectors that income tax should also be recovered from HPSEB based on its share, the Commission agrees with the concerns raised by the objectors in this regard and since income tax payable by UJVNL has to be recovered from beneficiaries, **the Commission directs UJVNL to recover the same from both UPCL and HPSEB in proportion of the capacity share based on the income tax implications for such stations.**

#### **5.2.6 Interest on Loans**

The Petitioner has claimed the interest on the normative debt equivalent to 70% of additional capitalisation amount. The Petitioner, however, did not consider any repayment for working out the interest charges. The Commission asked reasons from the Petitioner for not considering any repayment towards the normative loan while working out the interest expenses to which, UJVNL submitted that the Commission may take a view in this regard and may consider any adjustments as may be desired. Further, the Commission asked the Petitioner to submit the basis for revising the total amount disbursed towards APDP loan to Rs. 3.925 Crore as against earlier submission of Rs. 1.46 Crore in ARR and Tariff Petition for FY 2007-08 and also asked the copy of the loan letters.

UJVNL submitted that the loan under APDP scheme of Rs. 130.80 Lakh and Rs. 261.70 Lakh was granted for RMU of Chilla, Chibro and Khodri LHPs vide letter no. 92/9-3-30/2003 dated 14/01/03 and 22/9-3/U/APDP-UJVNL/03 dated 29/09/03 of GoU respectively. The repayment period of 20 years based on the terms of the loan has been considered in accordance to the above referred sanction letters. UJVNL also provided the details of the repayment schedule of the said loans along with interest due/paid thereon.

On financing of assets, Regulation 18 (1) of the UERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2004 stipulates as follows:

*“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."*

Regulation 18 (2) of the UERC (Terms and Conditions for Determination of Hydro Generation Tariff) Regulations, 2004 stipulates as follows:

*"The debt and equity amounts arrived at in accordance with sub-regulation (1) shall be used for calculating interest on loan, return on equity, Advance Against Depreciation and Foreign Exchange Rate Variation."*

Similarly for interest calculation, in accordance with the above provisions of Regulations, the Commission has considered the normative loan on the additional capitalization as approved by the Commission for the period from FY 2001-02 to FY 2008-09. As regards, the interest rate, the Commission has considered the interest rate of 11% in accordance with the rates as approved by the Commission in previous Order and considered the repayment equivalent to the depreciation allowed during the year.

As regards the APDP loan, the Commission has considered the loan repayment period of 20 years (i.e., repayment of 20 years for 50% of the loan amount and 5 years moratorium period and then 15 years for the remaining loan amount). As regards the interest rate considered for APDP loan, the Commission has considered the interest rate as 12% on APDP loan drawn during FY 2002-03 and 11.50% on APDP loan drawn during FY 2003-04.

The provisional capitalisation of Rs. 2.21 Crore has been treated as funded from loan from State Government with 9% interest and 10 years repayment for calculating interest beginning 2007-08.

The Summary of interest expenses is presented in Table below.

**Table 5.12: Interest on Loan (Rs. Crore)**

Station	FY 2007-08		FY 2008-09		FY 2009-10	
	Claimed	Approved	Claimed	Approved	Claimed	Approved
Dhakrani	0.03	0.02	0.10	0.02	0.61	0.02
Dhalipur	0.05	0.03	0.07	0.04	0.11	0.04
Chibro	0.46	0.27	0.49	0.29	0.78	0.28
Khodri	0.21	0.14	0.30	0.20	0.68	0.21
Kulhal	0.02	0.02	0.24	0.02	0.54	0.02
Ramganga	0.18	0.13	0.18	0.14	0.18	0.14
Chilla	0.89	0.72	0.91	0.70	1.04	0.66
M Bhali I	0.10	0.22	0.11	0.26	0.88	0.24
Khatima	0.06	0.04	0.06	0.05	0.06	0.05
<b>Total</b>	<b>1.99</b>	<b>1.59</b>	<b>2.46</b>	<b>1.71</b>	<b>4.89</b>	<b>1.66</b>

The difference in the interest expenses claimed by the Petitioner and approved by the Commission is mainly on account of the reason that the Petitioner has not considered any repayment towards the normative loan and also on account of the higher interest rate of 12.25% considered by the Petitioner and for 2008-09 and 2009-10 due to non- consideration of projected capitalisation after September 30, 2008 by the Commission.

### **5.3 Operation & Maintenance (O&M) Expenses**

The Petitioner had given the actual values of O&M expenses for the year 2007-08 for each plant that are independently accounted for and incurred at these plants (direct expenses) and the common/indirect expenses of Corporate/other attached offices were allocated to these plants. The indirect expenses were allocated to 9 LHPs considering the same allocation factor as was used by the Petitioner in its previous filings. The figures given in the Petition were, however, subsequently revised due to modification in provisional balance sheet for 2007-08 submitted later by the Petitioner. Later, the Petitioner also submitted the provisional balance sheet for 2008-09 also and corresponding break-up of direct O&M expenses and allocation of indirect O&M expenses attributable to these nine plants for 2008-09. In addition, the Petitioner has claimed the following expenses:

- Cost of consumption in colonies and barrages as calculated by the Petitioner,
- Regulatory fee and insurance charges,
- Payment of Rs. 2.05 Crore to PF trust for meeting difference between cash collection and cash disbursements required during these two years
- Cost of Rs. 0.17 Crore for concessional supply to past and present employees of UJVNL residing outside the colonies

The O&M expenses as given by the Petitioner alongwith above additional claims for 2007-08 and 2008-09 are given in the following Tables:

**Table 5.13: O&M Expenses given by Petitioner for 2007-08 (Rs. Crore)**

Plant	Direct				Indirect					Total				
	R&M Expense	A&G Expense	Employee Cost	Sub Total	R&M Expense	A&G Expense	Insurance & Regulatory Expense	Employee Cost	Sub Total	R&M Expense	A&G Expense	Insurance & Regulatory Expense	Employee Cost	Total O&M Expense
Dhakrani	1.15	0.17	2.11	3.44	0.48	0.09	0.01	0.90	1.47	1.62	0.26	0.01	3.01	4.91
Dhalipur	1.73	0.26	3.20	5.19	0.72	0.14	0.01	1.36	2.22	2.45	0.40	0.01	4.55	7.41
Chibro	4.94	0.29	6.14	11.38	3.39	0.64	0.05	6.38	10.46	8.33	0.94	0.05	12.52	21.84
Khodri	1.79	0.07	3.70	5.56	1.69	0.32	0.02	3.19	5.23	3.48	0.39	0.02	6.89	10.79
Kulhal	1.02	0.15	1.88	3.05	0.42	0.08	0.01	0.80	1.31	1.44	0.23	0.01	2.68	4.36
Ramganga	0.57	0.20	5.46	6.23	1.43	0.47	0.04	3.58	5.52	2.00	0.68	0.04	9.04	11.75
Chilla	6.05	0.21	6.43	12.70	1.04	0.34	0.03	2.60	4.01	7.09	0.56	0.03	9.03	16.71
M Bhali I	7.23	0.17	5.65	13.05	0.65	0.22	0.02	1.63	2.51	7.88	0.38	0.02	7.27	15.55
Khatima	2.47	0.09	2.92	5.49	0.30	0.10	0.01	0.75	1.15	2.77	0.19	0.01	3.67	6.64
<b>Total</b>	<b>26.96</b>	<b>1.63</b>	<b>37.49</b>	<b>66.09</b>	<b>10.11</b>	<b>2.41</b>	<b>0.18</b>	<b>21.18</b>	<b>33.88</b>	<b>37.07</b>	<b>4.03</b>	<b>0.19</b>	<b>58.67</b>	<b>99.97</b>
Cost of colony consumption														6.12
Regulatory Expenses														0.90
Insurance														1.60
Cost of Concessional supply to UJVNL's Past & present employees														0.17
Terminal Benefits & PF related Claims														2.05
Impact of arrear of pay revision														0.00
<b>Grand Total O&amp;M</b>														<b>110.81</b>

**Table 5.14 O&M Expenses given by Petitioner for 2007-08 (Rs. Crore)**

Plant	Direct				Indirect					Total				
	R&M Expense	A&G Expense	Employee Cost	Sub Total	R&M Expense	A&G Expense	Insurance & Regulatory Expense	Employee Cost	Sub Total	R&M Expense	A&G Expense	Insurance & Regulatory Expense	Employee Cost	Total O&M Expense
Dhakrani	0.96	0.14	2.31	3.42	0.29	0.14	0.07	0.98	1.48	1.26	0.28	0.07	3.29	4.90
Dhalipur	1.46	0.22	3.49	5.17	0.44	0.20	0.11	1.48	2.24	1.90	0.42	0.11	4.97	7.40
Chibro	4.24	0.37	6.53	11.13	2.09	0.96	0.51	6.97	10.53	6.33	1.32	0.52	13.50	21.67
Khodri	1.37	0.09	4.77	6.23	1.04	0.48	0.26	3.48	5.27	2.42	0.57	0.26	8.26	11.50
Kulhal	0.86	0.13	2.05	3.04	0.26	0.12	0.06	0.87	1.32	1.12	0.25	0.06	2.92	4.36
Ramganga	0.98	0.14	6.32	7.44	1.14	0.74	0.42	4.05	6.35	2.12	0.88	0.42	0.37	13.79
Chilla	5.98	0.25	7.25	13.48	0.83	0.54	0.31	2.95	4.62	6.80	0.79	0.31	10.20	18.10
M Bhali I	10.96	0.21	6.51	17.68	0.52	0.34	0.19	1.84	2.89	11.48	0.53	0.21	8.36	20.57
Khatima	2.65	0.09	3.29	6.02	0.24	0.15	0.09	0.85	1.33	2.88	0.24	0.09	4.14	7.35
<b>Total</b>	<b>29.46</b>	<b>1.64</b>	<b>42.52</b>	<b>73.62</b>	<b>6.85</b>	<b>3.68</b>	<b>2.02</b>	<b>23.47</b>	<b>36.02</b>	<b>36.31</b>	<b>5.29</b>	<b>2.05</b>	<b>65.99</b>	<b>109.64</b>
Cost of colony consumption														4.50
Regulatory Expenses														0.90
Insurance														0.74
Cost of Concessional supply to UJVNL's Past & present employees														0.17
Terminal Benefits & PF related Claims														2.05
Impact of arrear of pay revision														-
<b>Grand Total O&amp;M</b>														<b>118.01</b>

For 2009-10, the Petitioner has stated that except the component of employee cost, the principle of determination of other O&M expenses of escalating by 4% is acceptable to the Petitioner for A&G and R&M expenses. The Petitioner has submitted that it has computed the employee cost after taking into consideration the likely impact of Pay Revision consequent upon the report of VI Pay Commission.

The Petitioner, while computing the arrears of pay on implementation of the recommendations of VI Pay Commission, has considered the salary drawn based on the old pay scales and salary due based on the revised pay scales. The various assumptions considered while computing the arrears are as under:

**A. Computation of Salary drawn for the period from January 1, 2006 to March 31, 2009**

- Considered the basic pay drawn in the month of January 2006 as base;
- Considered increment based on the basic pay in the month of July of every financial year to compute the salary drawn for the period from January 1, 2006 to March 31, 2009;
- Considered the Dearness Allowance (DA) drawn based on applicable DA rates for the period from January 1, 2006 to March 31, 2009;

**B. Computation of Salary due for the period from January 1, 2006 to March 31, 2009 based on the revised pay scale**

- Considered the corresponding revised pay and grade pay for the month of January 2006 as against the old basic pay;
- Considered the increment as 3% in the month of July of each financial year;
- Considered DA on the revised pay and grade pay on the revised rates

**C. Computation of total arrears payable for all employees**

- Computed the arrears of pay and DA by finding out the difference of 'A' and 'B' above;
- Considered additional statutory liability @ 18% of the above arrear amount at average rate towards the contribution towards Employee Provident Fund, Gratuity, Employee Deposit Linked Insurance, Pension Contribution, Adm Charges;

Accordingly, UJVNL computed the total amount of impact of arrears on implementation of the VI Pay Commission's Recommendations as applicable to it as Rs. 52.08 Crore. Further, UJVNL has allocated this amount to the various divisions for operating staff which amounts to Rs. 45.82 Crore after excluding the arrears for project staffs. Further, UJVNL allocated this amount of Rs. 45.82 Crore to the 9 LHPs, which amounts to Rs. 38.40 Crore. The Petitioner has considered the impact of the arrears of pay revision in FY 2009-10 as 40% of this value, which works out to Rs. 15.36 Crore and is attributable to 9 large HEPs for FY 2009-10. This has been allocated to each of the nine plants in the same proportions as has been done for the actual employee cost for FY 2007-08. The summary of the O&M expenses as claimed by the Petitioner for FY 2009-10 is shown in the Table below:

**Table 5.15: O&M Expenses Claimed by Petitioner for 2009-10 (Rs. Crore)**

Plant	A&G and R&M Expenses	Employee Expenses	Total
Dhakrani	2.37	4.05	6.42
Dhalipur	3.43	6.12	9.55
Chibro	7.81	15.30	23.11
Khodri	3.82	8.71	12.53
Kulhal	2.02	3.60	5.62
Ramganga	2.18	10.22	12.40
Chilla	5.30	11.24	16.54
M Bhali I	9.30	8.84	18.14
Khatima	2.65	4.92	7.57
<b>Sub-Total</b>	<b>38.87</b>	<b>73.00</b>	<b>111.88</b>
Colony Consumption			4.34
Terminal Benefits			2.05
Regulatory Expenses			0.90
Insurance			0.88
Cost of Concessional supply to past and present employees of UJVNL			0.17
Provisioning for 6 <sup>th</sup> Pay Commission			15.36
<b>Total</b>			<b>135.58</b>

Before going into details of the Commission's methodology for working out the O&M expenses, it would be necessary to compute the annual escalation factors for inflationary increases for which the Commission has notified separate Regulations. The escalation rates have been considered as per the provisions specified in Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determining Escalation Factor) Regulations, 2007. As per UERC (Terms & Conditions for determination Escalation Factor) Regulations, 2007 –

#### 6. "Actual Escalation Factor for Past Years

6.1 Actual escalation factor ( $EF_k$ ) for a particular year ( $k^{th}$  year) shall be calculated from published data using the following formula:

$$EF_k = 0.40 \times \text{Infl CPI\_IW}_k + 0.60 \times \text{Infl WPI\_SC}_k \text{ (For Thermal Generating Companies)}$$

$$EF_k = 0.55 \times \text{Infl CPI\_IW}_k + 0.45 \times \text{Infl WPI\_SC}_k \text{ (For Others)}$$

Where

$$\text{Infl CPI\_IW}_k = \text{Annual Average Inflation in CPI\_IW for } k^{th} \text{ Year}$$

$$= \left[ \frac{\text{CPI\_IW}_k}{\text{CPI\_IW}_{k-1}} - 1 \right] \times 100$$

$$\text{Infl WPI\_SC}_k = \text{Annual Average Inflation in WPI\_SC for } k^{th} \text{ Year}$$

$$= \left[ \frac{\text{WPI\_SC}_k}{\text{WPI\_SC}_{k-1}} - 1 \right] \times 100$$

$$\text{CPI\_IW}_k = \text{Annual Average CPI\_IW for the } k^{th} \text{ Year}$$

$CPI\_IW_{k-1}$  = Annual Average CPI\_IW for the year preceding  $k^{th}$  Year

$WPI\_SC_k$  = Annual Average WPI\_SC for the  $k^{th}$  Year

$WPI\_SC_{k-1}$  = Annual Average WPI\_SC for the year preceding  $k^{th}$  Year

**6.2** CPI\_IW shall be taken as directly published by the Government.

**6.3** WPI\_SC shall be computed from disaggregated data on wholesale prices published by Ministry of Industry using the following formula:

$$WPI\_SC = \frac{\sum_{i=1}^{14} w_i WPI_i}{\sum_{i=1}^{14} w_i}$$

Where,

$WPI_i$  is the wholesale price index of the  $i^{th}$  commodity; and

$w_i$  is the respective weight.

**6.4** WPI\_SC may be obtained as a weighted average of relevant components selected from disaggregated WPI series (1993-94=100) as given below for Transmission Licensee and Other Licensees/Generating Companies:

COMMODITIES	WEIGHT ( $w_i$ )	
	For Transmission Licensee	For Others
1. Lubricants	-	0.16367
2. Cotton Cloth	0.90306	0.90306
3. Jute, Hemp and Mesta Cloth	-	0.37551
4. Paper & Paper Products	2.04403	2.04403
5. Rubber & Plastic Products	2.38819	2.38819
6. Basic Heavy Inorganic Chemical	-	1.44608
7. Basic Heavy Organic Chemical	-	0.45456
8. Paints Varnishes & Lacquers	0.49576	0.49576
9. Turpentine, Synthetic Resins, Plastic materials etc	0.74628	0.74628
10. Matches Explosives & Other Chemicals	-	0.94010
11. Non-Metallic Mineral Products	2.51591	2.51591
12. Basic Metals Alloys & Metals Products	8.34186	8.34186
13. Machinery & Machine Tools	8.36331	8.36331
14. Transport Equipment & Parts	4.29475	4.29475
All the Above (WPI_SC)	30.09315	33.47307

## 7. Escalation Factor for Future Tariffs

**7.1** The Escalation Factor for future tariff years in the period of applicability of relevant tariff regulations shall be based on the average of annual escalation factors for preceding five years.

**7.2** This average escalation factor shall be used for each financial year subsequent to the mid-year of the preceding five year period till current year as well as for future years."

On the basis of the above Regulations, the Commission has considered the actual escalation factors of 6.09% for FY 2007-08 and 8.97% for FY 2008-09. An average of escalation factors for previous five years of 6.51% based on the Wholesale Price Index (WPI) and

Consumer Price Index (CPI) has been considered for FY 2009-10.

The Commission has analysed the actual O&M expenses during 2007-08. If the Commission strictly adopts the relaxed Regulations to the extent considered in the Order dated 16.12.2004 and 12.07.2006 by considering average of three years' expenses of Rs. 66.99 Crore as base O&M expenses for 2002-03, the mid-year, and allows only 4% escalation on the base O&M expenses, the O&M expenses for 2007-08, 2008-09 and 2009-10 work out to Rs. 81.50 Crore, Rs. 84.76 Crore and Rs. 88.15 Crore respectively. However, considering the fact that actual O&M expenses for the 2006-07 were higher than the O&M expenses worked out by this methodology, in the previous Order dated 18.03.2008, the Commission has allowed further relaxation in the Regulations by considering actual expenses for 2006-07 as base expenses and considered 4% p.a. increase in the same for allowing O&M expenses for 2007-08 and 2008-09 as Rs. 88.61 Crore and Rs. 92.15 Crore respectively. Again the actual O&M expenses of Rs. 99.96 Crore in FY 2007-08 have been higher than the approved level. Same is true with the O&M expenses of 2008-09 and, thus, the Commission has taken a re-look at the methodology specified in the Regulations for review and genuine relaxation in this Order. While the Petitioner should not be allowed to gain too much on account of norms specified in the Regulations, on the other hand the Commission has also to see that the Petitioner is not subjected to undue hardship without considering ground realities. Relaxation, if any, has therefore to be given after taking adequate care that only essential expenses qualifying to be passed through after prudence check may be permitted for recovery through tariff. The Commission is of the view that if O&M expenses are not allowed based on actual O&M expenses, Repairs & Maintenance (R&M) works will suffer as the Petitioner will not be able to control Government wage structure based employee expenses, which in turn will adversely affect generation from these stations. Further, there has been substantial increase in the salaries of employees in the year 2009-10, which needs to be separately worked out. However, as stated above, before permitting the actual O&M expenses in relaxation to the Regulations, a prudence check needs to be applied on each component of the O&M expenses. The Commission has, therefore, deviating from Regulations which require determination of combined O&M expenses, scrutinised and analysed each component of the O&M expenses, viz, employee, A&G and R&M expenses, separately for prudence check. Each of these heads is discussed in the following paragraphs.

### **5.3.1 Appportionment of O&M expenses on 9 LHPs**

UJVNL has submitted that it has considered actual O&M expenses booked under accounting units directly attached to one plant only for the respective plants. For common accounting units serving more than one plant, the Petitioner has allocated the expenses booked in that unit to the attached plants in proportion of their installed capacity. For expenses in units responsible for all the plants and the project works, such as corporate office and CSPPPO, 80% of the expenses have been allocated to these 9 plants as was being done by it in its earlier filings. For want of a better alternative with the supplied data, the Commission is accepting the allocations and assumptions considered by the Petitioner for these 9 plants. However, the Commission is of the view that allocation of common/indirect expenses to individual plants has to be based on logical and realistic reasoning. **The Commission, therefore, directs the Petitioner to maintain O&M expenses for each plant separately and for items/units where it becomes necessary to allocate the common/indirect expenses, the Petitioner must submit alternatives of rational basis for their allocation in the present context as well as considering future scenarios within a period of 3 months alongwith actual data, if any, for demonstration of the proposed methodology out of the alternatives.**

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

During its visit to some of these power stations of the Petitioner, the Commission found that in spite of approvals granted by the Commission on O&M expenses, the plants were actually starved of money as the actual releases to the plants was much lower than the approved O&M expenses for the plants. This, needless to say, adversely affects the much needed repairs and maintenance works for making these plants function in an efficient manner. The Commission has, therefore, decided that the O&M expenses approved for 2009-10 for each of these plants would be trued up in the next tariff filing only to the extent they are actually released and utilised in the plants. The Commission has, however, taken care of the fact that only direct expenses, which are incurred at the station need to be subjected to such stipulation. **The Petitioner is, therefore, directed to ensure that the direct O&M expenses approved in this Order for 2009-10 are actually released and utilised in these plants to the extent required for requisite works/purposes for claiming them in the true up petition.** The Commission would consider truing of these expenses only to the extent they are utilised in each plant and subject, of course, to prudence check. Accordingly, the Commission has approved the O&M expenses as direct and indirect expenses separately in the following

paragraphs.

### **5.3.3 Employee Cost**

For the years 2007-08 and 2008-09, the Commission has accepted the methodology for allocation of actual employee cost for common facilities and the claims of direct employee expenses at plants as the Petitioner is following Government approved wage structure and by and large the components of employee cost are beyond its control. The Commission, however, noted that the Petitioner, apart from claiming actual employee expenses, has also claimed allocated cost of provision for interest accrued and payable to employees on their GPF balances by the GPF Trust. The allocated provision on these nine plants has been claimed as Rs. 2.90 Crore and Rs. 3.67 Crore out of total provision of Rs. 3.62 Crore and Rs. 4.59 Crore for 2007-08 and 2008-09 respectively. The Commission asked UJVNL to submit the nature, basis and justification for expenses of Rs. 3.62 Crore towards the interest paid to GPF Trust. UJVNL submitted that the shortfall of interest payable to GPF is required to be borne by it and, therefore, during the year under review the said amount of Rs. 3.62 Crore was provided on account of liability of GPF trust for payment of interest to GPF Account holders. The Commission notes that this interest is payable by the GPF Trust of UJVNL 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 UJVNL employees is to be claimed by the Uttarakhand Trust but for non-finalisation of transfer scheme, the final settlement on such GPF claims is still pending. 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 UJVNL Trust and not of the Petitioner. The Commission has, therefore, not allowed the claims of Rs. 2.90 Crore and Rs. 3.67 Crore on this account to the Petitioner and deducted the same from the claimed employee costs for 2007-08 and 2008-09. However, for meeting the actual payment liability to employees, 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, which is also considered in the following paragraph for further allowance in 2007-08, 2008-09 and 2009-10.

As regards additional cost pertaining to terminal benefits and Provident Fund related claims, UJVNL stated that it is also required to incur expenditure towards the difference of the amounts collected from employee contribution to the GPF Trust and the actual payouts of the Trust subject to condition that the same will be adjusted against future tariff when the unfunded GPF accumulation is made good by GoU/UPPSET/GoUP. The amount involved is of the order of Rs. 2.05 Crore per annum. UJVNL requested to consider such amount which the Commission has also considered while approving the O&M expenses in its Tariff Order dated March 18, 2008. The Commission had allowed the said amount in the previous tariff order considering UJVNL's request for a projected cash difference between collection and payments of GPF contributions.

In this regard, the Commission would like to point out that the same claim of Rs. 2.05 Crore was made by the Petitioner in its review Petition dated 06.11.2006. The Commission considered the same and allowed not only the differential but the entire payments projected by UJVNL while implementing the directions of Hon'ble ATE in its Order dated 14.03.2007. The Commission reproduces here its observation and direction on this issue as contained in para 15 of its Order dated 14.3.2007 finalising the AFC and tariff for the year 2004-05, which read as under:

*"(15) It may be recalled that the Commission had already allowed in full UJVNL's Terminal benefit liabilities accruing as per the Actuary's calculations. The amount of Rs. 8.4 crore, not allowed by the Commission relates to payment of provident fund, which is the liability of the still to be divided Provident Fund Trust, and leave encashment etc. which is a part the employee cost. Therefore, while disallowing expenditure in discharge of the PF Trust's liability, which has already been taken over by UP Government, the Commission in its Order dated 16.12.04 had made a transitional arrangement for making payments on this account by allowing carrying cost for the same. However, in view of Hon'ble Tribunal's directions quoted above, this amount is being allowed without any scrutiny, and there is now no need for allowing interest of Rs. 0.42 Crore as funding cost and the same is being written back. Since this amount is meant only for meeting terminal benefit and liabilities of the PF Trust, UJVNL should set aside this amount in a separate fund and use the same only for that and for no other purpose. Since the liability for payment of provident fund is that of the UP Trust which*

*has subsequently been assumed by UP Government, UJVNL should take effective steps to recover this amount as well as similar amounts already paid by it in the previous years, from the PF Trust. UJVNL shall file with its future ARR's full details of utilisation of this fund and of the reimbursements claimed and received on this account from the UP Trust. As and when the Provident Fund Trust or the UP or Uttaranchal Government reimburses this amount, necessary adjustment for the same will be made in UJVNL's future ARR."*

Therefore, the following three were the important decisions of the Commission:

- An amount of Rs. 8.4 Crore was allowed for meeting this liability till funding of the same is available with the Trust and the amount was to be adjusted in future ARR's of the Petitioner
- The amount was to be kept in a separate fund, i.e. a separate bank account, and to be used only for these payments
- The Petitioner was required to file full details of utilisation of this fund, both re-imbursements claimed and received, in its future ARR's.

It may be recalled that the Commission while determining tariff for 2006-07 in its Order dated 12.07.2006 declined to take cognisance of UJVNL's late submission of tariffs for 2005-06 and did not approve the same. By default, therefore, the tariffs finalised for 2004-05 in March 2007 were also applicable for 2005-06. Accordingly, the revenue of Rs. 8.4 Crore made available to the Petitioner for meeting cash shortfalls of the GPF Trust for 2004-05 was also recovered by it in 2005-06, making the total revenue available with it as Rs. 16.8 Crore till the end of 2005-06. The Petitioner in spite of the above quoted direction of the Commission to give details of the actual cash shortfall in subsequent years has again sought the differential of Rs. 2.05 Crore initially estimated and claimed by it for 2004-05 without giving any detail for the same. In order to know the exact amount of such payouts, the Commission sought the actual figures of the differential amount for the years 2007-08 and 2008-09 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:

**Table 5.16: Details of Actual Cash Inflows and Outflows of GPF Trust  
submitted by the Petitioner (Rs. Crore)**

Year	Opening Bank Balance	Contribution from Salary	Interest Earned	Maturity of FD	Investment in FD	Total Fund Available	Payment	Excess Cash Outflow
		A	B	C	D	E	F	F-E
2003-04	0.00	0.00	0.00	0.00	5.14	0.00	0.00	0.00
2004-05	0.05	7.54	0.20	0.00	0.00	7.77	10.94	3.15
2005-06	0.01	8.42	0.22	0.00	0.00	8.78	9.55	0.90
2006-07	0.36	8.53	0.25	0.00	0.00	9.14	9.71	0.57
2007-08	0.17	9.29	0.69	5.14	4.00	11.29	11.57	0.29
2008-09	0.27	9.90	0.10	4.00	1.00	13.27	13.04	-
2009-10*	0.01	6.55	0.08	1.00	0.00	7.65	8.15	0.50
2009-10**	0.00	5.00	0.00	0.00	0.00	5.00	6.00	1.00
<b>TOTAL</b>		<b>55.24</b>	<b>1.54</b>	<b>10.14</b>	<b>10.14</b>	<b>62.78</b>	<b>68.97</b>	<b>6.41</b>

\*Based on actual

\*\*Estimated

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. 16.8 Crore made available to the Petitioner till 2005-06 for meeting the cash shortfall, the Petitioner/Trust has utilised only Rs. 6.41 Crore till 2009-10 (2009-10 figures estimated) and would still be left with a cash of about Rs. 10 Crore after 2009-10. The Petitioner had also shown accrued interest on GPF balances with the above figures, which was different from the figure of 2007-08 reflected in its balance sheet and claimed by it. This interest, as stated earlier, is not permissible in tariff of the Petitioner. The Commission, therefore, rejects Petitioner's request for approving an amount of Rs. 2.05 Crore against the difference of the amounts collected from employee contribution to the GPF trust and the actual payouts of the Trust for each of the years 2007-08, 2008-09 and 2009-10. It may, however, be noted that the Commission has allowed the entire claim of current contributions of terminal benefits including leave encashment. **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. 16.8 Crore may be adjusted in future ARRs.** Meanwhile, the Petitioner would not be entitled to claim financing of shortfalls during the transitional period till the available funds are exhausted, details of which should be provided as and when it is claimed.

In its subsequent submission, the Petitioner has also claimed Rs. 14.02 Crore and Rs. 21.46 Crore for 2007-08 and 2008-09 respectively as provision for arrears on implementation of 6<sup>th</sup> Pay Commission's recommendations as applicable to the Petitioner. This is in addition to Rs. 15.36 Crore of 40% arrears in 2009-10, which clearly amounts to claiming the same expense twice. The Commission has considered the payment of arrears in accordance with the Government of Uttarakhand's Order for the Petitioner, according to which the arrears

are payable in three instalments of 40%, 30% and 30% in the years 2009-10, 2010-11 and 2011-12 respectively. Since the Commission is allowing payment of 40% of the arrears on cash basis as per this Order for 2009-10, there is no need to allow the same in 2007-08 and 2008-09 and, accordingly, the claim of UJVNL in this regard is not being considered for these years.

As stated earlier, except for the above claims of employee costs, the Commission has allowed all the claimed expenses under employee cost for 2007-08 and 2008-09, which as the allocation submitted by the Petitioner are approved at the following levels:

**Table 5.17: Details of Approved Employee Cost for 2007-08 and 2008-09 (Rs. Crore)**

Plant	2007-08			2008-09		
	Direct	Indirect	Total	Direct	Indirect	Total
Dhakrani	2.03	0.87	2.89	2.22	0.94	3.16
Dhalipur	3.06	1.31	4.37	3.35	1.42	4.77
Chibro	5.78	6.00	11.78	6.08	6.49	12.57
Khodri	4.01	3.03	7.04	4.50	3.29	7.79
Kulhal	1.80	0.77	2.57	1.97	0.84	2.81
Ramganga	5.09	3.34	8.43	5.85	3.75	9.61
Chilla	6.11	2.48	8.59	6.85	2.78	9.64
M Bhali I	5.45	1.57	7.01	6.24	1.76	8.01
Khatima	2.82	0.72	3.54	3.16	0.81	3.98
<b>Total</b>	<b>36.16</b>	<b>20.07</b>	<b>56.24</b>	<b>40.23</b>	<b>22.09</b>	<b>62.33</b>

The Commission is aware that during FY 2009-10, the employee expenses are likely to increase substantially due to pay revision on account of implementation of the recommendations of VI Pay Commission as applicable to the Petitioner. The Commission has obtained the actual salary details for the period from April to June 2009 and has estimated the employee cost for FY 2009-10 as Rs. 75.99 Crore by considering annual increment and applicable DA rates for salary computation. Terminal benefits and leave encashment have been considered to be in same proportion as was for 2008-09. The other allowances for three months have been annualised for 2009-10.

Further, the Commission has also obtained the detailed workings carried out by UJVNL for projecting the likely arrears of Rs. 52.08 Crore on account of recommendations of VI Pay Commission for the period from January 2006 to March 2009. The Commission found the workings of UJVNL in order and, accordingly, has considered the same. Therefore, the Commission has considered the impact of the arrears of pay revision in FY 2009-10 as 40% of the arrears for period January 2006 to March 2009 which works out to Rs. 15.36 Crore attributable to 9 large HEPs for FY 2009-10. The Commission would carry out the truing up of actual employee expenses including the arrears subject to prudence check in the next year tariff exercise.

### 5.3.4 Repairs and Maintenance Expenses

The Commission obtained the details of major works carried out in actual R&M expenses claimed by the Petitioner for 2007-08. However, the Commission observed that UJVNL has considered certain expenses which are capital in nature under Repair and Maintenance expenses. Some of the glaring examples of such bookings done during 2007-08 are as under:

**Table 5.18: Some of the Capital Items booked under Repairs and Maintenance Expenses (Rs. Lakh)**

S. No.	Plants	R&M Details	Cost
1	Dhakrani	Design Supply, Installation & Commissioning of 7 no 132 kV Isolators	16.80
2		Design Supply, Installation & commissioning of 3 no 132 kV Circuit Breaker	26.05
3	Chibro	Renovation of Unit #1	143.75
4		Procurement of Electronics card for DVR & Governor	35.96
5	Khodri	Battery Charger & DCDB	10.58
6	Ramganga	Supply of three phase 20 nos. test bench for testing energy meters	4.34
7	Chilla	Supply of Retrofitting of ABB make 145 kV Isolators	69.17
8	MB-I	Installation new tube-well and pumping plant at Tiloth colony and rising main up to Tiloth clear water reservoir.	34.98
9	<b>Total</b>		<b>341.63</b>

Normally, the expenditure for any renovation and modernisation or for life extension of an asset, which is likely to serve for more than a year is treated as capital expenditure and routine expenses on those items which are consumed within a period of one year are booked as revenue expenses subject of course to the concept of materiality. However, the above examples clearly bring out that the booking of expenses under capital and revenue heads are not being correctly done. Thus, it may be the case that UJVNL has also booked such capital related expenses under the head of R&M expenses for previous years as well. Accordingly, **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.**

For the present, the Commission has provisionally accepted the actual R&M expenses, including fuel cost, of Rs. 29.58 Crore for FY 2006-07 as submitted by UJVNL in the present filing for working out allowable R&M expenses for FY 2007-08 and 2008-09. The Commission has, therefore, considered actual R&M expenses for FY 2006-07 as base expense and allowed the R&M expenses for 2007-08, 2008-09 and 2009-10 considering the escalation rates of 6.09%, 8.97% and 6.51% respectively for each of these years as per the above quoted Regulations. Accordingly, the Commission has allowed R&M expenses of Rs. 31.38 Crore,

Rs. 34.19 Crore and Rs. 36.42 Crore for 2006-07, 2007-08 and 2008-09 respectively on provisional basis. Against these values the Petitioner's claims are Rs. 33.82 Crore and Rs. 36.31 Crore for 2007-08 and 2008-09 respectively. The Petitioner has given combined figure of Rs. 38.87 Crore A&G and R&M expenses for 2009-10. The approved R&M expenses for 2007-08 and 2008-09 have been apportioned into direct and indirect expenses in the same proportion as proposed by the Petitioner and for 2009-10 they are apportioned on the basis of proportion applied for 2008-09. The plant-wise R&M expense so approved are presented in the following Table:

**Table 5.19: Approved R&M Expenses for 2007-08, 2008-09 and 2009-10 (Rs. Crore)**

Plant	2007-08			2008-09			2009-10		
	Direct R&M Expenses	Indirect R&M Expenses	Total R&M Expenses	Direct R&M Expenses	Indirect R&M Expenses	Total R&M Expenses	Direct R&M Expenses	Indirect R&M Expenses	Total R&M Expenses
Dhakrani	1.53	0.51	2.04	1.70	0.52	2.22	1.81	0.55	2.36
Dhalipur	2.20	0.73	2.93	2.45	0.75	3.19	2.61	0.79	3.40
Chibro	3.61	2.22	5.83	4.26	2.10	6.36	4.53	2.24	6.77
Khodri	1.52	1.40	2.92	1.81	1.38	3.19	1.93	1.47	3.39
Kulhal	1.36	0.45	1.81	1.51	0.46	1.97	1.61	0.49	2.10
Ramganga	0.24	0.54	0.78	0.39	0.46	0.85	0.42	0.49	0.90
Chilla	3.65	0.50	4.15	3.98	0.55	4.52	4.23	0.59	4.82
M Bhali I	7.78	0.80	8.57	8.92	0.42	9.34	9.50	0.45	9.95
Khatima	2.13	0.21	2.34	2.34	0.21	2.55	2.49	0.22	2.72
<b>Total</b>	<b>24.02</b>	<b>7.36</b>	<b>31.38</b>	<b>27.36</b>	<b>6.83</b>	<b>34.19</b>	<b>29.14</b>	<b>7.28</b>	<b>36.42</b>

### 5.3.5 Administrative & General Expenses

After analysing the expenses in the balance sheet of the Petitioner for 2007-08 and 2008-09, the Commission noted that the Petitioner has not only included insurance and regulatory expenses under A&G expenses but also claimed them as additional expenses in line with Commission's approvals in previous tariff orders. The Petitioner, however, failed to take cognizance of the fact that while allowing these additional expenses separately, the Commission has first excluded them from total A&G expenses used for escalation by inflationary increase to arrive at tariff year A&G expenses and these expenses being non-escalable were separately allowed on actual basis. The Commission has carried out this correction in actual A&G expenses for 2007-08 and 2008-09 and has excluded them from claimed A&G expenses. The actual A&G expenses, excluding regulatory fee and insurance charges, of Rs. 4.33 Crore for 2007-08 and Rs. 5.80 Crore for 2008-09 as claimed by the Petitioner have been allowed by the Commission.

Insurance and regulatory fee have been separately allowed as additional expenses on actual basis. Accordingly, regulatory fee of Rs. 0.90 Crore has been considered for 2007-08

and 2008-09 against a total claim of Rs. 1.80 Crore and Rs. 0.90 Crore for these years. As regards the Regulatory fee for filing of the Petition, since the tariff filing fees for each generating station is Rs. 10 Lakh, the Commission approves an amount of Rs. 90 Lakh towards the Regulatory expenses for FY 2009-10 against Petitioner's claim of Rs. 0.90 Crore.

The insurance charges of Rs. 1.91 Crore for 2007-08 have been considered as per Petitioner's claim under A&G expenses for 2007-08 instead of its total claim of Rs. 2.08 Crore. UJVNL claimed the insurance charges under various policies as Fire & Allied Perils for Large Hydro Power plants, Loss of complete Revenue due to reduction in turnover/output and increased cost of working, Financial Liabilities relating to Director's and Officers Omission, Public Liability, Workman's Compensation, Legal Liability under the Workman's Compensation Act, 1923 and Indian Fatal Accidents Act, 1855. UJVNL considered the actual expenses towards insurance charges of Rs. 0.89 Crore of FY 2008-09 for projection purposes for FY 2009-10. Subsequently, the Commission obtained the details and copies of receipts of premiums paid for insurance policies and also the basis of allocation of same to nine LHPs. The details submitted were also incomplete but the Commission observed that the actual insurance charges for FY 2008-09 with only the submitted details work out to Rs. 0.677 Crore against Petitioner's submission of an allocated expense of Rs. 0.73 Crore. The Commission, therefore, approves the claimed level of Rs. 0.73 Crore of insurance charges for 2009-10.

The total A&G expenses so approved by the Commission work out to Rs. 4.33 Crore for 2007-08 and Rs. 5.80 Crore for 2008-09 against Petitioner's claims of Rs. 4.22 Crore and Rs. 10.25 Crore respectively. The approved A&G expenses for 2009-10 work out to Rs. 6.18 Crore. Thus, the approved value of A&G and R&M expenses is Rs. 42.59 Crore against Petitioner's claim of Rs. 38.87 Crore for 2009-10. The plant-wise break-up for direct and indirect expenses is provided in the following Table:

**Table 5.20: Approved A&G Expenses for 2007-08, 2008-09 and 2009-10 (Rs. Crore)**

Plant	2007-08			2008-09			2009-10		
	Direct A&G Expenses	Indirect A&G Expenses	Total E&G Expenses	Direct A&G Expenses	Indirect A&G Expenses	Total E&G Expenses	Direct A&G Expenses	Indirect A&G Expenses	Total E&G Expenses
Dhakrani	0.02	0.13	0.15	0.12	0.18	0.30	0.13	0.19	0.32
Dhalipur	0.03	0.20	0.23	0.18	0.27	0.45	0.20	0.28	0.48
Chibro	0.18	0.94	1.13	0.29	1.16	1.45	0.31	1.24	1.54
Khodri	0.06	0.46	0.52	0.07	0.57	0.63	0.07	0.60	0.67
Kulhal	0.02	0.12	0.14	0.11	0.16	0.26	0.12	0.17	0.28
Ramganga	0.12	0.70	0.82	0.11	0.88	0.98	0.11	0.94	1.05
Chilla	0.14	0.54	0.67	0.20	0.67	0.87	0.22	0.71	0.93
M Bhali I	0.10	0.34	0.44	0.17	0.42	0.59	0.18	0.45	0.63
Khatima	0.06	0.16	0.22	0.07	0.19	0.26	0.07	0.21	0.28
<b>Total</b>	<b>0.74</b>	<b>3.59</b>	<b>4.33</b>	<b>1.31</b>	<b>4.49</b>	<b>5.80</b>	<b>1.40</b>	<b>4.78</b>	<b>6.18</b>

### 5.3.6 Cost of consumption in colonies/dams/barrages etc.

In addition to the O&M expenses discussed above, the Commission had considered and provided for cost of consumption in colonies/ dams/barrages etc. The Commission had recognised this consumption in colonies, barrages etc. and had frozen the same at a level of 33.47 MU in its previous Tariff Orders accepting the estimates provided by the Petitioner. The Commission, in its Tariff Order dated March 18, 2008 had directed UJVNL to segregate the auxiliary consumption, transformation losses, colony consumption, consumption in dams, barrages, etc. For FY 2007-08, UJVNL has provided data of such consumption under various sub-heads as under:

**Table 5.21: Details of consumption in colonies/barrages etc. (MU)**

Details	Dhakrani	Dhalipur	Chibro	Khodri	Kulhal	Ramganga	Chilla	MB-I	Khatima	Total
Consumption at Barrage etc.	0.19	0.29	0.49	0.24	0.10	1.66	1.02	0.00	0.06	4.05
Consumption at Colonies etc.	0.91	0.58	3.82	1.90	1.01	1.28	2.67	2.04	1.85	16.06
<b>Sub Total</b>	<b>1.10</b>	<b>0.87</b>	<b>4.31</b>	<b>2.14</b>	<b>1.11</b>	<b>2.94</b>	<b>3.69</b>	<b>2.04</b>	<b>1.91</b>	<b>20.11</b>
Other Consumption	0.00	0.00	3.14	1.57	0.00	0.00	0.00	0.00	0.00	4.71
Energy to MB-II Project	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.74	0.00	10.74
<b>Grand Total</b>	<b>1.10</b>	<b>0.87</b>	<b>7.45</b>	<b>3.71</b>	<b>1.11</b>	<b>2.94</b>	<b>3.69</b>	<b>12.78</b>	<b>1.91</b>	<b>35.56</b>

The Petitioner has computed the cost of this consumption for 2007-08 by considering consumption attributable to these 9 plants and it has then computed the cost of this consumption @ Rs. 2/unit, which is the tariff applicable for domestic sale by UPCL, as Rs. 6.12 Crore. In addition, the Petitioner has separately sought the cost of concessional supply to its past and present employees residing outside the colonies as Rs. 0.17 Crore as was approved by the Commission in its previous tariff Order. Similar approach has been adopted by the Petitioner to work out the cost of such consumption for 2008-09 and 2009-10 as Rs. 4.51 Crore and Rs. 4.34 Crore respectively. The Petitioner has not advanced any reason for reduction in this cost. However, the Commission noted that the energy of 10.74 MUs supplied to MB-II during its construction from MB-I was not required in 2008-09 and 2009-10 and, accordingly, the Petitioner might have reduced this energy from the total consumption.

For the year 2007-08, the Commission has considered all types supply claimed by the Petitioner under this head except the consumption under 'other consumption' and 'Energy to MB-II project', which has been dealt with subsequently in the Order. Thus, the Commission has considered 20.11 MUs as supply to colonies/barrages/dams etc. against 35.56 MUs given by the Petitioner. The Commission also notes that the Petitioner has

erroneously taken the rate of supply to colonies/barrages etc. @ Rs. 2/unit, which should have been the generation tariff applicable to each plant as the supply is directly being done by UJVNL for activities that support its own generation. This approach has also been adopted by the Commission in its previous tariff orders and has been accepted by the Petitioner. There is no reason for revisiting the correct and well settled approach. Same level of consumption of 20.11 MUs and similar approach for its cost calculation has been adopted by the Commission to work out cost of such supplies for 2008-09 and 2009-10.

Accordingly, the cost of supply to colony and barrages, etc., has been computed by the Commission in accordance with philosophy adopted in previous Tariff Orders i.e., at Primary Energy Rate for each station rather than at retail supply tariff of Rs. 2 per unit claimed by Petitioner amounting to Rs. 6.12 Crore, Rs. 4.51 Crore and Rs. 4.34 Crore for FY 2007-08, FY 2008-09 and FY 2009-10. At the approved primary energy rate for FY 2007-08 and FY 2008-09 and determined Primary Energy Rate for FY 2009-10, the cost of this supply works out to about Rs. 0.84 Crore, Rs. 0.90 Crore and Rs. 1.12 Crore for FY 2007-08, FY 2008-09 and FY 2009-10 respectively. The Commission has, accordingly, approved such extra cost of Rs. 0.84 Crore, Rs. 0.90 Crore and Rs. 1.12 Crore for FY 2007-08, FY 2008-09 and FY 2009-10 for such supply to colonies, barrages etc. Since the Commission hereby approves 20.11 MU for FY 2009-10, compensating suitably to UPCL.

In addition to the above, UJVNL also considered the cost to concessional supplies to past and present employees residing in areas outside the colonies as approved by the Commission in its Tariff Order for 2007-08 and 2008-09 considering the monthly consumption of such employees/pensioners, based on the average monthly consumption of 86.20 units/consumer/month of the Domestic-RTS (1) category of the consumers of UPCL, For projecting the cost, the Petitioner has considered the rate at the prevalent demand tariff rates of Rs. 2.00/kWh in accordance with the rates specified in RTS-1 category of Uttaranchal Power Corporation Limited. The Commission, however, noticed that the figure of Rs. 0.17 Crore was arrived at by considering cost of energy @ Rs. 2/unit for the estimated supply for 1414 employees and reducing from it the collection from employees @ Rs. 75/employee. As UJVNL has stated that it has included such income in non-tariff revenue, there is no need to deduct the same now. Further, electricity duty of Rs. 0.15/unit has also been added to this cost. While the tariff for 2007-08 and 2008-09 has been considered @ Rs. 2/unit for 2009-10 it has been taken at Rs. 2.30/unit. Accordingly, the cost of such supplies works out to Rs. 0.34 Crore, Rs. 0.34 Crore and Rs. 0.36 Crore for 2007-08, 2008-09 and 2009-

10 respectively.

The Commission has, accordingly, considered the approved O&M expenses for FY 2007-08, FY 2008-09 and FY 2009-10 of Rs. 91.95 Crore, Rs. 102.32 Crore and Rs. 118.58 Crore respectively (excluding Insurance charges and Regulatory Fee as the same has been allowed by the Commission separately). Further, the O&M expenses have been apportioned plant-wise in the proportion of the O&M expenses for each generating stations for each year as submitted by the Petitioner.

O&M expenses as proposed by the Petitioner and as approved by the Commission for 2009-10 for the nine generating stations are summarised in the Table below:

**Table 5.22: O&M Expenses for FY 2007-08, FY 2008-09 and FY 2009-10 (Rs. Crore)**

Station	FY 2007-08		FY 2008-09		FY 2009-10			
	Claimed	Approved	Claimed	Approved	Claimed	Approved		
						Direct	Indirect	Total
Dhakrani	4.91	5.08	5.94	5.68	6.42	4.90	1.99	6.90
Dhalipur	7.41	7.53	9.24	8.42	9.55	7.28	2.97	10.25
Chibro	21.84	18.74	21.94	20.37	23.11	12.54	11.69	24.24
Khodri	10.79	10.49	11.55	11.61	12.53	7.24	5.89	13.13
Kulhal	4.36	4.52	6.11	5.04	5.62	4.36	1.77	6.13
Ramganga	11.75	10.03	11.81	11.44	12.40	7.01	5.58	12.59
Chilla	16.71	13.41	18.95	15.03	16.54	12.77	4.67	17.44
M Bhali I	15.55	16.03	21.41	17.94	18.14	16.85	2.93	19.78
Khatima	6.64	6.11	7.63	6.79	7.57	6.64	1.48	8.12
<b>Sub-Total</b>	<b>99.97</b>	<b>91.95</b>	<b>114.58</b>	<b>102.32</b>	<b>111.88</b>	<b>79.59</b>	<b>38.99</b>	<b>118.58</b>
Cost of colony consumption	6.12	0.84	4.50	0.90	4.34	1.12	-	1.12
Regulatory Expenses	0.90	0.90	0.90	0.90	0.90	-	0.90	0.90
Insurance	1.60	1.91	0.74	0.74	0.88	-	0.74	0.74
Cost of Concessional supply to UJVNL's Past & present employees	0.17	0.34	0.17	0.34	0.17	-	0.36	0.36
Terminal Benefits & PF related Claims	2.05	-	2.05	-	2.05	-	-	-
Impact of arrear of pay revision	-	-	-	-	15.36	10.95	4.41	15.36
<b>Total</b>	<b>110.81</b>	<b>95.93</b>	<b>122.94</b>	<b>105.19</b>	<b>135.58</b>	<b>91.66</b>	<b>45.40</b>	<b>137.06</b>

## 5.4 Interest on Working Capital

The Petitioner has claimed that it has projected the working capital for each plant in accordance with the provisions of the Regulations. The components of working capital as per the Regulations 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 UJVNL's stations transferred from UPJNL, 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.

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

The annual O&M expenses admitted by the Commission are Rs. 95.93 Crore, Rs. 105.19 Crore and Rs. 137.06 Crore for FY 2007-08, FY 2008-09 and FY 2009-10. Based on approved O&M expenses, one month's O&M expense, which works out to Rs. 7.99 Crore, Rs. 8.77 Crore and Rs. 11.42 Crore for FY 2007-08, FY 2008-09 and FY 2009-10 respectively, has been considered by the Commission for working out the working capital requirement.

#### **5.4.2 Maintenance Spares**

The Commission has considered the maintenance spares on the basis of the relevant Regulation. For old assets, the Commission has considered maintenance spares @ 1% of the historical cost transferred from UPJVNL as on 14.1.2000 and escalated @ 6% per annum thereafter. For assets capitalised during subsequent years, maintenance spares have been considered @ 1% of the additional capitalisation by escalating 6% per annum. The value of maintenance spares, thus, works out to Rs. 7.82 Crore, Rs. 8.32 Crore and Rs. 8.83 Crore for FY 2007-08, FY 2008-09 and FY 2009-10.

#### **5.4.3 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 include O&M expenses, depreciation, interest on loan, return on equity and interest on working capital. The Commission has approved the receivables for two months based on the approved AFC which works out to Rs. 22.17 Crore, Rs. 23.58 Crore and Rs. 29.18 Crore for FY 2007-08, FY 2008-09 and FY 2009-10 respectively.

Total working capital allowed by the Commission under the three components discussed above accordingly, works out to Rs. 37.98 Crore, Rs. 40.66 Crore and Rs. 49.43 Crore for FY 2007-08, FY 2008-09 and FY 2009-10 respectively.

As regards the interest on working capital, Regulation 27(2) of the UERC (Terms and Conditions for Determination of Hydro Generation 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 1<sup>st</sup> 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."*

The Commission has relaxed the norm for interest on working capital by considering the prevailing PLR to represent the current state of interest rate for borrowing for working capital requirements. The Commission has, thus, allowed Rs. 6.06 Crore as interest on working capital for FY 2009-10 considering an interest rate on the basis of the prevalent Prime Lending Rate (PLR) of State Bank of India which is 12.25% p.a.

The plant-wise details of working capital and interest thereon for FY 2007-08, FY 2008-09 and FY 2009-10 are given hereunder:

**Table 5.23: Interest on Working Capital for FY 2007-08, FY 2008-09 and FY 2009-10 (Rs. Crore)**

Plant	FY 2007-08		FY 2008-09		Approved (FY 2009-10)				Interest on working Capital FY 2009-10	
	Interest on working capital		Interest on working capital		1 month	1%	2 months	Total		
	Claimed	Approved	Claimed	Approved	O&M Expenses	Maintenance Spares	Receivables	Working Capital	UJVNL	Approved
Dhakrani	0.17	0.17	0.20	0.18	0.66	0.21	1.47	2.34	0.25	0.29
Dhalipur	0.25	0.25	0.30	0.28	0.98	0.35	2.19	3.52	0.35	0.43
Chibro	0.84	0.72	0.84	0.77	2.34	1.53	5.57	9.44	0.97	1.16
Khodri	0.52	0.49	0.54	0.53	1.28	1.28	3.56	6.12	0.64	0.75
Kulhal	0.17	0.17	0.23	0.19	0.59	0.30	1.39	2.28	0.24	0.28
Ramganga	0.47	0.40	0.47	0.44	1.27	0.87	3.04	5.19	0.55	0.64
Chilla	0.84	0.74	0.90	0.79	1.69	2.24	5.16	9.08	0.92	1.11
M Bhali I	0.78	0.76	0.91	0.80	1.83	1.91	5.11	8.85	0.91	1.08
Khatima	0.15	0.18	0.17	0.20	0.78	0.13	1.69	2.60	0.19	0.32
<b>Total</b>	<b>4.19</b>	<b>3.89</b>	<b>4.56</b>	<b>4.17</b>	<b>11.42</b>	<b>8.83</b>	<b>29.18</b>	<b>49.43</b>	<b>5.02</b>	<b>6.06</b>

## 5.5 Truing up for FY 2007-08 and FY 2008-09

The Petitioner in its Petition has requested for truing up of AFC for FY 2007-08 based on provisional accounts. The Commission subsequently also asked UJVNL to submit the provisional accounts for FY 2008-09. UJVNL has lately submitted the provisional accounts for 2008-09. The Commission has, therefore, carried out provisional truing up for FY 2007-08 and FY 2008-09 on the basis of provisional accounts, information available and principles adopted on various elements. The final truing up for these years would be carried out by the Commission after finalisation of audited accounts subject to prudence check.

Based on the above analysis, the Commission has worked out the approved figures of AFC 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 the truing up of AFC (expenses) for FY 2007-08 is shown in the Table below:

**Table 5.24: True up of AFC (Expenses) for FY 2007-08 (Rs. Crore)**

Particulars	Approved	Claimed	Approved after truing up	True up excess/(shortfall)	True up for UPCL	True up for HPSEB
Dhakrani	5.96	6.12	6.03	(0.07)	(0.06)	(0.02)
Dhalipur	8.80	9.09	8.96	(0.16)	(0.12)	(0.04)
Chibro	25.30	29.18	24.42	0.87	0.65	0.22
Khodri	16.38	17.63	16.57	(0.19)	(0.14)	(0.05)
Kulhal	5.89	6.19	6.09	(0.20)	(0.16)	(0.04)
Ramganga	14.21	16.16	13.47	0.74	0.74	0.00
Chilla	24.18	28.86	24.36	(0.18)	(0.18)	0.00
M Bhali I	24.17	26.79	26.17	(2.00)	(2.00)	0.00
Khatima	6.75	7.87	6.92	(0.17)	(0.17)	0.00
<b>Total</b>	<b>131.63</b>	<b>147.87</b>	<b>133.00</b>	<b>(1.37)</b>	<b>(1.44)</b>	<b>0.07</b>

Similarly, the summary of the provisional truing up of AFC (expenses) for FY 2008-09 is shown in the Table below:

**Table 5.25: True up of AFC (Expenses) for FY 2008-09 (Rs. Crore)**

Particulars	Approved	Claimed	Approved after truing up	True up excess/(shortfall)	True up for UPCL	True up for HPSEB
Dhakrani	6.36	7.27	6.61	(0.25)	(0.19)	(0.06)
Dhalipur	9.40	10.97	9.82	(0.42)	(0.32)	(0.11)
Chibro	27.44	29.05	25.87	1.56	1.17	0.39
Khodri	17.50	18.47	17.71	(0.21)	(0.16)	(0.05)
Kulhal	6.24	8.36	6.60	(0.36)	(0.29)	(0.07)
Ramganga	15.79	16.14	14.73	1.06	1.06	0.00
Chilla	25.52	30.88	25.85	(0.33)	(0.33)	0.00
M Bhali I	25.32	31.30	26.68	(1.36)	(1.36)	0.00
Khatima	7.26	8.84	7.61	(0.35)	(0.35)	0.00
<b>Total</b>	<b>140.82</b>	<b>161.27</b>	<b>141.48</b>	<b>(0.66)</b>	<b>(0.76)</b>	<b>0.10</b>

### 5.5.1 Revenue from Sale of Power and Non-Tariff Income

In order to work out the impact of truing up of revenues vis-a-vis approved AFC, it would be necessary to correctly work out the gross primary/secondary energy and their corresponding values of saleable primary/secondary energy for each station as per the provisions of Regulations. Accordingly, the Commission has first dealt with the claims of the Petitioner on saleable primary and secondary energy for each of these nine plants and Commission's analysis of the same, whereafter the revenue implication on true up has been calculated.

The claim of the Petitioner on primary and secondary energy generation for the year 2007-08 are summarised in the following table:

**Table 5.26: Saleable Primary and Secondary Energy claimed by UJVNL for FY 2007-08 (in MUs)**

Plants	Gross PE Generation projected by Commission	Gross Actual Generation	Gross Primary Energy	Internal Consumption from Primary Energy					Saleable Primary Energy	Gross Secondary Energy	Aux. Cons. & Trans. Loss from Secondary Energy	Saleable Secondary Energy
				Aux. Cons.	Transfor. Losses	Colony/ Barrage Cons.	Other Cons. @	Total				
a	b	c	d=Min(b,c)	e	f	g	h	i=e+f+g+h	j=d-i	k=c-b (only +ve)	l	m=k-l
Dhakrani	156.88	148.92	148.92	0.55	\$17.59	1.10	0.00	19.24	129.68	0.00	0.00	0.00
Dhalipur	192.00	210.70	192.00	0.64	1.87	0.87	0.00	3.38	188.62	18.70	0.00	18.70
Chibro	750.00	755.08	750.00	1.45	2.98	4.31	3.14	11.88	@737.50	@5.70	0.00	5.70
Khodri	345.00	354.72	345.00	0.91	1.10	2.14	1.57	5.72	339.28	9.72	0.00	9.72
Kulhal	153.91	149.76	149.76	0.39	2.80	1.11	0.00	4.30	145.46	0.00	0.00	0.00
Ramganga	311.00	279.06	279.06	1.20	4.42	2.94	0.00	8.56	270.50	0.00	0.00	0.00
Chilla	671.29	825.98	671.29	# 1.34	1.41	3.69	0.00	6.43	664.86	154.69	0.00	154.69
M Bhali I	395.00	466.14	395.00	1.76	0.15	2.04	&10.74	14.69	380.31	71.14	0.00	71.14
Khatima	194.05	155.34	155.34	0.31	1.77	1.91	0.00	3.99	151.36	0.00	0.00	0.00
<b>Total</b>	<b>3,169.13</b>	<b>3,345.70</b>	<b>3,086.37</b>	<b>8.55</b>	<b>34.08</b>	<b>20.11</b>	<b>15.45</b>	<b>78.19</b>	<b>3,007.56</b>	<b>259.95</b>	<b>0.00</b>	<b>259.95</b>

# includes 0.32 MU of additional Station Auxillary Consumption in Chilla PH claimed by the Petitioner.

\$ includes 16.81 MU additional transformation losses in Dhakrani PH claimed by the Petitioner.

@ Against the claim of 738.12 MU of saleable primary energy and 5.08 MU for secondary energy in the Petition, the Petitioner revised these figures to 737.50 MU and 5.70 MU in subsequent submission

& This supply of 10.74 MU was shown by Petitioner as supply to MB-II project from MB-I

From the above table, it can be seen that the Petitioner has worked out the gross primary energy and gross secondary energy with reference to the projected saleable primary energy considered by the Commission for working out the primary energy rate. As has been brought out in Chapter 4, the gross primary/secondary energy has to be worked out with reference to original design energy as per the provisions of the Regulations till the Petitioners gets the original design energy revised. Since the projected saleable energy considered by the Commission for working out the primary energy rate was lower of the average of 15 years generation and the mutually agreed design energy between UPPCL and UJVNL (which was equal to or lower than the original design energy), the primary energy generation considered by the Commission was lower than or equal to the original design energy. This relaxation was granted to the Petitioner to enable it to recover its entire AFC at a generation which is lower than or equal to the projected/expected generation as was explained in the Commission's order dated 16.12.2004. The same approach has been adopted year after year by the Commission and has also been accepted by the Petitioner while submitting its proposals for these plants in the past including the present submission. Accordingly, except for Dhalipur, Chibro and Khodri, the Petitioner has erroneously considered the projected generation approved by the Commission as the design energy for these plants and, hence, taken values lower than original design energies of these plants for working out the gross primary and secondary energies. This has resulted into lower values of primary energy and higher values of secondary energy for the given values of actual generation in 6 plants. The Commission has, therefore, considered the original design energy for working out the gross primary/secondary energy with the values of actual

generation as submitted by the Petitioner.

The actual values of auxiliary consumption and transformation losses given by the Petitioner are higher than norms in some cases and lower in others. However, since the Regulations provide normative values of these parameters, the Commission has to consider the values specified in the Regulations irrespective of their actual values. This implies that any saving due to better performance in these parameters may be allowed to be retained by the Petitioner and any inefficiency due to under-performance is not allowed to be recovered in tariff for the plants where the values of these parameters are higher than norms.

The Commission has analysed the data as provided by the Petitioner for auxiliary consumption and transformation losses. Summary of such analysis is presented in the following Table:

**Table 5.27: Actual and normative auxiliary consumption and transformation losses**

Plant	Actual Generation	Auxiliary Consumption			Transformation loss		
		Actual		Norm	Actual		Norm
		(MU)	(%)	(%)	(MU)	(%)	(%)
a	b	c	d=100xc/b	e	f	g=100xf/b	h
Dhakrani	148.92	0.55	0.37%	0.20%	17.59	11.81%	0.50%
Dhalipur	210.7	0.64	0.30%	0.20%	1.87	0.89%	0.50%
Chibro	755.08	1.45	0.19%	0.70%	2.98	0.39%	0.50%
Khodri	354.72	0.91	0.26%	0.50%	1.1	0.31%	0.50%
Kulhal	149.76	0.39	0.26%	0.20%	2.8	1.87%	0.50%
Ramganga	279.06	1.2	0.43%	0.20%	4.42	1.58%	0.50%
Chilla	825.98	1.34	0.16%	0.50%	1.41	0.17%	0.50%
MB-I	466.14	1.76	0.38%	0.20%	0.15	0.03%	0.50%
Khatima	155.34	0.31	0.20%	0.20%	1.77	1.14%	0.50%
<b>Total</b>	<b>3,345.70</b>	<b>8.55</b>			<b>34.09</b>		

The Commission observed that the details of the transformation losses as submitted by the Petitioner amount to 0.89%, 1.87%, 1.58% and 1.14% of the gross generation for the stations Dhalipur, Kulhal, Ramganga and Khatima respectively, which is very high by any standards. Further, the Commission observed that UJVNL has submitted the additional transformation losses due to stepping down the Bus bar voltage from 132 kV to lower levels and the total loss amounts to 11.81% of the gross generation for Dhakrani station, which again is very high by any standards. Similarly, the auxiliary consumption in some of the stations is higher than norms and, hence, may be seen for further reduction.

The reason for such exceptionally high values of transformation losses submitted by UJVNL appears to be inadequate metering facility to correctly calculate these losses. In the absence of such metering UJVNL has computed these losses as balancing figure from input and output energy recorded by meters for other purposes. The Commission is of the view that typically technical loss for transformation of energy would not be high and there is a

scope of providing complete and appropriate metering of all the interconnection points for correct energy accounting. UJVNL should also explore possibility of reduction in high auxiliary consumption. **The Commission, therefore, directs UJVNL to have proper metering at all interconnection points within three months from the date of issuance of this Order so as to have correct accounting of energy. Further, UJVNL should submit the status report on the installation of meters within one month of the time stipulated for completion of metering.**

The Commission has accepted the values of the colonies/barrages consumption of 20.11 MUs as submitted by the Petitioner now against the earlier approved figure of 33.47 MUs. It may be noted that the Commission is allowing the cost of this consumption in the O&M expenses to transparently reflect the financial implication of such supplies. In other words, the Commission is considering this energy as sale to UJVNL itself at approved tariffs, the burden of such purchase by UJVNL being allowed as expense. Since this energy is being considered as sale, the same should not be deducted from gross primary energy to workout saleable primary energy. However, the Petitioner has reduced this consumption from primary energy for working out the saleable primary energy, which as pointed above is obviously incorrect and would mean double accounting for this energy. The Commission has, therefore, not considered this consumption for working out the saleable primary energy.

The other consumption of 15.45 MUs includes 10.74 MUs of supply from MB-I to MB-II for construction purposes. The balance consumption of 4.71 MUs has been stated to be used for supply to irrigation department, bank, post office, hospital and other commercial consumers etc. Obviously, these two consumptions do not qualify as auxiliary or colonies consumption as UJVNL is supposed to sell these units to UPCL which in turn can distribute the same to these consumers. However, since UJVNL is presently supplying to them directly, the supply to MB-II is being treated as sale to UPCL for resale to UJVNL at construction tariff. UJVNL has clarified that it has taken revenue from other consumption as non-tariff income, but the actual value of such non-tariff income and its break-up for each plant could not be submitted by the Petitioner. The Commission has, therefore, considered this consumption as sale to UPCL at the approved tariffs for each plant. Accordingly, the non-tariff income from supply of such power to other consumers should be passed on to UPCL. As the actual value and breakup of this non-tariff income is not available at present and the Commission is considering entire non-tariff income of UJVNL as brought out

subsequently, there is no need to separately adjust this non-tariff income. For the supply to MB-II project from MB-I station, UJVNL may raise bills at approved station rates to UPCL and UPCL may bill UJVNL for such supply at the applicable retail tariff. Accordingly, the Commission is not deducting other consumption of 15.45 MU from approved gross primary energy for working out saleable primary energy and, hence, considering it as part of saleable primary energy from UJVNL plants to beneficiaries.

The Commission would like to point out here that it specifically asked UJVNL to clarify whether, it has considered the revenue from supply of power of private consumers for truing up purposes for FY 2007-08 and asked to submit the details of the revenue received from sale of such units. UJVNL submitted that the revenue collected from private consumers for such supply is being considered in the non tariff income of UJVNL. UJVNL submitted that the detailed information regarding transformation losses, cadre wise number of employees of UJVNL along with their consumption and the details of private consumers has been requisitioned from the respective divisions and shall be submitted shortly. However, UJVNL has not submitted such information till date. **The Commission hereby directs UJVNL to provide such information along with the Tariff Petitions to be filed for determination of tariff for FY 2010-11.**

The saleable primary and secondary energy accordingly considered by the Commission are presented in the following table:

**Table 5.28: Saleable Primary and Secondary Energy approved by the Commission for FY 2007-08 (in MUs)**

Plants	Original DE	Gross PE Generation projected by Commission	Gross Actual Generation	Gross Primary Energy	Internal Consumption from Primary Energy		Saleable Primary Energy	Gross Secondary Energy	Internal Consumption from Secondary Energy		Saleable Secondary Energy
					Normative Aux. Cons.	Normative Trans. Loss			Normative Aux. Cons.	Normative Trans. Loss	
a	b	c	D	e=Min(b,d)	f	g=0.05xe	h	i=b-d (+ve only)	j	k=0.05xi	l=i-j-k
Dhakrani	169.00	156.88	148.92	148.92	0.30	0.74	147.88	0.00	0.00	0.00	0.00
Dhalipur	192.00	192.00	210.70	192.00	0.38	0.96	190.66	18.70	0.04	0.09	18.57
Chibro	750.00	750.00	755.08	750.00	5.25	3.75	741.00	5.08	0.04	0.03	5.02
Khodri	345.00	345.00	354.72	345.00	1.73	1.73	341.55	9.72	0.05	0.05	9.62
Kulhal	164.00	153.91	149.76	149.76	0.30	0.75	148.71	0.00	0.00	0.00	0.00
Ramganga	385.00	311.00	279.06	279.06	0.56	1.40	277.11	0.00	0.00	0.00	0.00
Chilla	725.00	671.29	825.98	725.00	3.63	3.63	717.75	100.98	0.50	0.50	99.97
M Bhali I	546.00	395.00	466.14	466.14	0.93	2.33	462.88	0.00	0.00	0.00	0.00
Khatima	208.00	194.05	155.34	155.34	0.31	0.78	154.25	0.00	0.00	0.00	0.00
<b>Total</b>	<b>3,484.00</b>	<b>3,169.13</b>	<b>3,345.70</b>	<b>3,211.22</b>	<b>13.38</b>	<b>16.06</b>	<b>3,181.78</b>	<b>134.48</b>	<b>0.63</b>	<b>0.67</b>	<b>133.18</b>

Accordingly, against the Petitioners claim of 3007.56 MU and 259.95 MU for saleable primary and secondary energies, the Commission approves a level of 3181.78 MU and 133.18 MU for FY 2007-08 for saleable primary and secondary energies.

Similarly, the Petitioners claim and the Commission approval of primary and

secondary energies for 2008-09 have been worked out and presented in the following tables:

**Table 5.29: Saleable Primary and Secondary Energy claimed by UJVNL for FY 2008-09 (in MUs)**

Plants	Gross PE Generation projected by Commission	Gross Actual Generation	Gross Primary Energy	Internal Consumption from Primary Energy			Saleable Primary Energy	Gross Secondary Energy	Aux. Cons. & Trans. Loss from Secondary Energy	Saleable Secondary Energy
				Aux. Cons.	Transfor. Losses, Colony Consumption etc. \$	Total				
a	b	c	d=Min(b,c)	e	f	g=e+f	h=d-g	i=c-b (only +ve)	j	k=i-j
Dhakrani	156.88	146.52	146.52	0.57	17.50	18.07	128.45	0.00	0.00	0.00
Dhalipur	192.00	224.44	192.00	0.51	3.27	3.78	188.22	32.44	0.00	32.44
Chibro	750.00	837.69	750.00	2.29	10.12	12.41	737.59	87.69	0.00	87.69
Khodri	345.00	379.97	345.00	0.87	6.06	6.92	338.08	34.97	0.00	34.97
Kulhal	153.91	143.69	143.69	0.43	2.80	3.23	140.46	0.00	0.00	0.00
Ramganga	311.00	325.48	311.00	1.34	12.18	13.52	297.48	14.48	0.00	14.48
Chilla	671.29	776.51	671.29	0.81	6.53	7.34	663.95	105.22	0.00	105.22
M Bhali I	395.00	403.80	395.00	1.27	9.41	10.68	384.32	8.80	0.00	8.80
Khatima	194.05	140.92	140.92	0.28	0.12	0.40	140.52	0.00	0.00	0.00
<b>Total</b>	<b>3,169.13</b>	<b>3,379.02</b>	<b>3,095.42</b>	<b>8.36</b>	<b>67.99</b>	<b>76.35</b>	<b>3,019.07</b>	<b>283.60</b>	<b>0.00</b>	<b>283.60</b>

\$ This is the balancing figure as the Transformation Losses and other consumptions are not provided by UJVNL

**Table 5.30: Saleable Primary and Secondary Energy approved by the Commission for FY 2008-09 (in MUs)**

Plants	Original DE	Gross PE Generation projected by Commission	Gross Actual Generation	Gross Primary Energy	Internal Consumption from Primary Energy		Saleable Primary Energy	Gross Secondary Energy	Internal Consumption from Secondary Energy		Saleable Secondary Energy
					Normative Aux. Cons.	Normative Trans. Loss			Normative Aux. Cons.	Normative Trans. Loss	
a	b	c	d	e=Min(b,d)	f	g=0.05xe	h	i=b-d (+ve only)	j	k=0.05xi	l=i-j-k
Dhakrani	169.00	156.88	146.52	146.52	0.29	0.73	145.49	0.00	0.00	0.00	0.00
Dhalipur	192.00	192.00	224.44	192.00	0.38	0.96	190.66	32.44	0.06	0.16	32.21
Chibro	750.00	750.00	837.69	750.00	5.25	3.75	741.00	87.69	0.61	0.44	86.64
Khodri	345.00	345.00	379.97	345.00	1.73	1.73	341.55	34.97	0.17	0.17	34.62
Kulhal	164.00	153.91	143.69	143.69	0.29	0.72	142.68	0.00	0.00	0.00	0.00
Ramganga	385.00	311.00	325.48	325.48	0.65	1.63	323.20	0.00	0.00	0.00	0.00
Chilla	725.00	671.29	776.51	725.00	3.63	3.63	717.75	51.51	0.26	0.26	50.99
M Bhali I	546.00	395.00	403.80	403.80	0.81	2.02	400.98	0.00	0.00	0.00	0.00
Khatima	208.00	194.05	140.92	140.92	0.28	0.70	139.94	0.00	0.00	0.00	0.00
<b>Total</b>	<b>3,484.00</b>	<b>3,169.13</b>	<b>3,379.02</b>	<b>3,172.41</b>	<b>13.30</b>	<b>15.86</b>	<b>3,143.24</b>	<b>206.61</b>	<b>1.11</b>	<b>1.03</b>	<b>204.47</b>

As regards the revenue from sale of power for FY 2007-08, the Commission obtained the details under various heads as submitted by UJVNL. The Commission further obtained the details of the revenue earned from primary and secondary energy. However, it observed that UJVNL has computed the secondary energy based on the projected saleable primary energy that was approved by the Commission for working out the primary energy rate. The Commission also found that the revenues given by UJVNL were actual revenues billed by it at the applicable tariff at that time. While tariff for sale to UPCL was taken as that approved by the Commission, the tariff for sale to HPSEB was the provisional tariff as admitted by HPERC at that time. The details are listed below:

**Table 5.31: Details of actual revenue for FY 2007-08 submitted by UJVNL (Rs. Crore)**

Plants	Revenue from UPCL					Revenue from HPSEB					Total Revenue	
	Saleable Primary Energy	Saleable Secondary Energy	Saleable PE Rate	Revenue from PE	Revenue from Sec. Energ.	Saleable Primary Energy	Saleable Secondary Energy	Saleable PE Rate	Revenue from PE	Revenue from Sec. Energ.	Revenue from PE	Revenue from Sec. Energ.
a	b	c	d	e=bx d	f=cx d	g	h	i	j=gx i	k=hx i	l	m
Dhakrani	97.26	0.00	0.38	3.72	0.00	32.42	0.00	0.37	1.20	0.00	4.92	0.00
Dhalipur	136.79	18.70	0.46	6.31	0.86	51.83	0.00	0.37	1.92	0.00	8.23	0.86
Chibro	551.70	5.70	0.34	18.77	0.19	185.80	0.00	0.37	6.87	0.00	25.65	0.19
Khodri	252.03	9.72	0.48	12.05	0.46	87.25	0.00	0.37	3.23	0.00	15.28	0.46
Kulhal	116.37	0.00	0.39	4.49	0.00	29.09	0.00	0.37	1.08	0.00	5.56	0.00
Ramganga	270.50	0.00	0.46	12.44	0.00	0.00	0.00	0.00	0.00	0.00	12.44	0.00
Chilla	664.86	154.69	0.36	24.11	5.61	0.00	0.00	0.00	0.00	0.00	24.11	5.61
M Bhali I	380.31	71.14	0.62	23.43	4.38	0.00	0.00	0.00	0.00	0.00	23.43	4.38
Khatima	151.36	0.00	0.35	5.30	0.00	0.00	0.00	0.00	0.00	0.00	5.30	0.00
<b>Total</b>	<b>2,621.17</b>	<b>259.95</b>		<b>110.64</b>	<b>11.52</b>	<b>386.39</b>	<b>0.00</b>		<b>14.30</b>	<b>0.00</b>	<b>124.93</b>	<b>11.52</b>

The Commission reiterates its earlier direction that for computing the secondary energy in the plants, entire generation upto the Original Design Energy shall be considered as Primary Energy and excess generation if any, to the Original Design Energy will be the secondary energy on which the Petitioner will earn secondary energy charges. Accordingly, the Commission has recomputed the revenue from primary and secondary energy, which is presented below:

**Table 5.32: Approved figure of Revenue for UPCL & HPSEB for 2007-08 (Rs. Crore)**

Plants	Revenue from UPCL					Revenue from HPSEB					Total Revenue	
	Saleable Primary Energy	Saleable Secondary Energy	Saleable PE Rate	Revenue from PE	Revenue from Sec. Energ.	Saleable Primary Energy	Saleable Secondary Energy	Saleable PE Rate	Revenue from PE	Revenue from Sec. Energ.	Revenue from PE	Revenue from Sec. Energ.
a	b	c	d	e=bx d	f=cx d	g	h	i	j=gx i	k=hx i	l	m
Dhakrani	110.91	0.00	0.38	4.24	0.00	36.97	0.00	0.39	1.45	0.00	5.70	0.00
Dhalipur	142.99	13.93	0.46	6.60	0.64	47.66	4.64	0.39	1.88	0.18	8.48	0.83
Chibro	555.75	3.76	0.34	18.91	0.13	185.25	1.25	0.39	7.29	0.05	26.20	0.18
Khodri	256.16	7.22	0.48	12.25	0.35	85.39	2.41	0.39	3.36	0.09	15.61	0.44
Kulhal	118.97	0.00	0.39	4.59	0.00	29.74	0.00	0.39	1.17	0.00	5.76	0.00
Ramganga	277.11	0.00	0.46	12.75	0.00	0.00	0.00	0.00	0.00	0.00	12.75	0.00
Chilla	717.75	99.97	0.36	26.03	3.63	0.00	0.00	0.00	0.00	0.00	26.03	3.63
M Bhali I	462.88	0.00	0.62	28.52	0.00	0.00	0.00	0.00	0.00	0.00	28.52	0.00
Khatima	154.25	0.00	0.35	5.40	0.00	0.00	0.00	0.00	0.00	0.00	5.40	0.00
<b>Total</b>	<b>2,796.77</b>	<b>124.88</b>		<b>119.29</b>	<b>4.74</b>	<b>385.01</b>	<b>8.30</b>		<b>15.15</b>	<b>0.33</b>	<b>134.44</b>	<b>5.07</b>

Similarly, the Petitioners claim and the Commission approval of Revenue from primary and secondary energies for 2008-09 have been worked out and presented in the following tables

**Table 5.33: Details of actual revenue for FY 2008-09 submitted by UJVNL (Rs. Crore)**

Plants	Revenue from UPCL					Revenue from HPSEB					Total Revenue	
	Saleable Primary Energy	Saleable Secondary Energy	Saleable PE Rate	Revenue from PE	Revenue from Sec. Energ.	Saleable Primary Energy	Saleable Secondary Energy	Saleable PE Rate	Revenue from PE	Revenue from Sec. Energ.	Revenue from PE	Revenue from Sec. Energ.
a	b	c	d	e=bx d	f=cx d	g	h	i	j=gx i	k=hx i	l	m
Dhokrani	96.34	0.00	0.41	3.93	0.00	32.11	0.00	0.35	1.12	0.00	5.02	0.00
Dhalipur	133.06	32.44	0.49	6.56	1.60	55.17	0.00	0.35	1.92	0.00	8.47	1.60
Chibro	531.27	87.69	0.37	19.61	3.24	206.32	0.00	0.35	7.17	0.00	26.78	3.24
Khodri	244.82	34.97	0.51	12.50	1.79	93.26	0.00	0.35	3.24	0.00	15.74	1.79
Kulhal	112.37	0.00	0.41	4.59	0.00	28.09	0.00	0.35	0.98	0.00	5.56	0.00
Ramganga	297.48	14.48	0.51	15.21	0.74	0.00	0.00	0.00	0.00	0.00	15.21	0.74
Chilla	663.95	105.22	0.38	25.42	4.03	0.00	0.00	0.00	0.00	0.00	25.42	4.03
M Bhali I	384.32	8.80	0.65	24.81	0.57	0.00	0.00	0.00	0.00	0.00	24.81	0.57
Khatima	140.52	0.00	0.38	5.29	0.00	0.00	0.00	0.00	0.00	0.00	5.29	0.00
<b>Total</b>	<b>2,604.12</b>	<b>283.60</b>		<b>117.93</b>	<b>11.96</b>	<b>414.95</b>	<b>0.00</b>		<b>14.42</b>	<b>0.00</b>	<b>132.31</b>	<b>11.96</b>

**Table 5.34: Approved figure of Revenue for UPCL & HPSEB for 2008-09 (Rs. Crore)**

Plants	Revenue from UPCL					Revenue from HPSEB					Total Revenue	
	Saleable Primary Energy	Saleable Secondary Energy	Saleable PE Rate	Revenue from PE	Revenue from Sec. Energ.	Saleable Primary Energy	Saleable Secondary Energy	Saleable PE Rate	Revenue from PE	Revenue from Sec. Energ.	Revenue from PE	Revenue from Sec. Energ.
a	b	c	d	e=bx d	f=cx d	g	h	i	j=gx i	k=hx i	l	m
Dhokrani	109.12	0.00	0.41	4.45	0.00	36.37	0.00	0.42	1.54	0.00	5.99	0.00
Dhalipur	142.99	24.16	0.49	7.05	1.19	47.66	8.05	0.42	2.01	0.34	9.06	1.53
Chibro	555.75	64.98	0.37	20.51	2.40	185.25	21.66	0.42	7.83	0.92	28.34	3.31
Khodri	256.16	25.97	0.51	13.08	1.33	85.39	8.66	0.42	3.61	0.37	16.69	1.69
Kulhal	114.14	0.00	0.41	4.66	0.00	28.54	0.00	0.42	1.21	0.00	5.87	0.00
Ramganga	323.20	0.00	0.51	16.52	0.00	0.00	0.00	0.00	0.00	0.00	16.52	0.00
Chilla	717.75	50.99	0.38	27.48	1.95	0.00	0.00	0.00	0.00	0.00	27.48	1.95
M Bhali I	400.98	0.00	0.65	25.89	0.00	0.00	0.00	0.00	0.00	0.00	25.89	0.00
Khatima	139.94	0.00	0.38	5.27	0.00	0.00	0.00	0.00	0.00	0.00	5.27	0.00
<b>Total</b>	<b>2,760.03</b>	<b>166.10</b>		<b>124.92</b>	<b>6.87</b>	<b>383.21</b>	<b>38.37</b>		<b>16.19</b>	<b>1.62</b>	<b>141.12</b>	<b>8.49</b>

As per Regulations, the revenue from primary energy charge cannot be more than the approved AFC and any shortfall in AFC can be recovered through capacity charges/deemed generation charges as per the provisions of the Regulations. The Commission has, therefore, worked out the revenue earned from primary energy that is in excess of the Annual Fixed Charges allocable to UPCL and HPSEB. It may be noted that the Commission has already worked out the part of approved total AFC for UJVNL that is allocable to HPSEB in its Order dated 28.8.2009. The same has been used to work out excess payment of primary energy charges for UPCL and HPSEB, which comes to Rs. 6.21 Crore and Rs. 3.28 Crore (totalling to Rs. 9.48 Crore) for 2007-08 and 2008-09 respectively for UPCL. UJVNL is allowed to retain the charges recovered from UPCL for secondary energy as an incentive as per the Regulations. However, HPSEB having paid its share of AFC through primary energy charges and/or capacity/deemed generation charges, is not required to pay anything extra as per the Original Agreement of 1972, which stipulates that

only cost of generation attributable to HPSEB is recoverable from it irrespective of actual generation. Thus, for any shortfall in generation and hence in primary energy charge recoverable from HPSEB can be recovered by UJVNL through capacity/deemed generation charges. However, having recovered full share of AFC from HPSEB, UJVNL cannot claim secondary energy charge from it, which is obviously a stipulation existing in the agreement but is not in consonance with the Regulations. Since the Commission has abided by all terms of the agreement while determining HPSEB's tariff, the Commission allows a relaxation in the Regulations for HPSEB to the extent it is in contradiction to the original agreement on the issue of secondary energy charges. Accordingly, the Commission allows HPSEB a recovery of Rs. 0.33 Crore and Rs. 1.62 Crore (totalling to Rs. 1.98 Crore) for 2007-08 and 2008-09 respectively, paid by it to UJVNL for supply of its share of secondary energy. **UJVNL is hereby directed to refund these excess charges of Rs. 9.48 Crore to UPCL and Rs. 1.95 Crore to HPSEB through their respective bills in 5 equal monthly instalments beginning November 2009.** The detailed working is provided in the following Table:

**Table 5.35: Excess Revenue to be trued up for Sale of Energy to UPCL and HPSEB for 2007-08 (Rs. Crore)**

Plants	UPCL				HPSEB				Total			
	Revenue from PE Charges	Approved AFC	Shortfall in Revenue from PE	Excess Revenue to be trued up for sale of energy	Revenue from PE Charges	Approved AFC	Shortfall in Revenue from PE	Excess Revenue to be trued up for sale of secondary energy	Revenue from PE Charges	Approved AFC	Shortfall in Revenue	Excess Revenue to be trued up for sale of energy
a	b	c	d=min(b-c,0)	e=max(0,b-c)	f	g	h=min(f-g,0)	i=max(0,g-f)	j=b+f	k	l=d+h	m=e+i
Dhakrani	4.24	4.47	-0.23	0.00	1.45	15.29	-0.14	0.33	5.70	5.96	-0.58	0.33
Dhalipur	6.60	6.60	0.00	0.00	1.88				8.48	8.80		
Chibro	18.91	18.97	-0.06	0.00	7.29				26.20	25.30		
Khodri	12.25	12.28	-0.03	0.00	3.36				15.61	16.38		
Kulhal	4.59	4.71	-0.12	0.00	1.17	0.00	0.00	0.00	5.76	5.89	-1.46	0.00
Ramganga	12.75	14.21	-1.46	0.00	0.00				12.75	14.21		
Chilla	26.03	24.18	0.00	1.85	0.00				26.03	24.18		
M Bhali I	28.52	24.17	0.00	4.35	0.00				28.52	24.17		
Khatima	5.40	6.75	-1.35	0.00	0.00	0.00	0.00	0.00	5.40	6.75	-1.35	0.00
<b>Total</b>	<b>119.29</b>	<b>116.33</b>	<b>-3.25</b>	<b>6.21</b>	<b>15.15</b>	<b>15.29</b>	<b>-0.14</b>	<b>0.33</b>	<b>134.44</b>	<b>131.63</b>	<b>-3.39</b>	<b>6.53</b>

**Table 5.36: Excess Revenue to be trued up for Sale of Energy to UPCL and HPSEB for 2008-09 (Rs. Crore)**

Plants	UPCL				HPSEB				Total			
	Revenue from PE Charges	Approved AFC	Shortfall in Revenue from PE	Excess Revenue to be trued up for sale of energy	Revenue from PE Charges	Approved AFC	Shortfall in Revenue from PE	Excess Revenue to be trued up for sale of secondary energy	Revenue from PE Charges	Approved AFC	Shortfall in Revenue	Excess Revenue to be trued up for sale of energy
a	b	c	d=min(b-c,0)	e=max(0,b-c)	f	g	h=min(f-g,0)	i=max(0,g-f)	j=b+f	k	l=d+h	m=e+l
Dhakrani	4.45	4.77	(0.32)	0.00	1.54	16.43	(0.24)	1.62	5.99	6.36	(1.00)	1.62
Dhalipur	7.05	7.05	(0.00)	0.00	2.01				9.06	9.40		
Chibro	20.51	20.58	(0.07)	0.00	7.83				28.34	27.44		
Khodri	13.08	13.12	(0.04)	0.00	3.61				16.69	17.50		
Kulhal	4.66	5.00	(0.34)	0.00	1.21				5.87	6.25		
Ramganga	16.52	15.79	0.00	0.74	0.00	0.00	0.00	0.00	16.52	15.79	0.00	0.74
Chilla	27.48	25.52	0.00	1.97	0.00	0.00	0.00	0.00	27.48	25.52	0.00	1.97
M Bhali I	25.89	25.32	0.00	0.57	0.00	0.00	0.00	0.00	25.89	25.32	0.00	0.57
Khatima	5.27	7.26	(1.98)	0.00	0.00	0.00	0.00	0.00	5.27	7.26	(1.98)	0.00
<b>Total</b>	<b>124.92</b>	<b>124.39</b>	<b>(2.75)</b>	<b>3.28</b>	<b>16.19</b>	<b>16.43</b>	<b>(0.24)</b>	<b>1.62</b>	<b>141.12</b>	<b>140.82</b>	<b>(2.98)</b>	<b>4.90</b>

Similarly, the Commission has also computed shortfall in the recovery of AFC for each plant in the above Table, which totals to Rs. 3.39 Crore and is the maximum amount that can be claimed by UJVNL as a combination of capacity/deemed generation charges. The details of capacity and deemed generation charges bills raised by UJVNL for 2007-08 are presented in the following Table:

**Table 5.37: Actual shortfall and billed shortfall (Rs. Crore)**

Plant	Actual Short revenue	Billed by UJVNL as		
		Capacity Charge	Deemed Generation Charge	Total
Dhakrani	0.58	0.91	0.01	0.92
Dhalipur	0.00	0.00	0.00	0.00
Chibro	0.00	0.02	0.00	0.02
Khodri	0.00	0.00	0.00	0.00
Kulhal	0.00	0.26	0.09	0.35
Ramganga	1.46	1.26	0.00	1.26
Chilla	0.00	0.00	0.00	0.00
M Bhali I	0.00	0.00	0.00	0.00
Khatima	1.35	1.45	0.13	1.58
<b>Total</b>	<b>3.39</b>	<b>3.90</b>	<b>0.23</b>	<b>4.13</b>

It may be noted that against the allowable maximum amounts of capacity & deemed generation charge, UJVNL has billed for more revenue in Dhakrani, Chibro, Kulhal and Khatima, which is obviously incorrect and may further reduce depending upon whether the plant has achieved normative capacity index or not. The lower revenue billed in Ramganga may be due to lower value of capacity index but it needs to be validated with actual value of capacity index.

The Commission obtained the details of the non-tariff income for FY 2007-08 and

2008-09 as submitted by the Petitioner. The Petitioner has submitted the actual non-tariff income earned at each plant which totals to Rs. 0.29 and Rs. 0.43 Crore for these two years. 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 along-with excess/shortfall in expenses for truing up purposes. The Commission, however, also noted that the above provision of the Regulations permitting adjustment of non-tariff income from AFC is also 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. On a similar basis, no incentive for higher than normative Capacity Index is payable by HPSEB, which is payable by UPCL as per Regulations.

The summary of the provisional truing up for FY 2007-08 is shown in the Table below:

**Table 5.38: Summary of truing up for FY 2007-08 (Rs. Crore)**

Plants	UPCL			HPSEB	Total
	Non-tariff income considered by Commission	Expenses to be trued up for UPCL	Net Truing up for UPCL	Expenses to be trued up for HPSEB	Total Expenses to be trued up
a	b	c	d=b+c	e	f
Dhakrani	0.02	(0.06)	(0.03)	(0.02)	(0.07)
Dhalipur	0.03	(0.12)	(0.09)	(0.04)	(0.16)
Chibro	0.07	0.65	0.73	0.22	0.87
Khodri	0.02	(0.14)	(0.13)	(0.05)	(0.19)
Kulhal	0.02	(0.16)	(0.14)	(0.04)	(0.20)
Ramganga	0.00	0.74	0.74	0.00	0.74
Chilla	0.02	(0.18)	(0.15)	0.00	(0.18)
M Bhali I	0.02	(2.00)	(1.98)	0.00	(2.00)
Khatima	0.08	(0.17)	(0.09)	0.00	(0.17)
<b>Total</b>	<b>0.29</b>	<b>(1.44)</b>	<b>(1.15)</b>	<b>0.07</b>	<b>(1.37)</b>

The summary of the provisional truing up for FY 2008-09 is shown in the Table below:

**Table 5.39: Summary of truing up for FY 2008-09 (Rs. Crore)**

Plants	UPCL			HPSEB	Total
	Non-tariff income considered by Commission	Expenses to be trued up for UPCL	Net Truing up for UPCL	Expenses to be trued up	Expenses to be trued up
a	b	c	d=b+c	e	f
Dhakrani	0.01	(0.19)	(0.18)	(0.06)	(0.25)
Dhalipur	0.01	(0.32)	(0.30)	(0.11)	(0.42)
Chibro	0.01	1.17	1.18	0.39	1.56
Khodri	0.09	(0.16)	(0.06)	(0.05)	(0.21)
Kulhal	0.01	(0.29)	(0.28)	(0.07)	(0.36)
Ramganga	0.02	1.06	1.08	0.00	1.06
Chilla	0.18	(0.33)	(0.15)	0.00	(0.33)
M Bhali I	0.02	(1.36)	(1.34)	0.00	(1.36)
Khatima	0.07	(0.35)	(0.28)	0.00	(0.35)
<b>Total</b>	<b>0.42</b>	<b>(0.76)</b>	<b>(0.34)</b>	<b>0.10</b>	<b>(0.66)</b>

## 5.6 Annual Fixed Charges and Primary Energy Rate for 2009-10

Based on the above analysis, the Commission has approved a sum of Rs. 175.07 Crore for FY 2009-10 as the Total Annual Fixed Charges (AFC) of the Petitioner attributable to its two beneficiaries. The Commission has allocated the AFC among the two beneficiaries of the Petitioner viz. UPCL and HPSEB on the basis of capacity allocation in each of the shared plants and 100% on UPCL for other plants. Accordingly, out of AFC of Rs. 175.07 Crore, Rs. 154.23 Crore is attributable to UPCL and balance Rs. 20.85 Crore is attributable to HPSEB.

The summary of Annual Fixed Charge for FY 2009-10 is given in Tables below:

**Table 5.40: Annual Fixed Charges for FY 2009-10 (Rs. Crore)**

Station	Depreciation	Interest on Loan	Interest on Working Capital	O&M expenses	RoE	Total Annual Fixed Costs	AFC attributable to UPCL	AFC attributable to HPSEB
a	b	c	d	e	f	g=b+c+d+e+f	h	i
Dhakrani	0.01	0.02	0.29	7.95	0.54	8.81	6.60	2.20
Dhalipur	0.01	0.04	0.43	11.76	0.88	13.12	9.84	3.28
Chibro	0.11	0.28	1.16	28.03	3.83	33.40	25.05	8.35
Khodri	1.84	0.21	0.75	15.34	3.22	21.36	16.02	5.34
Kulhal	0.23	0.02	0.28	7.09	0.75	8.36	6.69	1.67
Ramganga	0.06	0.14	0.64	15.24	2.19	18.27	18.27	0.00
Chilla	3.25	0.66	1.11	20.24	5.67	30.94	30.94	0.00
M Bhali I	2.70	0.24	1.08	22.01	4.66	30.69	30.69	0.00
Khatima	0.02	0.05	0.32	9.41	0.33	10.12	10.12	0.00
<b>Total</b>	<b>8.23</b>	<b>1.66</b>	<b>6.06</b>	<b>137.06</b>	<b>22.08</b>	<b>175.07</b>	<b>154.23</b>	<b>20.85</b>

Based on the above analysis and considering the impact of truing up for FY 2007-08 and FY 2008-09, the Commission has approved a sum of Rs. 155.72 Crore for UPCL and Rs. 20.68 Crore for HPSEB for FY 2009-10 as the Annual Fixed Charges (AFC) of the Petitioner recoverable from two beneficiaries. Based on the station-wise approved Annual Fixed Charges (AFC) and saleable primary energy, Primary Energy Rate has been worked out for each of these nine generating stations.

The summary of Annual Fixed Charges and Primary Energy Rates for FY 2009-10 is given in Tables below:

**Table 5.41: Approved AFC and Primary Energy Rate for FY 2009-10 for UPCL**

Station	Saleable Primary Energy	AFC attributable to UPCL	Truing up for FY 2007-08 for UPCL	Truing up for FY 2008-09 for UPCL	Net AFC for UPCL	Saleable Primary Energy attributable to UPCL	Primary Energy Rate for UPCL
	(MU)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)	(MU)	(p/u)
Dhakrani	155.78	6.60	0.03	0.18	6.82	116.84	58.37
Dhalipur	190.66	9.84	0.09	0.30	10.23	142.99	71.56
Chibro	741.00	25.05	(0.73)	(1.18)	23.15	555.75	41.65
Khodri	341.55	16.02	0.13	0.06	16.21	256.16	63.28
Kulhal	152.83	6.69	0.14	0.28	7.11	122.27	58.14
Ramganga	308.82	18.27	(0.74)	(1.08)	16.46	308.82	53.28
Chilla	664.58	30.94	0.15	0.15	31.24	664.58	47.01
M Bhali I	392.24	30.69	1.98	1.34	34.01	392.24	86.71
Khatima	192.69	10.12	0.09	0.28	10.49	192.69	54.44
<b>Total</b>	<b>3,140.15</b>	<b>154.23</b>	<b>1.15</b>	<b>0.34</b>	<b>155.72</b>	<b>2,752.33</b>	<b>56.58</b>

**Table 5.42 : Approved AFC and Primary Energy Rate for FY 2009-10 for HPSEB**

Station	Saleable Primary Energy	AFC attributable to HPSEB	Truing up for FY 2007-08 for HPSEB	Truing up for FY 2008-09 for HPSEB	Net AFC for HPSEB	Saleable Primary Energy attributable to HPSEB	Primary Energy Rate for HPSEB
	(MU)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)	(MU)	(p/u)
Dhakrani	155.78	2.20	0.02	0.06	2.28	38.95	58.64
Dhalipur	190.66	3.28	0.04	0.11	3.43	47.66	71.89
Chibro	741.00	8.35	(0.22)	(0.39)	7.74	185.25	41.79
Khodri	341.55	5.34	0.05	0.05	5.44	85.39	63.70
Kulhal	152.83	1.67	0.04	0.07	1.78	30.57	58.37
Ramganga	308.82	0.00	0.00	0.00	0.00	0.00	0.00
Chilla	664.58	0.00	0.00	0.00	0.00	0.00	0.00
M Bhali I	392.24	0.00	0.00	0.00	0.00	0.00	0.00
Khatima	192.69	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>3,140.15</b>	<b>20.85</b>	<b>(0.07)</b>	<b>(0.10)</b>	<b>20.68</b>	<b>387.81</b>	<b>53.31</b>

The Commission hereby approves the Primary Energy Rates as mentioned in Table 5.41 for supply to UPCL from the above nine generating stations for FY 2009-10, i.e. with effect from 01.04.2009. The Pooled Average Cost of generation payable by HPSEB shall be 53.31 Paise/kWh with total AFC of Rs. 20.68 Crore. These rates will continue to be the approved rates for sale to UPCL and HPSEB till March 31, 2010.

In case the recovery from the Primary Energy Charges from UPCL is less than the Annual Fixed Charges (AFC), the difference between AFC and Primary Energy Charges shall be recoverable as Capacity Charges/Deemed Generation Charges subject to provisions of Regulations. In accordance with the provisions of Regulations, the secondary energy rate shall be equal to the primary energy rate and shall be applicable when the Saleable Primary Energy exceeds the Original Design Energy. These provisions shall be subject to such adjustments as are outlined in this Order for secondary energy charge, incentive and capacity charge for supply to HPSEB.

There has been delay in submission of the Tariff Petitions for FY 2009-10 as the Petitioner instead of submitting its Petition by November 30, 2008 has submitted the Petitions in between December 31, 2008 to January 1, 2009. However, the said Petitions were without the approval of Board of Directors, which were submitted in February 17, 2009. Further, in the month of May 2009 UJVNL submitted the replies of the deficiencies initially pointed out by the Commission. The Commission has taken serious note of delay in submission of Tariff Petitions for true up of previous years and for determination of tariff for the current year. The Commission has decided that the Petitioner shall pay a token penalty of Rs. 2 Crore to the Commission towards delay in submission of Tariff Petitions for 2009-10 latest by 31st March 2010. The Commission proposes to utilise this amount of penalty for conducting technical studies, benchmarking of various operational and technical parameters for efficiency improvement, intervention of IT enabled services for processes management and control etc. in Generation, Transmission and Distribution of electricity in the State as the Commission may consider necessary and appropriate.

## 6. Performance of Petitioner's Plants

A lot of concern has been expressed by the Stakeholders on need for improvement in performance of these nine plants of the Petitioner which are more than 25 years old. As brought out in earlier portion of this order, there is a scope of improvement in generation from these plants by raising their existing capacities, which have been stated to have reduced due to wear and tear during past many years, to at least their original design values. The more important issue is that of ensuring generation availability from these plants for longer duration of time as most of these plants have already outlived their originally envisaged useful life. Accordingly, the Commission is of the view that these plants urgently need Renovation, Modernisation and Upgradation (RMU) for both improvement in generation capacity and life extension. This is the widely accepted option of maintaining generating capacity rather than going in for installation of a new plant, which is both very costly and requires long gestation periods. The Petitioner has also stated that it has prepared some DPRs for these RMU schemes. However, the status of progress made in implementation of the same has not been submitted.

**The Commission, therefore, directs the Petitioner to make comprehensive RMU schemes for efficiency improvement and life extension of these plants and submit the DPRs for the same to the Commission within a period of six months giving roadmap for implementation of these schemes.** The DPRs should clearly bring out the benefits of the proposed RMU works and proposed/tied up financing arrangements. The Commission clarifies that expenditure incurred on approved RMU works would form as a part of the capital cost of the project and would be suitably considered while working out the AFC for the relevant year based on the actual capital expenditure incurred. The Petitioner should utilise the fundings available from approved financial institutions by ministry of power under its schemes for RMU of Hydro Plants. The Petitioner may approach other financial institutions in case the funding from such schemes and Petitioners internal resources is not sufficient to meet the requirements of funds for these works. The utility share of funds may be arranged from internal resources available with the Petitioner as discussed below.

The Commission opines that the funds from operations available with the Petitioner should be utilised for such RMU works. One normally used source of such funds is the depreciation that is available with the Petitioner. It may be noted that the Commission has permitted the following amounts of depreciation to the Petitioner from 2001-02 to 2008-09, which totals to Rs. 68.84 Crore:

**Table 6.1: Approved Figure of Depreciation of UJVNL (Rs. Crore)**

Plant	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Total
Dhakrani	0.16	0.41	0.00	-1.03	-1.03	0.00	0.00	0.00	-1.49
Dhalipur	0.27	0.68	0.00	-1.89	-1.89	0.00	0.00	0.00	-2.83
Chibro	1.15	2.94	2.06	0.00	0.00	0.00	0.00	0.00	6.15
Khodri	0.97	2.47	1.76	1.76	1.76	1.76	1.76	1.76	14.00
Kulhal	0.23	0.58	0.42	0.42	0.42	0.42	0.42	0.42	3.32
Ramganga	0.65	1.67	1.19	1.19	1.19	0.00	0.00	0.00	5.89
Chilla	1.63	4.17	2.97	2.97	2.97	2.97	2.97	2.97	23.63
M Bhali I	1.44	3.67	2.61	2.61	2.61	2.61	2.61	2.61	20.77
Khatima	0.09	0.24	0.00	-0.47	-0.47	0.00	0.00	0.00	-0.61
<b>Total</b>	<b>6.60</b>	<b>16.83</b>	<b>11.01</b>	<b>5.56</b>	<b>5.56</b>	<b>7.76</b>	<b>7.76</b>	<b>7.76</b>	<b>68.84</b>

Depreciation, being a non-cash expense, is available with the utility for reinvestment and replacement/renovation of existing assets. The Hon'ble ATE also have observed in Para 16 of their order dated 14.09.2006 on Appeal No. 189/2005 filed by the Petitioner:

*"....Provisions have to be made for replacement of machinery, equipment and buildings, plants etc. besides required to be maintained and all of which require huge staff. It has to make the capital outlay with demand charges are levied and collected, whereas the consumption charges that are levied and collected to meet the running charges."*

**The Commission hereby directs the Petitioner to credit this depreciation amount along-with all future deprecation allowed on these plants in a separate interest bearing bank account to be called Depreciation Reserve Fund (DRF), which should be utilised for RMU works of these plants.**

Another source of internal funds is the return on equity (RoE) and incentives allowed to be retained by the Petitioner. Since these are free reserves with the company, the Petitioner may use these funds for any purpose including re-investments, working capital management etc. In case, these funds are utilised for re-investment for creation of capital assets, including additional capitalisation through RMU, these investments will be reckoned as equity and eligible to earn return on it. The Petitioner has also been allowed RoE of Rs. 21.17, 21.17, 21.90 and 22.02 Crore for the years 2004-05, 2005-06, 2007-08 and 2008-09 respectively. Out of this total RoE of Rs. 86.26 Crore, Rs. 84.68 Crore is on old assets transferred to the Petitioner from UPJVNL. This RoE is subject to adjustment in future ARRs of the Petitioner upon finalisation of its transfer scheme. However, till the same is available with the Petitioner the same can be utilised by it for investment of its share of equity in new projects and existing projects.

Apart from the above, the Petitioner also has the surplus earned by it in previous years due to overcharging from UPCL. The Commission had directed to keep this surplus in a separate interest bearing account to be called as Renovation and Modernisation Fund

(RMF) account. The Petitioner has created the RMF account in its provisional balance sheets upto 2008-09. The Petitioner has stated that it has earned an interest income during 2007-08 and 2008-09, which is primarily on account of interest earned on funds set aside for RMF in accordance with the directive of this Commission in its order dated 16.12.2004. The Petitioner has proposed to invest such surplus fund along-with interest accrued thereupon as equity contribution in the RMU's of various projects as well as development of Green Site Projects already undertaken by UJVNL. It may be recalled that UJVNL had unilaterally raised the tariff payable by UPCL from 37 paise/unit to 55 paise/unit and hence realised excess money from UPCL till this Commission determined the tariff for the Petitioner. Accordingly, this money has actually been paid by UPCL, therefore, this surplus fund and interest thereon must be utilised for consumers of Uttarakhand.

Although the direction of the Commission for creation of RMF has been set aside by Hon'ble ATE in their Order dated 14.9.2006, the actual amount of surplus can always be true'd up by the Commission and refunded back to UPCL without the need for creating an RMF. It may also be noted that there are still pending issues related initial transfer of assets and liabilities to the Petitioner from the UJVNL, which may have a financial impact on the Petitioner on their settlement. It would, therefore, be prudent to set aside this surplus for meeting those liabilities to avoid any future tariff shock to consumers. Moreover there is also a need for making investments in the old and upcoming new plants of UJVNL, which are going to be available to the State consumers, for which the Petitioner would need its share of equity. The collections in the Power Development Fund have also reduced due to reduction in cess from 40 to 30 paise/unit in last two years. Considering the ambitious investment plan of UJVNL submitted it to the Commission, the PDF would be too low and insufficient to meet the equity requirements for these investments. Therefore, the Commission is not carrying out true-up of this surplus, and accepting the Petitioner's submission, allows the same to be retained by it for its share of investments in these projects and also for meeting the unforeseen transfer scheme liabilities. **The Petitioner is, therefore, directed to ascertain this surplus amount and credit it to a separate bank account.** As the Commission is not adjusting the interest earned on operational cash, the same should also be credit to this fund. The interest earned on this account shall also be credited to the same account. The money from this account shall be utilised only for the specified purposes and after obtaining Commission's in-principle approval for the same. The Petitioner is advised to retain the present RMF, reflected in its accounts, for this purpose and update the same as per the above directions.

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.**

Before parting with the Order, the Commission would like to bring on record, the co-operation extended by the Petitioner in timely and complete submission of information to the Commission after its admission. The Petitioner is expected to give still better response the next time.

**(Anand Kumar)**  
**Member**

**(V.J. Talwar)**  
**Chairman**

## 7. Annexures

### 7.1 Annexure 1: Public Notice

# UTTARAKHAND JAL VIDYUT NIGAM LTD.

H.O. "UJJWAL" Maharani Bagh, GMS Raod, Dehradun-248006

## PUBLIC NOTICE

### Inviting Comments on Petition filed by UJVNL for FY 2009-10 for Determination of Generation Tariff for 9 LHP's

1. Uttarakhand Jal Vidyut Nigam Limited (UJVNL), a Government owned company, generating power for supply to consumers in the State, has filed tariff proposals for the financial year 2009-10 for its nine large generating stations (LHP's) before Hon'ble Uttarakhand Electricity Regulatory Commission (Commission). UJVNL is hereby publishing the gist of proposals made along with the existing rates in the State as tabulated below:

Station	Installed Capacity (MW)	Year of Commissioning		Operation & Maintenance Expenses (Rs. Cr.)	Interest on working Capital (Rs. Cr.)	Interest on loan Capital (Rs. Cr.)	Return on Equity (Rs. Cr.)	Depreciation (Rs. Cr.)	Annual Fixed Charges (Rs. Cr.)	Saleable Energy (MUs)	Primary Energy Rate (p/u)
Dhakrani	33.75	1985-70	Approved for 07-08	5.19	0.17	0.04	0.55	0.02	5.96	155.78	38.25
			Actual for 07-08	5.36	0.17	0.03	0.53	0.02	6.12	155.78	39.00
			Approved for 08-09	5.57	0.18	0.04	0.55	0.02	6.36	155.78	40.80
			Estimates for 08-09	6.36	0.20	0.10	0.57	0.04	7.27	155.78	47.00
			Projected for 2009-10	7.53	0.25	0.61	0.82	0.20	9.41	155.78	60.00
Dhalipur	51.00	1965-70	Approved for 07-08	7.67	0.25	0.01	0.86	0.00	8.80	190.66	46.16
			Actual for 07-08	7.89	0.25	0.05	0.88	0.03	9.10	190.66	48.00
			Approved for 08-09	8.25	0.27	0.01	0.86	0.00	9.40	190.66	49.28
			Estimates for 08-09	9.67	0.30	0.07	0.89	0.04	10.97	190.66	58.00
			Projected for 2009-10	11.27	0.35	0.11	0.91	0.05	12.69	190.66	67.00
Chibro	240.00	1974-78	Approved for 07-08	19.88	0.75	0.53	3.95	0.18	26.30	743.25	34.03
			Actual for 07-08	23.77	0.84	0.46	3.85	0.26	29.18	741.00	39.00
			Approved for 08-09	21.95	0.82	0.52	3.97	0.18	27.44	743.25	36.91
			Estimates for 08-09	23.59	0.84	0.49	3.86	0.27	29.05	741.00	39.00
			Projected for 2009-10	27.98	0.97	0.78	4.00	0.36	34.10	741.00	46.00
Khodri	120.00	1983-84	Approved for 07-08	10.94	0.50	0.05	3.12	1.77	18.38	342.58	47.81
			Actual for 07-08	11.80	0.52	0.21	3.21	1.88	17.63	341.55	52.00
			Approved for 08-09	12.02	0.53	0.05	3.12	1.78	17.50	342.58	51.07
			Estimates for 08-09	12.44	0.54	0.30	3.25	1.94	18.47	341.55	54.00
			Projected for 2009-10	15.37	0.64	0.68	3.44	2.05	22.18	341.55	65.00
Kulhal	30.00	1974-78	Approved for 07-08	4.55	0.17	0.01	0.74	0.42	5.69	152.83	38.55
			Actual for 07-08	4.81	0.17	0.02	0.75	0.44	6.19	152.83	41.00
			Approved for 08-09	4.90	0.18	0.01	0.74	0.42	6.25	152.83	40.86
			Estimates for 08-09	6.52	0.23	0.24	0.85	0.51	8.36	152.83	55.00
			Projected for 2009-10	6.79	0.24	0.64	1.00	0.40	8.97	152.83	59.00
Ramganga	198.00	1976-78	Approved for 07-08	11.58	0.42	0.06	2.13	0.02	14.21	308.82	46.00
			Actual for 07-08	13.18	0.47	0.18	2.19	0.15	16.16	308.82	52.00
			Approved for 08-09	13.10	0.47	0.06	2.14	0.02	15.79	308.82	51.12
			Estimates for 08-09	13.14	0.47	0.18	2.19	0.15	16.14	308.82	52.00
			Projected for 2009-10	15.89	0.55	0.18	2.19	0.15	18.96	308.82	61.00
Chilla	144.00	1980-81	Approved for 07-08	14.04	0.75	0.83	5.56	3.19	24.18	666.59	36.27
			Actual for 07-08	18.13	0.84	0.89	5.69	3.31	28.86	664.59	43.42
			Approved for 08-09	15.36	0.79	0.61	5.66	3.20	25.52	666.59	38.29
			Estimates for 08-09	20.05	0.90	0.91	5.70	3.32	30.87	664.59	46.46
			Projected for 2009-10	20.00	0.92	1.043	5.74	3.34	31.04	664.59	46.71
Tiloth	90.00	1984-85	Approved for 07-08	16.03	0.73	0.10	4.06	2.65	24.17	392.24	61.62
			Actual for 07-08	18.57	0.78	0.10	4.66	2.68	26.78	392.24	68.28
			Approved for 08-09	17.14	0.77	0.10	4.67	2.65	25.32	392.24	64.56
			Estimates for 08-09	22.94	0.91	0.11	4.66	2.68	31.30	392.24	79.81
			Projected for 2009-10	21.53	0.91	0.88	5.04	2.92	31.27	392.24	79.73
Khatima	41.40	1955-56	Approved for 07-08	6.23	0.18	0.02	0.31	0.01	6.75	192.69	35.02
			Actual for 07-08	7.29	0.15	0.06	0.33	0.04	7.87	192.69	40.82
			Approved for 08-09	6.70	0.19	0.03	0.32	0.01	7.26	192.69	37.67
			Estimates for 08-09	8.24	0.17	0.06	0.33	0.04	8.84	192.69	45.88
			Projected for 2009-10	9.22	0.19	0.06	0.33	0.04	9.84	192.69	51.06
Total			Approved for 07-08	88.61	3.92	1.45	21.89	8.26	131.64	3,145.44	
			Actual for 07-08	110.80	4.19	2.00	22.09	8.81	147.89	3,092.87	
			Approved for 08-09	92.15	4.20	1.43	21.93	8.28	140.84	3,145.44	
			Estimates for 08-09	122.95	4.58	2.46	22.30	8.99	161.27	3,140.15	
			Projected for 2009-10	135.58	5.02	4.88	23.47	9.51	178.46	3,140.15	

2. The Annual Fixed Charges (AFC) and the corresponding tariff has been proposed for energy to be sold to UPCL as well as supply to HPSEB. The truing up of the Annual Fixed Charges approved by the Commission for FY 2007-08 has also been requested in the Petition to allow the gap between AFC approved by the Commission and the actual AFC incurred. In case the entire claim of UJVNL is accepted by the Commission, additional hike of 2.35% in consumer tariff shall be required over and above the hike proposed by UPCL and PTCUL.

3. Detailed proposals as submitted by UJVNL can be seen free of cost on any working day at the Commission's office at **Institution of Engineers (I), Building, 1<sup>st</sup> floor, Near ISBT, Majra, Dehradun** or at the office of Uttarakhand Jal Vidyut Nigam Ltd., "UJJWAL", Maharani Bagh, GMS Road, Dehradun. Relevant extracts can also be obtained from the above mentioned office of UJVNL.

4. The proposals filled by the UJVNL are also available at the website of the Commission ([www.uerc.in](http://www.uerc.in)) and at the UJVNL's website ([www.uttaranchaljalvidyut.com](http://www.uttaranchaljalvidyut.com)).

5. 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 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 27.07.2009.

प०सं० 126/उजविनि/विज्ञापन दि० 04.07.2009

Managing Director

"Avoid wasteful use of Electricity"

## 7.2 Annexure 2: List of Respondents

Sl. No.	Name	Designation	Organization	Address
1.	Shri Rajeev Ghai	President	Kumaon Garhwal Chambers of Commerce & Industry	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt.- Udham Singh Nagar
2.	Shri Pankaj Gupta	President	Industries Association of Uttarakhand	Mohabewala Industrial Area, Dehradun - 248110
3.	Shri K.G. Behl, Brig. (Retd.)	President	All India Consumers Council (AICC)	Uttaranchal, 8-A, Nemi Road, Dehradun - 248001

**7.3 Annexure 3: List of Participants in Public Hearings****List of Participants in Hearing at Almora on 14.07.2009**

<b>SL. No.</b>	<b>Name</b>	<b>Designation</b>	<b>Organization</b>	<b>Address</b>
1.	Shri Rajendra Singh Shahi	Chairman	Poorva Sainik League	Palika Bazar, Near Uco Bank, Almora
2.	Shri Ghananad Joshi		Poorva Sainik League	Palika Bazar, Near Uco Bank, Almora
3.	Shri Naveen Chandra Joshi		Poorva Sainik League	Palika Bazar, Near Uco Bank, Almora
4.	Shri Shyam Lal Shah	District President	Prantiya Udhyog Vyapar Manda	Kutchery Bazar, Almora
5.	Shri Harish Chandra Mehra			Mohalla- Paniya Udyar, Jakhand Devi, Almora
6.	Shri Nand Kishor		Swachhakar Karamchari Sangh	Rajpur Balmiki Basti, Joshikhola, Almora
7.	Shri Girish Dhawan			Chowk Bazar, Almora
8.	Shri Kailash Chandra Gururani			Shagun Shopping Complex, L.R. Shah Road, Almora
9.	Shri Deep Lal Shah			Nanda Devi Marg, Lala Bazar, Almora
10.	Shri Kaushal Kishore Saxena	Journalist	Shristi	Ranidhara Road, Almora

**List of Participants in Hearing at Haldwani on 05.07.2009**

SL. No.	Name	Designation	Organization	Address
1.	Shri Satnam Singh Cheema	Pradesh Upadhyaksha	Bhartiya Kissan Union	Janakpur Farm, Kashipur, Udham Singh Nagar
2.	Shri Tika Singh Saini	Adhyaksha	Sanyukta Kisan Sangharsh Samiti	Katora Tal, Kashipur, Udham Singh Nagar
3.	Shri Jai Bhagwan Agarwal	Director	M/s. Kashi Vishwanath Steels Ltd.	Narain Nagar Industrial Estate, Bazpur Road, Kashipur-244713
4.	Shri Rajeev Gupta		M/s. Galwalia Ispat Udyog Ltd.	Narain Nagar Industrial Estate, Bazpur Road, Kashipur, U.S. Nagar
5.	Shri Arbind Mishra		M/s. Kashi Vishwanath Textile Ltd.	Kashipur, U.S. Nagar
6.	Shri Kuldeep Singh			Village- Dhakia Lalan, P.O. - Dhakia No. I, Distt. Udham Singh Nagar
7.	Shri Baljinder Singh...			V. Pajja, P.O. Mahuakhera
8.	Shri Surinder Singh			Banskhera, Kashiur
9.	Shri Kashmir Singh			Banskhera, Kashiur
10.	Shri Balkar Singh, Fauzi, Ex. A.C. B.S.F.,		Bhartiya Kisan Union	Vill- Raipur, Kashipur, Distt. Udham Singh Nagar
11.	Shri G.D. Punera, Retd. Commander			Punera Cottage, Vill.- Gaujajali, Bichli, Bareilly Road, Haldwani
12.	Shri Naveen Chandra Verma			Omkar Jewellers, Haldwani
13.	Shri Rakesh Bajaj		M/s. Innovative Textile	B-8, SIDCUL, Sitarganj, Distt.- Udham Singh Nagar
14.	Shri Bharat Saigal		M/s. Innovative Textile	B-8, SIDCUL, Sitarganj, Distt.- Udham Singh Nagar
15.	Shri R.K. Gupta		M/s. Gujarat Ambuja Exports Ltd.	ESIP, Sitarganj, Distt.- Udham Singh Nagar
16.	Shri Suresh Kumar		M/s. La-opala RGLN	ESIP, Sitarganj, Distt.- Udham Singh Nagar
17.	Shri M.C. Joshi		M/s. La-opala RGLN	ESIP, Sitarganj, Distt.- Udham Singh Nagar
18.	Shri Bhola Trivedi		M/s. Narendra Plastic	ESIP, Sitarganj, Distt.- Udham Singh Nagar
19.	Shri S. Malik		M/s. Parle Products	ESIP, Sitarganj, Distt.- Udham Singh Nagar
20.	Shri Rajeev Ghai	President	Kumaun Garhwal Chamber of Commerce & Industry	Chamber House, Industrial Estate, Bazpur Road, Kashipur, U.S. Nagar
21.	Shri Amit Shukla	HR-Coordinator	Kumaun Garhwal Chamber of Commerce & Industry	Chamber House, Industrial Estate, Bazpur Road, Kashipur, U.S. Nagar

**List of Participants in Hearing at Haldwani on 05.07.2009**

<b>SL. No.</b>	<b>Name</b>	<b>Designation</b>	<b>Organization</b>	<b>Address</b>
22.	Shri P.K. Bhasin	General Manager (Project)	Heinz India Pvt. Ltd.	D-99, A-83, SIDCUL, Sitarganj, Distt.- Udham Singh Nagar
23.	Shri Vipin Tyagi		M/s. BST Textile Mills Pvt. Ltd.	Plot No. 9, Sector 9, SIDCUL, Pant Nagar, Rudrapur - 263153
24.	Shri S.K. Garg		M/s. BST Textile Mills Pvt. Ltd.	Plot No. 9, Sector 9, SIDCUL, Pant Nagar, Rudrapur - 263153
25.	Shri Sudhir Sharma			Chamunda Vihar, RMR Road, Kashipur
26.	Dr. Ganesh Upadhyay			Vill. & Post - Shantipuri, No. 2, (Kicchha), Udham Singh Nagar
27.	Shri Gurmeet Singh			Girdhyai, Kashipur, Udham Singh Nagar
28.	Shri Naraina Singh			Mahuakheraganj, Kashipur, Udham Singh Nagar
29.	-----		M/s. Umashakti Steels (P) Ltd.	Vill. - Vikrampur, Bazpur, Distt.- Udham Singh Nagar
30.	-----		M/s. Sri Tribhuvan Ispat (P) Ltd.	Vill.- Vikrampur, Bazpur, Distt.- Udham Singh Nagar
31.	Shri Darbara Singh		M/s. Sam Cables	Rudrapur, Distt.- Udham Singh Nagar
32.	Shri Ashok Bansal		M/s. Rudrapur Solvents Pvt. Ltd.	Lalpur, Rudrapur, Distt.- Udham Singh Nagar

**List of Participants in Hearing at Dehradun on 20.07.2009**

SL. No.	Name	Designation	Organization	Address
1.	Shri R.P. Sharma		M/s. Ambuja Cement Ltd.	Vill. Lakeshwari, Bhagwanpur Industrial Area, Roorkee
2.	Shri V. Prabhakar		M/s. Ambuja Cement Ltd.	Vill. Lakeshwari, Bhagwanpur Industrial Area, Roorkee
3.	Shri N.L. Reddy	Managing Director	M/s. Concord Drugs Ltd.	Vill. Raipur, Post – Bhagwanpur, Tehsil – Roorkee, Haridwar
4.	Shri M.L. Biyala		M/s. Plastiblends India Ltd.	Khasra No. 216, Vill. Raipur, Post – Bhagwanpur, Tehsil – Roorkee, Haridwar
5.	Shri Gautam Kapoor		M/s. Ramson Polymers Pvt. Ltd.	Khasra No. 103, Vill. Raipur, Post – Bhagwanpur, Tehsil – Roorkee, Haridwar
6.	Shri Yogesh Sharma		Bhagwanpur Industrial Association	Plot No. 200, near Ambuja Cemtn, Lakeshwari, Bhagwanpur, Roorkee
7.	Shri Rajiv Agarwal	Consumer Representative & Sr. Vice-president,	Industries Association of Uttarakhand	32- Inder Road, Dalanwala, Dehradun
8.	Shri Pankaj Gupta	President	Industries Association of Uttarakhand	C/o Satya Industries, Mohabewala Industrial Area, Dehradun
9.	Shri Kumar Uday Pratap	Manager	Polyplex Corporation Ltd.	B-37, Sector – 1, Noida (UP)
10.	Shri Manoj Agarwal		Polyplex Corporation Ltd.	Lohia Head Road, Khatima, Udham Singh Nagar
11.	Shri S. Mittal		Polyplex Corporation Ltd.	Lohia Head Road, Khatima, Udham Singh Nagar
12.	Shri Anil Marwah	State General Secretary	Prantiya Industries Association	222/5, Gandhi Gram, Dehradun
13.	Shri K.L. Khandusa		Sri Ganesh Roller Floor Mills	Mohabewala Industrial Area, Dehradun
14.	Shri V.V. Joshi		M/s. Tata Motors Ltd.	Plot No. 1, Sector 11, IIE, SIDCUL, Pant Nagar, Udham Singh Nagar
15.	Shri Chitre Praveen		M/s. Tata Motors Ltd.	Plot No. 1, Sector 11, IIE, SIDCUL, Pant Nagar, Udham Singh Nagar
16.	Shri R.K. Singh		M/s. Tata Motors Ltd.	Plot No. 1, Sector 11, IIE, SIDCUL, Pant Nagar, Udham Singh Nagar
17.	Shri R.K. Sharma		Industries Association of Uttarakhand	Mohabewala Industrial Area, Dehradun
18.			M/s. Uttam Fibre (P) Ltd.	Lal Tappar, Dehradun

**List of Participants in Hearing at Dehradun on 20.07.2009**

SL. No.	Name	Designation	Organization	Address
19.			M/s. Rawat Engg. Tech. (P) Ltd.	Mohabewala Industrial Area, Dehradun
20.	Shri Hemant Koorich	Secretary	Industries Association of Uttarakhand	2-B, Govt. Industrial Estate Patel Nagar
21.	Shri Rajeev Ghai	President	Kumaon Garhwal Chambers of Commerce & Industry	Industrial Estate, Bazpur Road, Kashipur - 244713
22.	Shri P.M. Gupta & Shri R.C. Rastogi		IDPL	Virbhadra, Rishikesh, Distt.- Dehradun
23.	Shri Mukesh Tyagi		Kumaon Garhwal Chambers of Commerce & Industry	Industrial Estate, Bazpur Road, Kashipur - 244713
24.	Shri Ashish		Kumaon Garhwal Chambers of Commerce & Industry	Industrial Estate, Bazpur Road, Kashipur - 244713
25.	Shri Anil Goel	Pradesh Mahamantri	Prantiya Udyog Vyapar Pratinidhi Mandal	13, Gandhi Road, Dehradun
26.	Shri Sanjay Jain		M/s. Arihant Express	Patel Nagar, Dehradun
27.	Shri Nitin Agarwal		M/s. Alpha Pharma	Dev Bhoomi Industrial Estate, Roorkee
28.	Shri N.P. Shukla		M/s. Vansh Electro Mechanical Pvt. Ltd.	D-6, Dev Bhoomi Industrial Estate, Roorkee
29.	Shri R.R. Chhimps		M/s. Valiant Electricals (P) Ltd.	C-17, Dev Bhoomi Industrial Estate, Roorkee
30.	Shri S.B. Saha & Shri S.S. Arora		M/s. Greenply Industries Ltd.	Plot No. 2, Sector - 9, IIE, Pantnagar, Distt.- Udham Singh Nagar
31.	Shri Subhash Kukreti	Director	Shree Dhanvarsha Steels Ltd.	D-Block, UPSID Industrial Area, Jashodharpur, Kotdwara, Uttarakhand
32.	Shri M.S. Gambhir		J.T. Engineering (P) Ltd.	-----
33.	Shri Surendra Ghai	....	.....	.....
34.	Shri Jitendra Kumar	President	Sidharth Paper Ltd.	Industrial Estate, Bazpur Road, Kashipur
35.	Shri Pukhraj Kushwaha		Khatima Fibers Ltd.	Khatima, Udham Singh Nagar

**List of Participants in Hearing at Dehradun on 20.07.2009**

SL. No.	Name	Designation	Organization	Address
36.	Shri S.P. Kochhar		Hotel Madhuban	Rajpur Road, Dehradun
37.	Shri Mohammad .....		Hotel Classic International	.....
38.	Shri Arun Sharaswat	President	Sidcul Industrial Association, Haridwar	Padam Services, Plot No. 27, Sector - 1B, IIE, SIDCUL, Haridwar
39.	Shri Rakesh Bhatia	Vice-president	KGCCI	E-8, Govt. Industrial Area, Patel Nagar, Dehradun
40.	Shri J.B. Batra	.....	.....	.....
41.	Shri Ashish Kothiyal		I Next	-----
42.	Shri Shiv Charan Dwivedi			Thana Clementtown, Quarter No. 13, P.O. Clementtown, Dehradun
43.	Shri Vishwa Mitra Jogia			36- Panchsheel Park, Chakrata Road, Dehradun - 248006
44.	Shri Narender Pal Singh			17- Ganga Nagar, Rishikesh
45.	Dr. Gaurav Goyal	Hony. Secretary	Indian Dental Association	66 - Saharanpur Road, Dehradun - 248001
46.	Dr. Vishwajeet Walia	President	Indian Dental Association	2, Orient Cinema Complex, Astley Hall, Rajpur Road, Dehradun
47.	Shri Ravi Chandel			5/1, New Vasant Vihar Enclave, Dehradun
48.	Dr. M.M. Singh			Prem Nagar Gurudwara, Shri Guru Singh Sabha, Premnagar, Dehradun
49.	Shri V.S. Bhatnagar			98/3, Bell Road, Bharuwala Grant, Clementtown, Dehradun
50.	Brig. K.G. Behl	Member	State Advisory Committee	8- A, Nemi Road, Dalanwala, Dehradun
51.	Shri Shiv Kumar Sharma			Shukla Bazar, Subhash Chowk, Rishikesh, Dehradun