

**Order on  
Approval  
of Business Plan and  
Multi-Year Tariff Petition for the  
Control Period FY 2013-14 to FY 2015-16  
for  
Uttarakhand Power Corporation Ltd.**

**May 06, 2013**

**UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**

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

**Near ISBT, Majra, Dehradun - 248002**



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**Before**

**UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**

**Petition No.: 04 of 2013**

**and**

**Petition No.: 07 of 2013**

**In the Matter of:**

Petition filed by Uttarakhand Power Corporation Limited for approval of its Business Plan for the first Control Period from FY 2013-14 to FY 2015-16

**AND**

Petition filed by Uttarakhand Power Corporation Limited for determination of Multi Year Tariff for the first Control Period from FY 2013-14 to FY 2015-16

**BY**

Uttarakhand Power Corporation Limited  
Urja Bhawan, Kanwali Road, Dehradun

..... Petitioner

**Coram**

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

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

Section 64(1) read with Section 61 and 62 of the Electricity Act, 2003 (hereinafter referred to as "Act") requires the generating companies and the licensees to file an application for

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Uttarakhand Electricity Regulatory Commission

determination of tariff before the Appropriate Commission in such manner and along with such fee as may be specified by the Appropriate Commission through Regulations. In compliance with the above provisions of the Act and Regulation 9(1) and Regulation 11(1) of UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011, Uttarakhand Power Corporation Limited (hereinafter referred to as “UPCL” or “Petitioner” or “licensee”) filed separate Petitions for the approval of the Business Plan for the first Control period from FY 2013-14 to FY 2015-16 (Petition No. 04 of 2013 hereinafter referred to as “Business Plan Petition”) and Multi Year Tariff Petition (Petition No. 07 of 2013 hereinafter referred to as the “MYT Petition”) on December 21, 2012. UPCL in its Business Plan Petition, submitted the Capital Investment Plan, Financing Plan, and trajectory of performance parameters for the first Control Period. Further, through the MYT Petition, UPCL submitted the detailed calculations of its projected Aggregate Revenue Requirement for the first Control Period from FY 2013-14 to FY 2015-16 as per the Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2011 (UERC Tariff Regulations, 2011). Through the MYT Petition, the Petitioner also requested for final true up for FY 2010-11 based on audited accounts and provisional true up for FY 2011-12 in accordance with Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2004.

Tariff determination being the most vital function of the Commission, it has been the practice of the Commission to detail the procedure and explain the principles utilized by it in determining the ARR and tariffs. Accordingly, in the present Order also, in line with past practices, the Commission has tried to detail the procedure and principles followed by it in determining the ARR requirement of the licensee. For the sake of convenience and clarity, this Order has further been divided into following Chapters:

Chapter 1 - Background & Procedural History

Chapter 2 - Petitioner’s Submissions

Chapter 3 - Stakeholders’ Responses and Petitioner’s Comments

Chapter 4 - Commission’s Approach

Chapter 5 –Commission’s Analysis, Scrutiny and Conclusion on Business Plan for the first Control Period

Chapter 6 - Commission's Analysis, Scrutiny and Conclusion on Truing up and MYT for the  
First Control Period

Chapter 7 - Tariff Rationalisation, Tariff Design and Related Issues

Chapter 8 - Commission's Directives

# 1. Background and Procedural History

Uttarakhand Power Corporation Ltd. (UPCL) is a company wholly owned by the Government of Uttarakhand and the sole distribution licensee engaged in the business of distribution and retail supply of power in the State of Uttarakhand. The Electricity Act, 2003 (Act) read with the Commission's relevant Regulations framed u/s 181 of the Act requires the distribution licensee to file with the Commission, the Annual Revenue Requirement (ARR) & Tariff Proposals for the ensuing Financial Year, on or before 30th November each year.

In exercise of power conferred to it under Section 61 of the Electricity Act, 2003, and all other powers enabling it in this behalf, the Commission notified the UERC (Terms and conditions for Determination of Tariff) Regulations, 2011 in December 2012.

As mentioned earlier, in accordance with the provisions of the Act and the UERC Tariff Regulations, 2011, Distribution Companies are required to submit the Business Plan and the MYT Petitions for determination of the distribution tariff for supply of electricity. As per Regulations 9(1) and 9(3) of the UERC Tariff Regulations, 2011 the Business Plan Petition was required to be submitted on or before May 31, 2012 and the same were got to be approved by the Commission prior to filling of the MYT Petitions. However, UPCL continuously sought extensions from the Commission to file the Business Plan Petition as indicated in the following list of correspondence with the Petitioner. The Commission in its letter dated November 2, 2012 allowed UPCL to submit the Business Plan Petition by November 30, 2012 and directed UPCL to submit the MYT Petition as well within the specified time till November 30, 2012. UPCL further sought extension to file the Business Plan Petition and MYT Petition as indicated in the following list of correspondence with the Petitioner.

**Table 1.1: List of Correspondence with the Petitioner**

Sr. No.	UPCL Correspondence		UERC Correspondence		
	Letter Reference	Date	Letter Reference	Date	Extension Granted
1	852/UPCL/Comm/RC-1/MD	May 03,2012	UERC/6/TF-145/12-13/2012/298	May 25, 2012	June 30, 2012
2	1301/UPCL/Comm/RC-1/MD	June 30, 2012	UERC/6/TF-145/12-13/2012/593	July 10, 2012	July 31, 2012
3	1715/UPCL/Comm/RC-1/MD	August 07,2012	UERC/6/TF-145/12-13/2012/729	August 14,2012	August 31, 2012
4	1966/UPCL/Comm/RC-1/MD	September 10, 2012	UERC/6/TF-145/12-13/2012/921	September 24, 2012	September 30, 2012
5	2302/UPCL/Comm/RC-1/MD	October 31, 2012	UERC/6/TF-145/12-13/2012/1053	November 2, 2012	November 30, 2012
6	2427/UPCL/RM/B-13	November 26, 2012	UERC/6/TF-165/12-13/2012/1151	November 30, 2012	December 15, 2012
7	1224/UPCL/RM/B-13	December 14, 2012	UERC/6/TF-145/12-13/2012/1270	December 19, 2012	December 20, 2012

Although, as per the Regulation 11(1) of UERC Tariff Regulations, 2011 the MYT Petitions are required to be filed latest by November 30, 2012, in view of the above UPCL filed its Petitions of Business Plan for FY 2013-14 to FY 2015-16 and Multi-Year Tariff Petition for the Control Period from FY 2013-14 to FY 2015-16 along with Truing-up for FY 2010-11 and FY 2011-12 on December 21, 2012.

The Commission vide its letter no. 1395/UERC/Misc. App No. 49 of 2012/12-13 and letter no. 1398/UERC/Misc. App No. 50 of 2012/12-13 dated January 11, 2013 returned the Petitions filed by the Petitioner alongwith the details of defects in the Petitions asking it to rectify these infirmities, so that the Petitions may be admitted by the Commission. The Petitioner submitted its replies to the deficiencies pointed by the Commission alongwith the revised Petition vide its letter no. 233/UPCL/RM/B-13 and letter no. 232/UPCL/RM/B-13 dated January 31, 2013.

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

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

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

*...*

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

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

*..."*

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

In view of the above Judgment, and to ensure the timely Tariff Determination, the Commission deciding to process the Business Plan Petition and MYT Petition concurrently and to club the Petitions for approval of Business Plan and Multi Year Tariff. Accordingly, the Commission has processed the Petitions for approval of Business Plan Petition and Multi Year Tariff, and the Commission is issuing this single Order on approval of Business Plan Petition and Multi Year Tariff Petition.

Based on the submissions of the Petitioner, the Commission provisionally admitted the Petitions vide two separate Orders on February 1, 2013 for further processing subject to the



condition that Petitioner shall furnish any further information/clarifications as deemed necessary by the Commission during the processing of the Petitions, and provide such information and clarifications to the satisfaction of the Commission within the time frame as may be stipulated by the Commission failing which the Petition would be treated as deemed returned on the due date for last information sought by the Commission and the Commission would proceed to dispose off the matter as it deems fit based on the information available with it. The Commission, through its above Admittance Order dated February 1, 2013, to provide transparency to the process of tariff determination and to give all the stakeholders an opportunity to submit their objections/suggestions/comments on the proposals of the Distribution Company, also directed the Petitioner to publish the salient points of its proposals in the leading newspapers. The salient points of the proposals were published by Petitioner in the following newspapers:

**Table 1.2: Publication of Notice**

S.No.	Newspaper Name	Date of publication
1.	Rashtriya Sahara	06.02.2013
2.	Amar Ujala	06.02.2013
3.	Hindustan Times	06.02.2013
4.	Hindustan	06.02.2013
5.	Hindustan Times	07.02.2013

Through above notice, stakeholders were requested to submit their comments latest by March 15, 2013 (copy of the notice is enclosed as **Annexure-3**).

The Commission on its own initiative also sent the copies of salient points of tariff proposals to members of the State Advisory Committee, the State Government and also made available the details of the proposals submitted by the Petitioner in the Commission's office and on the Commission's website.

The Commission received 83 objections/suggestions/comments in writing on the Petitioner's Business Plan Petition for FY 2013-14 to FY 2015-16 and Multi-Year Tariff Petition for the Control Period from FY 2013-14 to FY 2015-16.. The list of stakeholders who have submitted their objections/suggestions /comments is enclosed at **Annexure-4**.

For direct interaction with all stakeholders and public at large so as to give them an opportunity of being heard, the Commission conducted common public hearings on the proposals filed by UJVNL, PTCUL and the Petitioner at the following places in the State of Uttarakhand:

**Table 1.3: Schedule of Hearings**

S.No.	Place	Date
1	Ranikhet	March 14,2013
2	Rudrapur	March 15, 2013
3	Dehradun	March 18, 2013
4	New Tehri	March 20, 2013

The list of participants who attended the Public Hearing is enclosed at **Annexure-5**. The objections/suggestions/comments, as received from the stakeholders in writing as well as during the course of public hearing were sent to the Petitioner for its response. All the issues as raised by the stakeholders and Petitioner's response on the same are detailed in Chapter 3 of this Order. In this context it is also to underline that while finalizing the Tariff Order, the Commission has, as far as possible, tried to address the issues as raised by the stakeholders.

Meanwhile, after provisional admittance of the Business Plan Petition for FY 2013-14 to FY 2015-16 and Multi-Year Tariff Petition for the Control Period from FY 2013-14 to FY 2015-16 and Truing-up for FY 2010-11 and FY 2011-12, based on preliminary scrutiny, the Commission identified certain data gaps in the Petitions. Accordingly, following additional information/clarification from the Petitioner were sought by the Commission vide its letter no. 1395/UERC/Misc. App No. 49 of 2012/12-13 dated January 11, 2013 and letter no. 1398/UERC/Misc. App No. 50 of 2012/12-13 dated January 11, 2013:

**Business Plan Petition for FY 2013-14 to FY 2015-16**

- Clarification on whether it had any pre-planned strategy to estimate surplus/deficit power based on monthly demand supply position in the past years in order to appropriately plan to purchase/sale in case of deficit/surplus situation and submit the same.
- Basis for escalating the variable cost of power purchase from UJVNL at 4% p.a. and from NTPC at 7% p.a.
- Clarification regarding the year for which rostering data has been considered for projecting restricted sale at State periphery.
- Details of expected COD considered for each of the upcoming stations.
- Basis for considering power purchase cost from new generating stations (thermal and large hydro) developed by Central Sector at Rs. 4.50/kWh for the Control period.

- Details of initiatives planned for energy efficiency and demand side management measures for the Control Period.
- Basis for considering annual escalation rate of 10% for projecting the Intra-State Transmission Charges and ULDC and NRLDC charges.
- Basis for considering 1.25% of total employee cost for training and development.
- Details of nature of expenses considered by it under 'New Recruitment Cost' alongwith the detailed recruitment plan.
- Status of Commission's in-principle approval of year wise Capital Expenditure schemes for the Control Period.
- Basis for considering a much lower value for annual release of PTW connections for the Control Period as compared to FY 2011-12.
- Basis for estimating the new loans at a rate of interest of 13% with 10 years of repayment period in line with existing arrangements of loans with REC and PFC.
- Basis for considering an escalation of 5% over the actual NTI of FY 2011-12 for escalating each year of the Control Period
- Details of delayed payment charges and the financing cost.

**Multi-Year Tariff Petition for the Control Period from FY 2013-14 to FY 2015-16 and Truing-up for FY 2010-11 and Provisional Truing up FY 2011-12**

- Compliance Report with regard to the directives issued by the Commission in the aforesaid Order.
- Rate Schedule for the Revised Tariffs proposed by it for FY 2013-14.
- Detailed proposal for recovery of past adjustment on account of impact of transfer scheme including impact on category-wise tariff.
- A copy of the Government of Uttarakhand Order No.-117/I(2)/2011-05/19/2002, dated 27-04-2012 approving the Transfer Scheme of assets and liabilities executed between UPPCL and Petitioner on October 10, 2003.
- Basis for considering normative interest rate at 10% from FY 2001-02 to FY 2004-05.

- Interest rate considered for computation of Carrying Cost for FY 2011-12 and FY 2012-13.
- Actual month-wise load shedding data for FY 2010-11 and FY 2011-12.
- Computation of distribution losses for FY 2010-11 and FY 2011-12.
- Detailed computation of Inter-State Transmission charges and losses for FY 2010-11 and FY 2011-12.
- SLDC certification indicating the Intra-State Transmission losses for FY 2010-11 and FY 2011-12.
- Monthly power purchase bills for the months April 2010, June 2010, September 2010, December 2010, March 2011, June 2011, September 2011, December 2011 and March 2012.
- Details of banking of energy during FY 2010-11 and FY 2011-12.
- Details of scheme-wise capital expenditure and capitalisation for FY 2010-11 and FY 2011-12.
- Computing scheme-wise IDC regarding the actual capitalisation for FY 2010-11 and FY 2011-12 respectively.
- Clearance Certificate from the Electrical Inspector with regard to capitalisation of various HT/EHT schemes for FY 2010-11 and FY 2011-12.
- Confirmation that accumulated depreciation in FY 2010-11 and FY 2011-12 is less than 90% of GFA for all assets.
- Documentary evidence for interest rate charged by bank for new loans for FY 2010-11 and FY 2011-12.
- Supporting Documents for consideration of Interest on working capital as 11.75% for FY 2010-11 and 13.25% for FY 2011-12, respectively.
- Data on actual Consumers Security Deposit for FY 2010-11 and FY 2011-12, i.e. Opening Balance, Closing Balance, and average balance during the year.
- Basis for calculating the provision for bad and doubtful debts at 2.5% on actual revenue for FY 2010-11 and FY 2011-12, respectively.

- Basis and assumptions for capitalising the employee expenses and A&G expenses for FY 2010-11 and FY 2011-12.
- Head-wise increase in the Employee expenses, A&G expenses and R&M expenses along with the reason for increase.
- Details of interest paid on account of delayed payment by consumers for FY 2010-11 and FY 2011-12.
- Details of schemes whose DPR are pending for the Commission's approval and DPR schemes yet to be submitted to the Commission for the Control Period.
- Proposed tariff hike in terms of percentage for each consumer category for FY 2013-14 to meet the projected revenue gap.
- Category-wise/voltage-wise cost to supply in compliance with Regulation 92 of Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2011.
- Details indicating the existing and proposed category-wise cross subsidy, in view of the proposed tariff revision.
- Base data for the past three years, viz. number of consumers, connected load, sales and impact on revenue on account of the revised categorisation proposed.

In its reply to the Business Plan Petition for FY 2013-14 to FY 2015-16 and Multi-Year Tariff Petition for the Control Period from FY 2013-14 to FY 2015-16 and final Truing-up for FY 2010-11 and Provisional Truing up for FY 2011-12, the Petitioner submitted some information vide its letter no. 233-232/UPCL/RM/B-13 dated January 31, 2013 and letter no. 342-343 /UPCL/RM/B-13 dated February 13, 2013. Further, with an objective to have better clarity and removal of inconsistency in data submitted in the Petitions and additional information, the Commission also held a Technical Validation Session (TVS) with the Petitioner on February 20, 2013, during which the issues raised vide letter no. 1395-1398/UERC/Misc. App No. 49 of 2012/12-13 dated January 11, 2013 and replies submitted by Petitioner vide letter no. 233/UPCL/RM/B-13 dated January 31, 2013, letter no. 342-343 /UPCL/RM/B-13 dated February 13, 2013, were discussed. Based on these discussions, the Commission, vide its letter no. UERC/6/TF/Petition No. 04 & 07 of 2013/12-13/2013/1591 dated February 22, 2013 forwarded the minutes of the first TVS, seeking some further

clarification/information from the Petitioner. Some of the information as sought by the Commission was submitted by the Petitioner vide letter no. 577 UPCL/RM/B-13 dated March 2, 2013. The Commission in the wake of several pending queries and information from the Petitioner held a second round of Technical Validation Session on April 4, 2013.

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

## **2. Petitioner's Submissions**

This Chapter gives a brief summary of the UPCL's Petition for approval of MYT Business Plan and MYT Petition for the Control Period from FY 2013-14 to FY 2015-16. The contents of this Chapter are based on original submissions in the Petitions and do not incorporate changes in information and data submitted subsequently by the Petitioner. Additional submissions made by UPCL have been considered by the Commission under Chapter 5 on Approval of Business Plan and Chapter 6 while analysing the Final Truing up for FY 2010-11, Provisional Truing up for FY 2011-12 and Approval of ARR for the Control Period FY 2013-14 to FY 2015-16.

### **2.1 Business Plan for the Control Period from FY 2013-14 to FY 2015-16**

The Commission in exercise of power vested with it under Section 181 read with Sections 61, 62 & 86 of the Electricity Act, 2003 issued the Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff) Regulations, 2011, in short, UERC Tariff Regulations, 2011 on December 19, 2011. These Regulations provide for the Multi Year Tariff framework for approval of ARR and expected revenue from tariffs and charges for the Control Period for which the distribution licensee shall submit the MYT Business Plan for the entire Control Period for the approval of the Commission prior to the beginning of the Control Period.

The Petitioner has filed its MYT Business Plan in which it has submitted its Sales Forecast, Distribution Loss trajectory, Power Purchase Plan, Capital Expenditure Plan, Operation and Maintenance Expenses and other distribution costs along with the ARR for the Control Period FY 2013-14 to FY 2015-16. However, the head-wise summary of the MYT Business Plan is enumerated below and the other ARR components are briefed in later part of this Chapter:

#### **2.1.1 Energy Sales Forecast**

The Petitioner submitted that based on actual energy sales data, Uttarakhand witnessed a CAGR (Compound Annual Growth Rate) of 16.26 % in energy consumption over the past six years from FY 2006-07 to FY 2011-12.

For projecting category-wise energy sales of UPCL for FY 2013-14 to FY 2015-16 (Control Period) both Econometric Method and Adjusted Trend Analysis Method have been applied.

Furthermore, sales projections from the draft Report of the 18<sup>th</sup> Electric Power Survey (EPS) undertaken by the Central Electricity Authority (CEA) have been taken into account for considering the final sales projection figures. The Petitioner submitted that different methodologies and outcome of the sales forecast are described below:

***Energy Sales - From Draft 18th Electric Power Survey Projections***

The Petitioner submitted that the primary objective of the 18th Electric Power Survey forecast is to determine the electricity demand for States & Union Territories so that they can plan and arrange to meet the energy demand. The EPS forecast is a projection of aggregate power demand over the year and category-wise electricity consumption. Partial End-use Method (PEUM), which is a combination of end-use method and time series analysis has been applied in 18th Electric Power Survey forecast. Further, analysis of these sales forecasts suggests that they are on the higher side for the first two years of the forecast period. Comparing the 17th EPS forecast for FY 2006-07 to FY 2011-12 with the actual total energy sales during the same period, it is observed that EPS forecast figures have consistently been higher than actual energy consumption. Therefore, energy sales forecast from the draft 18th EPS has not been selected to determine the final sales forecast.

***Projection of Energy Sales (Restricted Sales) - Econometric Method***

The Petitioner submitted that Econometric method combines economic theory with statistical methods to produce a system of equations for forecasting energy demand. Taking cross-sectional/pooled data, relationship could be established between electricity demand and other economic variables. The 'dependent variable', which is restricted sales is expressed as a function of several economic/other relevant factors which are called 'independent/explanatory variables'. Several combinations of these variables have to be tried till the relationship is found to be statistically significant. Multiple linear regression method has been adopted for restricted sales projections, where linear functional form of the independent variables has been considered. Category-wise sales have been forecasted primarily based on sectoral gross domestic product (hence growth rates) and population growth rate. Linear regression method involves using historical dependent and independent variable data to derive a linear causal relationship between the variables and obtain a fitted line, which will give the estimated value for the dependent variable for corresponding values of the independent variables, as shown below.



Fitted line:  $\hat{Y} = a + b_1X_1 + b_2X_2 + b_3X_3 + \dots$ ,

where  $\hat{Y}$  = estimated/forecast value of the dependent variable (category-wise restricted sales);  $X_1$ ,  $X_2$ ,  $X_3$  are the independent variables (for ex., total gross state domestic product (GSDP) , population, industrial gross state domestic product, agri-GSDP, amount of annual rainfall, etc.).

The Petitioner further submitted that in several cases, based on data availability of economic parameters, ten years of category-wise actual historical energy sales (at consumer level) data from FY 2002-03 through FY 2011-12 has been used for regression analysis.

Similarly, ten years (depending on data availability) of historical data for the independent variables has been collected for the same purpose. Relevant explanatory variables have been selected for category-wise sales forecast based on correlation with energy sales.

The Petitioner submitted that three scenarios have been considered for econometric analysis - optimistic, realistic and pessimistic based on the growth rate assumptions for projecting independent variables for the forecast period.

***Projection of Energy Sales (Restricted Sales) - Adjusted Trend Analysis (CAGR) Method***

The Petitioner submitted that under this method, for projecting the category-wise energy sales for FY 2013-14 to FY 2015-16, the past growth trends in each consumer category is considered as explained below:

- (a) The Adjusted Trend Analysis Method for projecting the sales for all consumer categories assumes that the underlying factors which drive the demand for electricity are expected to follow the same trend as in the past. However, this approach also discounts any outlier (relative to the trend) observed in the growth rates over the period of 5 years and excludes them while projecting energy sales for FY 2013-14 to FY 2015-16.
- (b) This method makes use of a statistical tool, namely the Compound Annual Growth Rate (CAGR). According to this method, Compound Annual Growth Rates (CAGRs) were calculated from the past figures for each category, corresponding to different lengths of time in the past five years, along with the year on year growth rates since FY 2006-07. CAGR has been computed for each category for the past 5-year period FY 2006-07 to FY 2011-12, the 4-year period FY 2007-08 to FY 2011-12, the 3-year period FY 2008-09 to FY 2011-12, and the 2-year period FY 2009-10 to FY 2011-12, along with the 1-year growth rate of FY 2011-12 over FY 2010-11,

- (c) A 5 year CAGR has been chosen for the purpose of projections for most of the categories, except for a few categories like Non-Domestic, Private tube-wells, HT industries and Mixed Load. For consumption by the Non-Domestic category, 8% growth rate is considered keeping in mind the declining growth trend. While for consumption by HT industries and Mixed Load, growth rates of 8% and 10% respectively have been considered as the growth in the future, because the growth is not expected to be in tune with the high growth rate observed from the past trends because of the current global economic scenario and the country's substantially low industrial production growth rate. Similarly, for projecting consumption by Private Tube Wells category, 10% growth rate has been considered.
- (d) The Petitioner further submitted that for projecting sales, the actual sales for FY 2011-12 for each consumer category is taken as the base, i.e. the chosen growth rate is applied over the actual sales for FY 2011-12 to make projections for each category for FY 2012-13; and for projections for FY 2013-14, the growth rate is applied on the projected sales of FY 2012-13, while for FY 2014-15, the projected sales for FY 2013-14 is considered the base and similarly sales for FY 2015-16 has been projected.
- (e) However, energy sales to un-metered consumers under Domestic, Public Lamps and Private Tube Wells in FY 2011-12 have been recasted as per methodology (based on the connected load for the un-metered consumers vis-à-vis that for metered consumers in the same consumer category) specified by the Commission before considering them for projections.

#### ***Final Energy Sales (Restricted Sales) - Selection among the Multiple Methods***

The Petitioner submitted that the energy sales growth forecast for domestic, non-domestic and HT industry categories are almost similar both under the Econometric Method - realistic model and the Trend Analysis - CAGR Method, which seems in line with the likely scenario, given the looming global and national economic horizon as well as Uttarakhand state-specific economic factors. For other categories, there are some issues that deter using the Econometric Method- multiple linear regression to determine the projected growth rate for certain categories like railway traction, government irrigation, PTW and LT industry.

Firstly, multiple linear regression involves future projections of explanatory variable like total GSDP, state industry GDP, etc. In this uncertain global environment, forecasting these

independent variables which are getting linked to the dependent variable - energy sales makes the inherent assumptions in the model weaker which affects the forecast outcome. This is the reason that three separate scenarios - optimistic, realistic and pessimistic have been considered. For example, the targeted national GDP growth rate in the draft 12th Five Year Plan Approach Paper was 9% and given the present economic scenario, the Planning Commission has cut the growth rate to 8.2%, while international rating agencies have a even lower outlook on GDP growth rate. Therefore, during very uncertain times, such as now, the forecasts have to be revised more frequently, which calls for the underlying assumptions also to be changed on a regular basis and have to be more dynamic.

Unavailability of data for explanatory variables which can be better linked to energy sales for certain categories has distorted the sales growth forecast for certain categories like - government irrigation, railway traction and LT industry. As mentioned before, from the historical data a strong correlation between agriculture GDP and, government irrigation and private tubewells/pumping sets could not be established. Hence, the projected growth rates obtained for these categories from the linear regression model are not consistent with the growth rate expected in the absence of data for other parameters which can be correlated more accurately. Similarly for railway traction sales forecast, in the absence of electrified railway route length data for Uttarakhand, total railway route length for Uttarakhand has been considered which does not have a significant relationship with railway traction sales. As a result of which the model forecasts a very high growth rate of 18.44% which is not realistic, whereas 5 year CAGR of 5.25% is a better indicator of the future growth rate. Inconsistency in LT industry GDP data (which shows a negative correlation between LT industry sales and LT industry GDP) has resulted in forecasting a much lower growth rate than what should be and hence, cannot be considered.

Generally, linear regression model is suitable when atleast 25-30 years of annual historical data is available. Hence, considering the inherent issues using Econometric Method forecast in this case and data unavailability for accurate forecasting for certain categories, the Petitioner has chosen restricted energy sales forecast consistent with future expectations because of the subjective rates assumed, wherever, required.

The Petitioner further submitted that as stated earlier, Uttarakhand being a power deficit State, the difference of total sales calculated from the CAGR method and the total available units for sale are considered and this difference in units for each year of the Control Period are proposed to

be distributed among all the categories of consumers in the ratio of the sales figure calculated earlier. Based on this approach, the adjusted sale (from CAGR method) for FY 2013-14 to FY 2015-16 as submitted by the Petitioner is as follows:

**Table 2.1: Projected Restricted Energy Sales (MU) for FY 2013-14 to FY 2015-16 (MU)**

Category	FY 2013-14	FY 2014-15	FY 2015-16
RTS-1: Domestic	1989.83	2156.63	2370.08
RTS-2: Non-Domestic	1038.46	1125.65	1237.76
RTS-3: Public Lamps	82.11	89.10	97.91
RTS-4: Private Tube-wells / Pumping	229.11	248.18	272.07
RTS-5: Government Irrigation System	167.26	181.12	198.90
RTS-6: Public Water Works	399.07	432.60	475.48
RTS-7: LT & HT Industry	5658.87	6128.43	6735.38
<b>LT Industry</b>	<b>338.36</b>	<b>366.70</b>	<b>403.01</b>
<b>HT Industry</b>	<b>5320.51</b>	<b>5761.73</b>	<b>6332.37</b>
RTS-8: Mixed Load	194.95	211.45	232.54
RTS-9: Railway Traction	9.36	10.14	11.19
<b>Total</b>	<b>9769.02</b>	<b>10583.30</b>	<b>11631.31</b>

### 2.1.2 Efficiency Parameters

#### Distribution Loss Trajectory:

The Petitioner submitted that it has proposed loss reduction schemes to achieve the distribution losses target of 16.32% by the end of FY 2015-16. The proposed distribution loss trajectory as submitted by the Petitioner is detailed hereunder:

**Table 2.2: Projected Distribution Loss Trajectory for the Control Period**

Particulars	FY 2011-12 (Actuals)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)	FY 2014-15 (Projected)	FY 2015-16 (Projected)
Distribution Loss	19.96%	19.00%	18.25%	17.28%	16.32%

#### Collection Efficiency

The Petitioner submitted that in FY 2011-12, the actual collection efficiency was recorded to be 93.06% and it is making efforts to improve its performance and efficiency by incurring proposed capital expenditure which has been dealt along with the capital expenditure plan. The Petitioner further submitted that it aims to achieve the collection efficiency level of 97% by the end of FY 2015-16.

**Table 2.3: Collection Efficiency for FY 2013-14 to FY 2015-16**

Particulars	FY 2011-12 (Actuals)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)	FY 2014-15 (Projected)	FY 2015-16 (Projected)
Collection Efficiency	93.06%	95.25%	96.00%	96.50%	97.00%

### 2.1.3 Availability of Power

The Petitioner has submitted that the quantum of power purchase for the first Control Period has been calculated as per the projected sales and distribution losses, as shown in the Table below:

**Table 2.4: Projected Power Purchase Quantum at UPCL periphery**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Distribution Losses (%)	18.25%	17.28%	16.32%
Restricted Sales (MU)	9769.02	10583.30	11631.31
Power Purchase to meet restricted demand at UPCL periphery (MU)	11949.87	12794.12	13899.75

The Petitioner has submitted the following sources of power to meet its power requirement during the first Control Period:

- UJVNL Generating Stations
- Central Sector Generating Stations (CSGS)
- Share of free power of GoU
- Independent Power Producers (IPP)
- Short-term power arrangements: Banking, open market purchase etc.

The Petitioner has submitted that it has considered allocation of firm power from CSGS considering Uttarakhand's firm allocation specified in the notification no. NRPC/SE(O)/Allocations/2012-13 dated 20 May, 2011 of Northern Regional Power Committee and its subsequent amendments. The Petitioner has submitted that it has considered the unallocated share for CSGS equivalent to monthly unallocated quota for FY 2011-12 arrived based on the monthly total percentage share of each Station and percentage allocation of firm share for each Station in Uttarakhand for FY 2011-12.

The projected availability from various firm sources of power and the associated cost estimates are discussed in subsequent paragraphs.

#### **2.1.3.1 Projected Availability from UJVNL Stations**

The Petitioner submitted that it has considered the availability from various generating stations of UJVNL as follows:

- Monthly availability from UJVNL Stations has been estimated based on 10 year Projections made available by UJVNL dated 08 August, 2012.
- Annual Generation from UJVNL Stations has been apportioned on each month of the year based on 4 year average of monthly generation in a particular month to the total Generation during the year.

#### **2.1.3.2 Projected Availability from NTPC Ltd. (NTPC)**

The Petitioner submitted that it has considered the availability from various generating stations of NTPC as follows:

- Monthly availability from NTPC Stations has been estimated based on the average of 3 year monthly PLF for NTPC Stations.
- The Auxiliary Consumption has been considered as specified in Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009.
- The monthly Generation from each Station has been taken based on firm and unallocated share of Uttarakhand.

#### **2.1.3.3 Availability of Power from NHPC Ltd. (NHPC)**

The Petitioner submitted that it has considered the availability from various generating stations of NHPC as follows:

- Monthly energy availability from various NHPC stations has been estimated based on monthly Design Energy for these Stations reduced by normative Auxiliary Consumption specified by Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and Uttarakhand's Firm and unallocated share of each Station in Uttarakhand.

**2.1.3.4 Availability of Power from THDC Stations**

The Petitioner submitted that it has considered the availability from various generating stations of THDC as follows:

- Availability from Koteswar has been considered based on annual Design Energy of the Station apportioned monthly in the proportion of monthly Design Energy for all NHPC Stations taken together to the annual Design Energy.
- Availability from Tehri HEP has been considered based on Program Energy.
- Auxiliary Consumption has been considered as per CERC Tariff Regulations, 2009.
- Free Power from the respective Stations has been projected separately based on Uttarakhand's percentage allocation of Power from these Stations.
- Monthly Generation from each Station is based on the firm and unallocated share of each Station in Uttarakhand.

**2.1.3.5 Availability of Power from SJVNL (Nathpa Jhakri) Stations**

The Petitioner submitted that it has considered the availability from various generating stations of SJVNL as follows:

- Monthly energy availability from Nathpa Jhakri Station of SJVNL based on monthly Design Energy reduced by normative Auxiliary Consumption specified by Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 and Uttarakhand's Firm and unallocated share of each Station in Uttarakhand.

**2.1.3.6 Availability of Power from NPCIL Stations**

The Petitioner submitted that it has considered the availability from various generating stations of NPCIL as follows:

- Monthly energy availability from NPCIL Stations based on actual monthly PLF of each Station in FY 2011-12.
- The estimated availability has been then reduced by Auxiliary Consumption of 10%.

- Monthly Generation from each Station is based on the firm and unallocated share of each Station in Uttarakhand.

#### ***2.1.3.7 Availability of Power from Vishnu Prayag HEP***

The Petitioner submitted that it has considered the availability from Vishnu Prayag HEP as follows:

- Monthly availability from Vishnuprayag HEP has been estimated based on actual power made available in FY 2011-12 and in the first 6 months of FY 2012-13.

#### ***2.1.3.8 Availability of Power from IPP Stations***

The Petitioner submitted that it has considered the availability from various IPP Stations as follows:

- Monthly availability from IPP Stations has been estimated based on the power actually made available by such Stations in FY 2011-12 and in the first 6 months of FY 2012-13.

#### ***2.1.3.9 Free Power of Government of Uttarakhand***

Government of Uttarakhand is entitled for 12% free power from the following Stations and, accordingly, the free power available from these stations has been considered by the Petitioner:

- Dhauliganga of NHPC
- Tanakpur of NHPC
- Tehri-I of THDC
- Koteswar of THDC
- Vishnuprayag of JP Hydro

#### ***2.1.3.10 Projected availability of Power from Upcoming Stations***

The Petitioner has considered the availability of power from upcoming Stations, expected to be commissioned during the first Control Period, as follows:

- Expected COD of the new Stations has been taken from sources like latest CEA reports, PPA signed with the Generating Companies and as per information made available by the Generators.



- Availability after COD has been projected taking into account norms of Auxiliary Consumption, expected PLF and Uttarakhand's share in Generation.

#### 2.1.3.11 Summarised Availability

Based on the above paras, the following Table summarises the total estimated and projected availability from various generating stations as submitted by the Petitioner for FY 2013-14 to FY 2015-16.

**Table 2.5: Summary of Power Availability for FY 2013-14 to FY 2015-16 (MU)**

Major Sources	FY 2013-14	FY 2014-15	FY 2015-16
UJVNL	4339.00	4401.00	4926.00
NTPC	2630.52	2630.52	2638.19
NHPC	370.06	370.06	370.06
THDC (including Koteswar)	136.89	136.89	136.89
NPCIL	207.29	207.29	207.82
SJVNL	32.84	32.84	32.84
Free Share of GoU	895.14	895.14	895.75
IPP Stations	336.27	336.27	337.19
Upcoming Stations	1014.9	1521.78	2530.25
<b>Total</b>	<b>9962.89</b>	<b>10531.77</b>	<b>12074.97</b>

#### 2.1.3.12 Transmission Losses

The Petitioner submitted that inter-State Transmission Losses and intra-State Transmission Losses for the first Control Period have been considered as 4% and 1.76% respectively in line with the Transmission Losses approved by the Commission in Tariff Order for FY 2012-13.

#### 2.1.3.13 Procurement of Deficit Energy

The Petitioner has submitted the Energy Balance for the years FY 2013-14 to FY 2015-16 as shown in the Table below:

**Table 2.6: Energy Balance for the years FY 2013-14 to FY 2015-16 (MU)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Gross energy procured from outside the State sources	5181.11	5708.09	6735.27
Inter-State Transmission Losses (%)	4.00%	4.00%	4.00%
Inter-State Transmission Losses (MU)	207.24	228.32	269.41
Net energy available from outside the State	4973.87	5479.77	6465.86
Add: Energy generated within the state	4989.03	5052.00	5609.12
Net energy available for use in the state	9962.89	10531.77	12074.97
Intra-State Transmission Losses (%)	1.76%	1.76%	1.76%
Intra-State Transmission Losses (MU)	175.35	185.36	212.52
<b>Energy available for sale to distribution licensee (A)</b>	<b>9787.55</b>	<b>10346.41</b>	<b>11862.45</b>
Sales (B)	9715.34	10569.83	11499.80
Distribution Loss	18.25%	17.28%	16.32%
<b>Energy requirement at DISCOM periphery (C)</b>	<b>11884.20</b>	<b>12778.61</b>	<b>13742.53</b>
<b>Surplus/Deficit at DISCOM Periphery (A-C)</b>	<b>-2096.66</b>	<b>-2432.20</b>	<b>-1880.07</b>
<b>Sales after adjusting inter-state sales</b>	<b>9769.02</b>	<b>10583.30</b>	<b>11631.31</b>
<b>Power Purchase after adjusting for deficit power</b>	<b>11949.87</b>	<b>12794.90</b>	<b>13899.68</b>

The Petitioner has submitted that as shown in the above Table, the availability from the existing Stations and upcoming Stations shall not be sufficient to meet the ever-increasing demand of the State. The Petitioner has submitted that it has projected monthly short-term purchase of power in the power deficit months of the first Control Period to be procured from short term sources. The Petitioner has submitted the projections of short term power requirement as shown in the Table below:

**Table 2.7: Projected availability from short-term sources to meet demand at State periphery (MU)**

Year	Restricted Demand	Unrestricted Demand
FY 2013-14	2201.06	2766.17
FY 2014-15	2492.35	3155.29
FY 2015-16	2073.72	2666.86

#### **2.1.4 Capital Expenditure Plan**

The Petitioner submitted that for improving the performance in terms of meeting the load growth, reduction of losses and reliability of supply, a detailed Capital Investment Plan has been worked out for the Control Period FY 2013-14 to FY 2015-16 which proposes an investment of Rs. 2355.37 Crore. The deployment of Capex as proposed by the Petitioner has been done under the following four benefit centres:

- (i) Load growth

- (ii) Loss reduction
- (iii) System reliability & safety improvement
- (iv) Creation of infrastructure facilities & other misc. works

The summary of various schemes along with the proposed capex under each benefit centres as submitted by the Petitioner is as follows:

(a) LOAD GROWTH

The Petitioner submitted that according to sales projection, it has considered a cumulative average growth rate of around 8.5%. The Petitioner has proposed the following capital investment:

- The Petitioner plans to add 357 MVA of capacity by establishing 39 sub-stations during the Control Period at a total cost of Rs. 253.56 Crore.
- The Petitioner plans to augment 59 Sub-stations during the Control Period at a total expenditure of Rs. 16.71 Crore.
- The Petitioner plans to provide 2100 pending PTW connections during the Control Period.
- The Petitioner plans to install 60 compact (11kV/0.44kV) sub-stations at a cost of Rs. 29.25 Crore.
- With the projected increase in number of consumers during the Control period, the Petitioner plans to install 3.25 Lakh single phase meters and 75000 three phase meters.
- The Petitioner further plans to lay 11 kV ABC and 11 kV LT lines during the Control Period.

**Table 2.8: Scheme wise Capital investment proposed for Load Growth (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Construction of 33/11 kV Sub-station and associated 33 kV and 11 kV lines	80.93	86.60	86.03
Augmentation of existing 33/11 kV Substations	5.30	5.89	5.53
Release of PTW Connections	11.86	13.05	14.35
Installation of Compact Sub-station (11 kV/0.44 kV)	13.93	15.32	
Installation of meters for giving new connection	30.92	37.74	45.76
Laying of 11 kV ABC	5.87	6.45	7.10
Laying of LT Lines	9.78	10.75	11.83
<b>Total</b>	<b>158.59</b>	<b>175.80</b>	<b>170.60</b>

(b) LOSS REDUCTION

To achieve the distribution loss target, the Petitioner has proposed the following capital investment:

- Installation of a total of 100 capacitor Bank at 33/11 kV during the Control Period at a cost of Rs. 20.00 Crore.
- R-APDRP Works (Part A and Part B)
- Install around 100, 33 kV meters and 400, 11 kV meters.
- Shifting of around 52500 single phase connections and 7500 three phase connections outside consumer premises.
- Replacement of around 75000 single phase meters and 1000 three phase mechanical meters.
- Around 3000 km of LT ABC to reduce theft.
- Installation of 450 meters on 100 kVA DTs, 450 meters on 250 kVA DTs and 150 meters on 400 kVA DTs during the Control Period.
- Procurement of High Value Consumer Management System (HVCMS).

**Table 2.9: Scheme wise Capital investment proposed for Loss Reduction (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Installation of Capacitor Bank at 33/11 kV sub-station	10.00	10.00	0.00
R-APDRP Part A	37.60	0.00	0.00
R-APDRP Part B	150.00	242.63	238.88
Installation of double metering of High Voltage consumers	1.96	1.43	3.39
Shifting of single phase and three phase meters outside the consumer premises	1.99	2.19	2.41
Replacement of Mechanical meters with Electronic meters and Installation of Electronic Meters in un-metered connections	5.41	5.38	5.91
Implementation of Automated Meter Reading (AMR ) meters	6.26	2.58	0.95
Laying of LT ABC in theft prone areas	78.21	86.03	0.00
DT metering	1.14	1.25	1.38
Replacement of Defective meters	14.05	13.31	12.27
Procurement of HVCMS	0.20	0.00	0.00

(c) RELIABILITY and SAFETY IMPROVEMENT

- The Petitioner plans to install a total of 13045 additional transformers with varying capacity during the Control Period.

- The Petitioner plans to install a total of 18000 protection system on transformers including fencing around the transformers during the Control Period.
- The Petitioner plans to replace old low length poles with high length poles, reconductoring and strengthening of LT & 11 kV lines, installation of guard wires at crossings and over residential buildings, etc. to increase the safety of the consumers and reduce breakdowns.
- The Petitioner plans to lay around 50 km of 11 kV underground cables in the three year period which will help in reduction of breakdowns and increase the reliability and quality of power.
- The Petitioner plans to spend Rs. 10 Crore during the Control Period on Smart Grid Systems.

**Table 2.10: Scheme wise Capital investment proposed for reliability and safety improvement (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Installation of additional distribution transformers	241.54	234.94	240.78
Installation of LT protection system on transformers and fencing of transformers	29.33	21.51	23.66
Installation of poles and guard wires, reconducting of line etc.	39.95	31.76	0.00
Installation of 11 kV underground cables	6.52	7.17	7.89
Smart Grid projects for industrial areas	0.00	10.00	10.00

(d) CREATION OF INFRASTRUCTURE FACILITIES and OTHER MISCELLANEOUS WORKS

- The Petitioner plans to introduce a total of 10000 pre-paid consumer meters for temporary connections for its consumers during the Control Period.
- The Petitioner plans to install Video conferencing for faster implementation of policy decisions. Further, to increase the collection efficiency, the Petitioner plans to increase the number of cash collection centers, introduce online bill payment options, increase consumer care centers, etc.
- The Petitioner plans to procure 4 meter testing vans and handheld meter testing instruments.
- The Petitioner is also planning to procure new vehicles, increase office infrastructure, IT infrastructure etc. during the Control Period.

**Table 2.11: Scheme wise Capital investment proposed for creation of infrastructure facilities and other miscellaneous works (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Prepaid Metering	4.04	4.44	0.00
Video conferencing	0.20	0.00	0.00
Consumer care centers, E-payment of bills and Cash Collection centers	0.25	0.25	0.25
Procurement of Sub-station and consumer meter testing equipments	0.50	0.50	0.00
New and emerging technologies and miscellaneous works like, new vehicles, office infrastructure, IT infrastructure etc.	0.50	0.50	0.50

The summary of proposed capital expenditure and the capitalization in the respective year as submitted by the Petitioner is detailed in the Table below:

**Table 2.12: Summary of proposed capital expenditure and capitalisation (Rs. Crore)**

Particulars	Proposed Capital Expenditure	Proposed Capitalisation
FY 2013-14	788.23	761.48
FY 2014-15	851.67	992.88
FY 2015-16	715.47	781.47
<b>Total</b>	<b>2355.37</b>	<b>2535.83</b>

## 2.2 MYT for the Control Period from FY 2013-14 to FY 2015-16

Regulation 5 of the UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011, provides for the applicant to submit Multi Year Tariff Petition for determination of Aggregate Revenue Requirement and Tariffs for first year of the Control Period for approval. Accordingly, the Petitioner has submitted the MYT Petition including the Past Adjustments and Truing Up. The projections in the MYT Petition are based on the projections of the MYT Business Plan. The head wise summary of the MYT Petition is elaborated below:

### 2.2.1 Past Adjustments

The Petitioner submitted that GoU vide its Order No.-117/I(2)/2011-05/19/2002, dated April 27, 2012 had approved the Transfer Scheme of assets and liabilities executed between UPPCL and the Petitioner company on October 12, 2003.

The Petitioner submitted that the Commission did not accept its claims on the basis of the values given in the Transfer Scheme while approving the ARR of previous years. The Petitioner has requested for depreciation on the opening value of GFA as per Transfer Scheme, on the

capitalization not considered by the Commission in Tariff Orders and on the assets created out of grants.

The Petitioner submitted that it has computed the impact on Depreciation and Return on Equity / Capital along with the carrying cost from FY 2001-02 to FY 2012-13 as Rs. 1581.24 Crore. Since, the recovery of such a huge amount in FY 2013-14 alone would lead to a tariff shock to consumers, therefore, it has proposed that the entire impact of scheme should be treated as regulatory asset and should be recovered over a period of three years. The computation of recovery of the claim over a period of three years as submitted by the Petitioner is as follows:

**Table 2.13: Recovery of Claims (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Opening amount	1581.24	1123.71	599.83
Recovery during the year	640.38	640.38	640.38
Closing amount	940.86	483.32	(40.55)
Average	1261.048	803.52	279.64
Interest Rate	14.50%	14.50%	14.50%
Carrying Cost	182.85	116.51	40.55
Final Closing Amount	1123.71	599.83	0

The Petitioner has proposed the recovery of Rs. 640.38 Crore in FY 2013-14 by imposing a regulatory surcharge of 11.37%, which would be levied as a percentage of total fixed charges and energy charges for all the categories of consumers and the remaining unrecovered amount of Rs. 1280.77 Crore would be recovered over next two subsequent years, i.e. FY 2014-15 and FY 2015-16.

### 2.2.2 *Truing-up for FY 2010-11*

The Commission in exercise of power vested under it under section 181 read with sections 61, 62 & 86 of the Electricity Act, 2003 issued the Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Truing up of Tariff) Regulations, 2008 on 11-03-2008. These Regulations provides for Truing up of approved expenses and revenue on the basis of actuals (provisional/ audited) for the same. These Regulations also specify the procedure for Truing up.

The Petitioner submitted that the Commission vide its Order dated April 11, 2012 had Trued-up the expenses and revenue for FY 2009-10 and also carried provisional Truing up for FY 2010-11 based on provisional data in the absence of audited data for the said period at that time. The annual accounts for the FY 2010-11 has since been audited and on the basis of this audited data, the Petitioner has requested the Commission to finally true up the expenses and revenue for FY

2010-11. The computations of revenue and expenses under various heads alongwith the relevant records and supporting documents with reasons and justifying such calculations under each head have been made. The head-wise details of variations in expenses and revenue with justification are enumerated below.

#### **2.2.2.1 Power Purchase Expenses**

The Petitioner has considered the actual power purchase expenses for FY 2010-11 on the following basis:

- a) Power purchase expenses are computed as per the actual bills received from the generating companies.
- b) Energy purchased through U.I Over-drawal during the year is considered towards State consumption.
- c) Revenue received towards energy charges for U.I Under-drawal has been reduced from the power purchase cost
- d) Cost of free power has been considered at a rate equivalent to the average power purchase rate from all firm sources except GoU free power. This is in line with the methodology adopted by the Commission in its previous Tariff Orders.
- e) Hon'ble Central Electricity Regulatory Commission has revised the Tariff of various central generating stations, accordingly, the arrears amount has also been considered for such stations.
- f) Transmission charges payable to Power Grid Corporation of India Limited (PGCIL) and Power Transmission Corporation of Uttarakhand Limited (PTCUL) are taken on the basis of transmission charges paid to the respective company for the year.

The details of power purchase expenses are as follows:



**Table 2.14: Power Purchase Expenses for FY 2010-11**

Particulars	Power Purchased @ State periphery (MU)	Cost (Rs. Crore)
NTPC	2735.54	688.24
NPCL	179.52	49.32
NHPC (Excl Tanakpur & Dhauliganga)	430.26	119.45
UJVNL	4414.69	647.85
SJVNL	46.23	13.41
THDC( Excl Free power from Tehri & Koteshwar)	96.99	49.32
IPPS	231.46	71.87
Open market purchase	229.94	101.43
UI Received	617.36	228.95
Banking	32.01	
<b>Sub-Total</b>	<b>9014.00</b>	<b>1969.83</b>
<b>Free power</b>		
Tanakpur	43.12	8.75
Dhauliganga	129.12	26.20
Tehri	357.47	72.53
Vishnuprayag	200.79	40.74
Sub-Total	730.50	148.21
<b>Transmission and Other Cost</b>	<b>0.00</b>	<b>237.42</b>
<b>Less: UI Received</b>	<b>294.26</b>	<b>63.01</b>
<b>Total Power Purchase Cost</b>	<b>9450.24</b>	<b>2292.45</b>

The variation in power purchase expenses as claimed by the Petitioner and as approved by the Commission is as follows:

**Table 2.15: Variation in Power Purchase Expenses for FY 2010-11 (Rs. Crore)**

Particulars	Approved by UERC	Actual as Per Audited Account	Variation
Power Purchase Expenses	2293.36	2292.45	0.91

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

O&M Expenses include Repairs and Maintenance Expenses, Employee Costs and Administration & General Expenses, which are based on actual expenses as shown in the Annual Accounts for the year. O&M Expenses have been claimed net of capitalization. The variation in O&M Expenses as claimed by the Petitioner and as approved by the Commission is as follows:

**Table 2.16: Variation in O&M Expenses for FY 2010-11 (Rs. Crore)**

Particulars	Approved by UERC	Actual as Per Audited Account	Variation
<b>Operation and Maintenance Expenses</b>	<b>286.32</b>	<b>286.39</b>	<b>-0.07</b>
<i>Less: Capitalisation</i>			

### 2.2.2.3 Interest and Finance Charges

The Petitioner has claimed Interest expenses on the following basis:

- Actual interest accrued during the year has been claimed which is net off capitalisation.
- No interest on GPF loans and UPPCL Loans has been considered.
- Interest on REC (Old) loans has been taken in accordance with the interest determined by the Commission in Annexure 7 of the Tariff Order of FY 2009-10 issued by UERC.
- Government Guarantee fees is considered on actual basis.

The details of Interest and Finance charges as claimed by the Petitioner are as follows:

**Table 2.17: Interest and Finance charges for FY 2010-11 (Rs. Crore)**

Particulars	Approved by UERC	Actual
APDRP	1.30	1.33
District Plan	3.19	2.22
MNP	7.42	1.64
PMGY	0.25	6.11
State Plan	3.45	2.40
AREP	-	1.70
RGGVY	0.42	0.00
Others	6.95	7.35
<b>Total Interest on GoU Loan</b>	<b>22.98</b>	<b>22.75</b>
Interest on REC (Old) Loans	30.39	23.55
Rebates/Discounts allowed to consumers	0.13	0.13
Interest on consumers security deposit	16.58	16.58
GoU Guarantee Fees	2.73	1.40
Other financial & Bank charges	4.67	4.67
<b>Gross</b>	<b>77.48</b>	<b>69.07</b>
Less: Capitalization	0.00	2.30
<b>Net Charges</b>	<b>77.48</b>	<b>66.77</b>

Variation in Interest and Finance charges as claimed by the Petitioner and as approved by the Commission is as follows:

**Table 2.18: Variation in Interest and Finance Charges for FY 2010-11 (Rs. Crore)**

Particulars	Approved by UERC	Actual	Variation
Interest and Finance charges	77.48	69.07	8.41
Less: Capitalization	0.00	2.30	2.30
<b>Net off Capitalisation</b>	<b>77.48</b>	<b>66.77</b>	<b>10.71</b>

### 2.2.2.4 Depreciation

The Petitioner submitted that the Commission in its Tariff Order of FY 2012-13 had allowed depreciation on opening value of GFA less value of the assets funded through grant at the normative rates specified by the Commission in its UERC (Terms and Conditions for determination

of distribution tariff), Regulations, 2004.

The value of depreciation allowed by the Commission for FY 2010-11 was Rs 21.95 Crore.

The Commission in its previous Orders had not recognized the value of GFA amounting to Rs 441.92 Crore due to non-finalisation of transfer scheme. Accordingly, the Petitioner for the purpose of True-up of FY 2010-11 also requests the Commission to allow the same value. The impact of transfer scheme which has now been approved by the GoU has been dealt with in the earlier Section.

The Table below details the variation in the Depreciation approved by the Commission in the Tariff Order of FY 2012-13 against the depreciation now claimed by the Petitioner for FY 2010-11.

Variation in depreciation as claimed by the Petitioner and as approved by the Commission is as follows:

**Table 2.19: Variation in Depreciation for FY 2010-11 (Rs. Crore)**

Particulars	Approved by UERC	Actual	Variation
Depreciation	21.95	21.95	0.00

#### **2.2.2.5 Provision for Bad & Doubtful Debts**

The Petitioner has claimed Provision for bad and doubtful debts @ 2.5% of the tariff revenue. Considering the Tariff Revenue at Rs. 2509.20 Crore, the figure for Provision for Bad and Doubtful Debts works out to Rs. 67.77 Crore. The Petitioner submitted that annual provision towards bad & doubtful debts is an accepted method of accounting and considering the peculiarity of retail supply of electricity business and the same has also been recognized by the SERCs. The Petitioner further submitted that, considering the geographical spread of the large consumer base across the State including a large part of the same prevailing in the difficult terrain and hilly region and the problem of realizing energy dues from retail consumers, the Petitioner requested the Commission to allow provision for bad and doubtful debts on actual basis.

#### **2.2.2.6 Interest on Working Capital**

The Petitioner has worked out Interest on Working Capital in line with the methodology adopted by the Commission during earlier Truing up exercise as shown below:

**Table 2.20: Interest on Working Capital for FY 2010-11 (Rs. Crore)**

Particulars	Amount
Operation and Maintenance Expenses (one month)	23.87
Collection Inefficiency (5%)	100.37
Receivables (2.5 months)	522.75
<b>Sub-total</b>	<b>646.98</b>
<b>Less: Adjustment for security deposits &amp; Credit by Power Purchase</b>	<b>464.56</b>
<b>Net working capital</b>	<b>182.43</b>
<b>Interest on working capital @ 11.75%</b>	<b>21.44</b>

Variation in Interest on working capital as claimed by the Petitioner and as approved by the Commission is as follows:

**Table 2.21: Variation in Interest on Working Capital for FY 2010-11 (Rs. Crore)**

Particulars	Approved by UERC	Claimed	Variation
<b>Interest on Working Capital</b>	<b>14.06</b>	<b>21.44</b>	<b>-7.38</b>

#### 2.2.2.7 Return on Equity

The Petitioner has computed Return on equity based on opening equity of Rs. 42.20 Crore approved by the Commission for FY 2010-11 in the Tariff Order of FY 2012-13 and also on the liability for CPSU dues, part of which has been converted to Equity of Rs. 481.03 Crore less opening GFA of Rs. 108.26 Crore which were transferred to PTCUL. Thus, the opening equity considered for FY 2010-11 is Rs. 414.97 Crore.

**Table 2.22: Return on Equity claimed for FY 2010-11 (Rs. Crore)**

Particular	Actual
Opening Equity	414.97
Additions	129.04
Closing Equity	544.01
Average	479.49
Rate of Return (%)	14.00%
<b>Return on Equity</b>	<b>67.13</b>

The table below details the variation in return on equity approved by the Commission in the Tariff Order of FY 2012-13 against the return, which has now been claimed by the Petitioner for FY 2010-11.

**Table 2.23: Variation in Return on Equity (Rs. Crore)**

Particulars	Approved by UERC	Actual	Variation
<b>Return on Equity</b>	<b>5.91</b>	<b>67.13</b>	<b>-61.22</b>

#### 2.2.2.8 Tariff Revenue

The Petitioner submitted that the tariff revenue from sale of energy to State consumers has

been considered as per actual value of sales reflected in the Audited Annual Accounts of FY 2010-11. The distribution losses claimed in the Petition were 21.61% for FY 2010-11, while 19% were determined by the Commission. Further, the Petitioner has also considered Deemed revenue for excess distribution losses as per the direction of the Commission.

**Table 2.24: Tariff Revenue for FY 2010-11 (Rs. Crore)**

Particulars	Amount
Tariff Revenue at 21.61% loss level	2509.20
Deemed revenue on excess loss of 2.61 (21.61 - 19) % at Rs. 3.46/ Unit	83.40
<b>Total Tariff Revenue</b>	<b>2592.60</b>

Variation in Tariff Revenue as claimed by the Petitioner and as approved by the Commission is as follows:

**Table 2.25: Variation in Tariff Revenue for FY 2010-11 (Rs. Crore)**

Particulars	Approved by UERC	Actual	Variation
<b>Tariff Revenue</b>	<b>2718.44</b>	<b>2592.60</b>	<b>125.84</b>

#### 2.2.2.9 Non-Tariff Revenue

The Petitioner has considered the income from non-tariff sources, such as late payment surcharge, interest on deposits and other miscellaneous income as per the annual accounts for the FY 2010-11. Variation in Non-Tariff Revenue as claimed by the Petitioner and as approved by the Commission is as follows:

**Table 2.26: Non-Tariff Revenue for FY 2010-11 (Rs. Crore)**

Particulars	Approved by UERC	Actual	Variation
(A) Misc Income from consumers			
Misc Charges from consumers	9.77	132.52	-122.75
Delayed payment surcharge	8.21	8.21	0.00
<b>Sub-total (A)</b>	<b>17.98</b>	<b>140.73</b>	<b>-122.75</b>
(B) Other Misc charges			
Income from investments	9.35	9.35	0.00
Rebate	28.85	28.86	-0.01
income from Misc receipts	2.95	2.96	-0.01
Other	0.12	0.12	0.00
<b>Sub-total (B)</b>	<b>41.27</b>	<b>41.29</b>	<b>-0.02</b>
(C) Trading/UI			
Interstate sales / Grid Sale handling charge	0.00	0.00	0.00
<b>Total (A+B)</b>	<b>59.25</b>	<b>182.02</b>	<b>-122.77</b>

**2.2.2.10 ARR & Revenue for the FY 2010-11**

Based on above submissions, the summary of expenses and revenue for FY 2010-11 as approved by the Commission and as claimed by Petitioner is as follows:

**Table 2.27: Summarised ARR, Revenue and Surplus for FY 2010-11 (Rs. Crore)**

Particular	Approved by UERC	Actual as Per Audited Account	Variation
<b>A Expenditure</b>			
Power purchase expenses	2055.93	2055.03	-0.90
Transmission Charges-PGCIL	125.93	125.93	0.00
Transmission Charges-PTCUL	111.50	111.50	0.00
O&M Charges	286.32	286.39	0.07
Interest Charges	77.48	66.77	-10.71
Depreciation	21.95	21.95	0.00
Interest on Working Capital	14.06	21.44	7.38
<b>B Gross Expenditure</b>	<b>2693.17</b>	<b>2689.00</b>	<b>-4.17</b>
Other expenses/Appropriations			
Provision for bad and doubtful debts	0.00	67.77	67.77
Return on equity	5.91	67.13	61.22
<b>C. Net Expenditure</b>			
Less: Non Tariff income	59.25	182.02	122.77
<b>D. Net annual revenue requirements</b>	<b>2639.81</b>	<b>2641.88</b>	<b>2.07</b>
<b>E. Revenue at existing tariffs</b>	<b>2631.95</b>	<b>2509.20</b>	<b>-122.75</b>
<b>F. Revenue Surplus/(Gap)</b>	<b>-7.86</b>	<b>-132.69</b>	<b>-124.83</b>
<b>G. Other adjustment</b>			<b>0.00</b>
Revenue from additional sale	86.49	83.40	-3.09
<b>H. Adjusted Revenue surplus/(Gap)</b>	<b>78.63</b>	<b>-49.28</b>	<b>-127.91</b>

The Petitioner requested the Commission to approve the gap of Rs 49.28 Crore against the surplus of Rs 78.63 Crore determined by the Commission.

**2.2.3 Provisional Truing-up for FY 2011-12**

The Petitioner has requested the Commission to True-up the expenses and revenue for FY 2011-12 on the basis of provisional data. The Petitioner has submitted the computations of revenue and expenses under various heads along with the relevant records and supporting documents with reason and justifications under each head. The head-wise details of costs with justification are enumerated below.

### 2.2.3.1 Power Purchase Expenses

The Petitioner has considered the power purchase expenses for FY 2011-12 on the following basis:

- a) Power purchase expenses are computed as per the actual bills received from the generating companies.
- b) Energy purchased through U.I Over-drawal during the year is considered towards State consumption.
- c) Revenue received towards energy charges for U.I Under-drawal has been reduced from the power purchase cost
- d) Cost of free power has been considered at a rate equivalent to the average power purchase rate from all firm sources except GoU free power. This is in line with the methodology adopted by the Commission in its previous Tariff Orders.
- e) Hon'ble Central Electricity Regulatory Commission has revised the Tariff of various stations of central generating stations, accordingly, the arrears amount has also been considered for such stations.
- f) Transmission charges payable to Power Grid Corporation of India Limited (PGCIL) and Power Transmission Corporation of Uttarakhand Limited (PTCUL) are taken on the basis of transmission charges paid to the respective company for the year.

The details of power purchase expenses are as follows:

**Table 2.28: Power Purchase Expenses for FY 2011-12**

Particular	Power Purchased at State Periphery (MU)	Cost (Rs. Crore)
NTPC	2582.87	804.16
NPCL	216.63	78.06
NHPC (Excl Tanakpur & Dhauliganga)	425.18	200.70
UJVNL	4732.32	664.47
SJVNL	35.53	9.80
THDC( Excl Free power from Tehri & Koteshwer)	139.92	66.54
IPPS	318.32	475.05
Open market purchase	941.48	36.56
UI Received	499.43	193.09
Banking		
Sub-Total	9891.68	2528.44
<b>Free power</b>		

**Table 2.28: Power Purchase Expenses for FY 2011-12**

Particular	Power Purchased at State Periphery (MU)	Cost (Rs. Crore)
Tanakpur	46.08	10.77
Dhauliganga	131.65	30.76
Tehri	457.32	106.84
Koteshwar	64.10	14.97
Vishnuprayag	234.85	54.86
Sub-Total	934.00	218.20
<b>Transmission and Other Cost</b>	<b>0</b>	<b>395.85</b>
<b>Less: UI Received</b>	<b>162.87</b>	<b>18.04</b>
Banking	193.13	
<b>Total Power Purchase Cost</b>	<b>10469.70</b>	<b>3124.44</b>

The variation in power purchase expenses as approved by the Commission and as claimed by the Petitioner is as follows:

**Table 2.29: Variation in Power Purchase Expenses for FY 2011-12 (Rs. Crore)**

Particulars	Approved by UERC	Claimed	Variation
<b>Power Purchase Expenses</b>	<b>2441.08</b>	<b>3124.44</b>	<b>-683.36</b>

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

The O&M Expenses include Repairs and Maintenance Expenses, Employee Costs and Administration & General Expenses. O&M Expenses have been claimed by the Petitioner net of capitalization. The variation in O&M Expenses as approved by the Commission and as claimed by the Petitioner is as follows:

**Table 2.30: Variation in O&M Expenses for FY 2011-12 (Rs. Crore)**

Particulars	Approved by UERC	Actual	Variation
<b>Net Operation and Maintenance Expenses</b>	<b>272.53</b>	<b>296.83</b>	<b>-24.30</b>
<b>Less: Capitalisation</b>			

#### 2.2.3.3 Interest and Finance Charges

The Petitioner has claimed Interest expenses on the following basis:

- Actual interest accrued during the year has been claimed which is net off capitalisation
- No interest on GPF loans and UPPCL Loans has been considered
- Interest on REC (Old) loans has been taken in accordance with the interest determined by the Commission in Annexure 7 of the Tariff Order of FY 2009-10 issued by UERC.
- Government Guarantee fees is considered on actual basis.

The details of Interest and Finance charges as claimed by the Petitioner are as follows:



**Table 2.31: Interest and Finance charges for FY 2011-12 (Rs. Crore)**

Particulars	Claimed
APDRP	2.03
District Plan	3.22
MNP	0.72
PMGY	5.63
State Plan	2.81
AREP	1.46
RGVY	0.00
Others	7.53
<b>Total Interest on GoU Loan</b>	<b>23.39</b>
Interest on REC (Old) Loans	22.50
Rebates/Discounts allowed to consumers	14.38
Interest on consumers security deposit	20.36
GoU Guarantee Fees	2.50
Other financial & Bank charges	9.87
<b>Gross</b>	<b>92.99</b>
Less: Capitalisation	4.50
<b>Net Charges</b>	<b>88.49</b>

Variation in Interest and Finance charges as claimed by the Petitioner and as approved by the Commission is as follows:

**Table 2.32: Variation in Interest and Finance Charges for FY 2011-12 (Rs. Crore)**

Particulars	Approved by UERC	Actual	Variation
Interest and Finance charges	71.08	92.99	-21.91
Less: Capitalisation	0.00	4.5	-4.5
<b>Net off Capitalisation</b>	<b>71.08</b>	<b>88.49</b>	<b>-17.41</b>

#### 2.2.3.4 Depreciation

The Petitioner submitted that the Depreciation has been calculated asset-wise based on the Opening and Closing gross fixed assets specified in the provisional accounts of FY 2011-12, i.e. Rs. 2760.30 Crore and Rs. 3097.49 Crore, respectively. From FY 2011-12 onwards, the Petitioner has computed depreciation assuming that the effect of transfer scheme has been executed from this financial year.

Depreciation has been calculated on the average basis on the normative rates specified by the Commission in UERC (Terms and Conditions for determination of distribution tariff), 2011.

The Table below details the variation in the Depreciation approved by the Commission in the Tariff Order of FY 2011-12 against the depreciation now claimed by the Petitioner for FY 2011-12.

**Table 2.33: Variation in Depreciation for FY 2011-12 (Rs. Crore)**

Particulars	Approved by UERC	Claimed	Variation
Depreciation	27.95	112.66	-84.71

#### **2.2.3.5 Provision for Bad & Doubtful Debts**

The Petitioner submitted that annual provisioning towards bad & doubtful debts is an accepted method of accounting and considering the peculiarity of retail supply of electricity business, the same has also been recognized by the State Regulatory Commissions. The amount, if any, written off towards bad debts is only adjusted against the accumulated provisions in the books, irrespective of the actual amount of bad debts during any particular financial year.

Considering the geographical spread of the large consumer base across the State including a large part of the same prevailing in the difficult terrain and hilly region and the problem of realizing energy dues from retail consumers, the Petitioner requested the Commission to allow provision for bad and doubtful debts on actual basis.

The actual collection efficiency for FY 2011-12 comes out to 92.67%, accordingly, the collection inefficiency come to 7.33%. In the service business like electricity sector where the consumer base is large, a lot of consumers default on payment and this amount remain outstanding in the books of accounts. As per the actual practice also, the Petitioner makes a provision of 5% in the accounts. The Petitioner also requests the Commission to allow provision for bad debts on actual basis.

However, the Petitioner in its present Petition has calculated provision for bad debts at 2.50% on the actual revenue of Rs. 2830.57 Crore for FY 2011-12 which translates to Rs. 76.04 Crore.

#### **2.2.3.6 Interest on Working Capital**

The Petitioner has worked out Interest on Working Capital in line with the methodology adopted by the Commission during earlier Truing up exercise as shown below:

**Table 2.34: Interest on Working Capital for FY 2011-12 (Rs. Crore)**

Particular	Claimed
O&M Expenses (one month)	24.74
Collection Inefficiency	84.92
Receivables (2.50 months)	589.70
<b>Sub-Total</b>	<b>699.36</b>
Less : Adjustment for security deposits & credit by power purchase	599.69
<b>Net Working Capital</b>	<b>99.67</b>
Interest Rate (Short-term PLR)	13.25%
<b>Interest on Working Capital</b>	<b>13.21</b>

Variation in Interest on working capital as approved by the Commission and as claimed by the Petitioner is as follows:

**Table 2.35: Variation in Interest on Working Capital for FY 2011-12 (Rs. Crore)**

Particulars	Approved by UERC	Claimed	Variation
<b>Interest on Working Capital</b>	<b>8.02</b>	<b>13.21</b>	<b>-5.19</b>

#### 2.2.3.7 Return on Equity

The Petitioner has claimed Return on Equity on Equity base of Rs. 594.59 Crore, which works out to Rs. 83.24 Crore. The Table below details the Return on Equity calculated for FY 2011-12.

**Table 2.36: Return on Equity (Rs. Crore)**

Particulars	Claimed for FY 2011-12
	Claimed
Opening Equity	544.01
Additions	101.16
Closing Equity	645.16
Average	594.59
Rate of Return (%)	14.00%
Return on Equity	83.24

The Table below details the variation in return on equity approved by the Commission in the Tariff Order of FY 2012-13 against the return now claimed by the Petitioner for FY 2011-12.

**Table 2.37: Variation in Return on Equity (Rs. Crore)**

Particulars	Approved by UERC	Claimed	Variation
<b>Return on Equity</b>	<b>7.47</b>	<b>83.24</b>	<b>-75.78</b>

#### 2.2.3.8 Tariff Revenue

The tariff revenue from sale of energy to State consumers has been considered as per actual

value of sales reflected in the Provisional Annual Accounts for FY 2011-12. The distribution losses claimed in the Petition were 19.96% for the FY 2011-12, as against 18% approved by the Commission. Further, the Petitioner has also considered Deemed revenue for excess distribution losses at an ABR of Rs 3.43 per unit.

**Table 2.38: Tariff Revenue for FY 2011-12 (Rs. Crore)**

Particulars	Amount
Tariff Revenue at 19.96% loss level	2830.57
Deemed revenue on excess loss of 2.61 % (19.96-18)%	69.31
<b>Total Tariff Revenue</b>	<b>2899.88</b>

Variation in Tariff Revenue as approved by the Commission and as claimed by the Petitioner is as follows:

**Table 2.39: Variation in Tariff Revenue for FY 2011-12 (Rs. Crore)**

Particulars	Approved by UERC	Claimed	Variation
<b>Tariff Revenue</b>	<b>2804.70</b>	<b>2899.88</b>	<b>-95.18</b>

#### 2.2.3.9 Non-Tariff Revenue

The Petitioner has considered the income from non-tariff sources, such as late payment surcharge, interest on deposits and other miscellaneous income as per the annual accounts for the FY 2011-12. The details of Non-Tariff Revenue showing the variation from the values as approved by the Commission are as follows:

**Table 2.40: Variation in Non Tariff Revenue for FY 2011-12 (Rs. Crore)**

Particulars	Approved by UERC	Actual	Variations
<b>(A) Misc Income from consumers</b>			
Misc Charges from consumers	1.40	189.53	-188.13
Delayed payment surcharge	10.30	8.92	1.38
<b>Sub-total (A)</b>	<b>11.70</b>	<b>198.45</b>	<b>-186.75</b>
<b>(B) Other Misc charges</b>			
Income from investments	1.50	85.48	-83.98
Rebate	17.00	47.49	-30.49
Income from Misc receipts	5.00	3.96	1.04
Other	0.00	0.13	-0.13
<b>Sub-total (B)</b>	<b>23.50</b>	<b>137.07</b>	<b>-113.57</b>
<b>(C) Trading/UI</b>			
Interstate sales / Grid Sale handling charge	0.00	0.00	0.00
<b>Total (A+B)</b>	<b>35.20</b>	<b>335.51</b>	<b>-300.31</b>

#### 2.2.3.10 ARR & Revenue for the FY 2011-12

Based on above submissions, the summary of expenses and revenue for the FY 2011-12 as

approved by the Commission and as claimed by Petitioner is as follows:

**Table 2.41: Summarised ARR, Revenue and Surplus for FY 2011-12 (Rs. Crore)**

Particulars	Approved by UERC	Claimed	Variations
<b>A Expenditure</b>			
Power purchase expenses	2,195.91	2728.59	532.68
Transmission Charges-PGCIL	113.35	211.02	97.67
Transmission Charges-PTCUL	131.82	184.82	53.00
O&M Charges	272.52	296.83	24.31
Interest Charges	71.08	88.49	17.41
Depreciation	27.95	112.65	84.70
Interest on Working Capital	8.02	13.21	5.19
<b>B Gross Expenditure</b>	<b>2,820.65</b>	<b>3635.62</b>	<b>814.97</b>
<b>Other expenses/Appropriations</b>			
Provision for bad and doubtful debts	0.00	76.04	76.04
Return on equity	7.47	83.24	75.77
Carrying Cost of deficit	3.61	0.00	-3.61
<b>C. Net Expenditure</b>			
Less: Non Tariff income	35.20	335.51	300.31
<b>D. Net annual revenue requirements</b>	<b>2,796.53</b>	<b>3459.39</b>	<b>662.86</b>
<b>E. Revenue at existing tariffs</b>	<b>2,804.70</b>	<b>2830.57</b>	<b>25.87</b>
<b>F. Revenue Surplus/Gaps</b>	<b>8.17</b>	<b>-628.82</b>	<b>-636.99</b>
<b>G. Other adjustment</b>			
Revenue from additional sale	0.00	69.31	69.31
<b>H. Adjusted Revenue surplus/ (Gap)</b>	<b>8.17</b>	<b>-559.50</b>	<b>-559.50</b>

#### 2.2.3.11 Total Gap including Carrying Cost

The total Gap for FY 2010-11 and FY 2011-12 as submitted by the Petitioner works out to be Rs. 608.78 Crore.

The Petitioner requested the Commission to allow carrying cost on the same. The working of carrying cost as submitted by the Petitioner is based on the following:

- Opening Gap of Rs. 215.80 Crore has been considered based on the gap computed by the Commission till FY 2008-09 in the Tariff Order of FY 2011-12.
- Addition in Gap in FY 2009-10 has been taken based on the gap determined by the Commission in the Tariff Order of FY 2011-12 of Rs. 245.28 Crore for FY 2009-10.
- Opening gap for subsequent years has been considered equivalent to the closing gap

of the previous year.

- d) Carrying Cost has been calculated on the average gap.
- e) The rate of interest has been considered equivalent to the SBI PLR as on April 1 of the that Financial Year
- f) No carrying cost has been considered for FY 2013-14 although the recovery of the gap would be spread over the year, therefore, it requested the Commission to consider an interest rate for calculating the carrying cost on average basis in FY 2013-14.

The Summary of Total Gap for FY 2010-11 and FY 2011-12 including carrying cost as submitted by the Petitioner is detailed below:

**Table 2.42: Total Gap for FY 2010-11 and FY 2011-12 (Rs. Crore)**

Particulars	Amount
Gap for FY 2010-11 as per audited accounts	(49.28)
Gap for FY 2011-12 as per provisional accounts	(559.5)
Total Gap (A)	(608.78)
Carrying Cost	(189.9)
Total Gap including carrying cost (A+B)	(798.68)

#### **2.2.4 MYT for the Control Period from FY 2013-14 to FY 2015-16**

As discussed in the earlier Sections the Petitioner has filed its MYT Business Plan in which it has submitted its Sales Forecast, Distribution Loss trajectory, Power Purchase Plan and Capital Expenditure Plan. The head-wise summary of the MYT Petition is enumerated below:

#### **2.2.5 Power Purchase Cost**

The Petitioner has submitted the following sources of power to meet its requirement during the first Control Period:

- UJVNL Generating Stations
- Central Sector Generating Stations (CSGS)
- Share of free power of GoU
- Independent Power Producers (IPP)
- Short-term power arrangements: Banking, open market purchase etc.

The projected power purchase cost from these sources is discussed below:

#### **2.2.5.1 Cost of Power from UJVNL Stations**

The Petitioner has estimated the power purchase cost for procurement of power from UJVNL based on the following principles:

- Variable Cost has been considered equivalent to the variable cost from such Stations in the first 6 months of FY 2012-13 and then escalated at the rate of 4% per annum.
- Fixed Cost and other charges have been considered equal to that of FY 2011-12.

#### **2.2.5.2 Cost of power from NTPC**

The Petitioner has estimated the power purchase cost for procurement of power from NTPC Stations based on the following principles:

- Annual Fixed Charges has been derived (in proportion to UPCL's share) from the relevant Tariff Orders issued by CERC applicable for FY 2013-14. For the years FY 2014-15 and FY 2015-16 also, the Fixed Charges for FY 2013-14 have been considered as CERC (Terms and Conditions of Tariff) Regulations, 2009 are applicable only up to FY 2013-14.
- The Variable Cost including Fuel Price Adjustment (FPA) for FY 2013-14 to FY 2015-16 has been arrived at by estimating the Variable Cost for FY 2012-13 based on the actual Variable Cost incurred by UPCL from April to September, 2012 and escalating the same at 7% per annum.
- For FY 2013-14 to FY 2015-16, other charges have been considered based on the actual other charges incurred by UPCL in FY 2011-12.

#### **2.2.5.3 Cost of Power from NHPC**

The Petitioner has estimated the power purchase cost for procurement of power from NHPC Stations based on the following principles:

- Annual Fixed Charges as specified in the respective CERC Tariff Orders has been considered. For the years FY 2014-15 and FY 2015-16 also, the Fixed Charges for FY 2013-

14 have been considered as CERC (Terms and Conditions of Tariff) Regulations, 2009 are applicable only up to FY 2013-14.

- The Annual Fixed Charges for each Station has been bifurcated into two components – Fixed Capacity Charge equivalent to 50% of the specified Annual Fixed Charges (after deducting the free share of power, if any) and Energy Charges calculated by dividing the remaining 50% of the Annual Fixed Charges by the Design Energy of the Station. The Net Charges payable have been derived after deducting free share of Power.

#### **2.2.5.4 Cost of Power from THDC**

The Petitioner has estimated the power purchase cost for procurement of power from THDC Stations based on the following principles:

- Annual Fixed Charges as specified in the respective CERC Tariff Orders/monthly power purchase bills has been considered.
- The Annual Fixed Charges for each Station has been bifurcated into two components – Fixed Capacity Charge equivalent to 50% of the specified Annual Fixed Charges (after deducting the free share of power, if any) and Energy Charges calculated by dividing the remaining 50% of the Annual Fixed Charges by the Design Energy of the Station. The Net Charges payable have been derived after deducting free share of Power.
- Other Charges have been projected based on the actual charges for FY 2011-12.

#### **2.2.5.5 Cost of Power from SJVNL (Nathpa Jhakri) Stations**

The Petitioner has estimated the power purchase cost for procurement of power from Nathpa Jhakri Station based on the following principles:

- Annual Fixed Charge for FY 2011-12 has been considered and the net Charges payable have been derived after deducting the free share of Power.

#### **2.2.5.6 Cost of Power from NPCIL Stations**

The Petitioner has estimated the power purchase cost for procurement of power from NPCIL Stations based on the following principles:



- Based on actual Power Purchase bills for FY 2011-12, single part Tariff has been considered.
- Other charges have also been considered equal to that of FY 2011-12.

#### ***2.2.5.7 Cost of Power from Vishnu Prayag HEP***

The Petitioner submitted that the power available from Vishnu Prayag HEP during the first Control Period is only free power.

#### ***2.2.5.8 Cost of Power from IPP Stations***

The Petitioner has estimated the power purchase cost for procurement of power from IPP Stations based on PPA/arrangement agreed with the developer.

#### ***2.2.5.9 Free Power of Government of Uttarakhand***

Government of Uttarakhand is entitled for 12% free power from the following Stations:

- Dhauliganga of NHPC
- Tanakpur of NHPC
- Tehri-I of THDC
- Koteswar of THDC
- Vishnuprayag of JP Hydro

#### ***2.2.5.10 Cost of Free Power from Government of Uttarakhand***

The Petitioner submitted that the rate of free Power has been considered equal to the average power purchase cost projected from firm sources except free power, in line with Commission's approach in earlier Tariff Orders.

#### ***2.2.5.11 Cost of Power from Upcoming Stations***

The Petitioner has estimated the power purchase cost for procurement of power from upcoming stations based on the following principles:

- For stations under development by private developers, the rate has been projected based on the PPA/relevant regulations/ various communication with the promoter.

- For other Thermal Generating Stations and Large Hydro Generating Stations being developed by Central Sector, the rate has been considered equivalent to Rs. 4.50/kWh.

#### 2.2.5.12 Summarised Power Purchase Cost from Firm Sources

Based on the discussion in paras above, the following Table summarises the total estimated and projected power purchase cost estimated by the Petitioner from various generating stations for FY 2013-14 to FY 2015-16.

**Table 2.43: Summary of Power Purchase Cost from Firm Sources (Rs. Crore)**

Major Sources	FY 2013-14	FY 2014-15	FY 2015-16
UJVNL	697.15	717.29	780.21
NTPC	884.68	926.10	972.38
NHPC	211.01	211.00	211.01
THDC (including Koteswar)	124.95	124.95	124.95
NPCIL	74.96	75.56	76.32
SJVNL	8.41	8.41	8.41
Free Share of GoU	243.92	246.26	257.14
IPP Stations	120.90	120.57	120.68
Upcoming Stations	348.91	467.25	915.30
<b>Total</b>	<b>2714.89</b>	<b>2897.40</b>	<b>3466.40</b>

#### 2.2.5.13 Procurement of Deficit Energy

The Petitioner has submitted the Energy Balance for the years FY 2013-14 to FY 2015-16 as shown in the Table below:

**Table 2.44: Energy Balance for the years FY 2013-14 to FY 2015-16 (MU)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Gross energy procured from outside the State sources	5181.11	5708.09	6735.27
Inter-State Transmission Losses (%)	4.00%	4.00%	4.00%
Inter-State Transmission Losses (MU)	207.24	228.32	269.41
Net energy available from outside the State	4973.87	5479.77	6465.86
Add: Energy generated within the state	4989.03	5052.00	5609.12
Net energy available for use in the state	9962.89	10531.77	12074.97
Intra-State Transmission Losses (%)	1.76%	1.76%	1.76%
Intra-State Transmission Losses (MU)	175.35	185.36	212.52
<b>Energy available for sale to distribution licensee (A)</b>	<b>9787.55</b>	<b>10346.41</b>	<b>11862.45</b>
Sales (B)	9715.34	10569.83	11499.80
Distribution Loss	18.25%	17.28%	16.32%
<b>Energy requirement at DISCOM periphery (C)</b>	<b>11884.20</b>	<b>12778.61</b>	<b>13742.53</b>
<b>Surplus/Deficit at DISCOM Periphery (A-C)</b>	<b>-2096.66</b>	<b>-2432.20</b>	<b>-1880.07</b>
<b>Sales after adjusting inter-state sales</b>	<b>9769.02</b>	<b>10583.30</b>	<b>11631.31</b>
<b>Power Purchase after adjusting for deficit power</b>	<b>11949.87</b>	<b>12794.90</b>	<b>13899.68</b>

The Petitioner has submitted that as shown in the above Table, the availability from the existing Stations and upcoming Stations shall not be sufficient to meet the ever-increasing demand of the State. The Petitioner has submitted that it has projected monthly short-term purchase of power in the power deficit months of the first Control Period. The Petitioner has submitted the projections of short term power requirement as shown in the Table below:

**Table 2.45: Projected availability from short-term sources to meet demand at State periphery (MU)**

Year	Restricted Demand	Unrestricted Demand
FY 2013-14	2201.06	2766.17
FY 2014-15	2492.35	3155.29
FY 2015-16	2073.72	2666.86

#### 2.2.5.14 Trading/UI Underdrawal

For the years FY 2013-14 to FY 2015-16, the Petitioner has not estimated any surplus energy.

#### 2.2.5.15 Total Power Purchase Cost

Based on the assumptions and methodology discussed above, the Petitioner has estimated the total power purchase costs for meeting the State demand as shown in the Table below:

**Table 2.46: Projected Power Purchase Cost for the first Control Period (Rs. Crore)**

Year	Power Purchase Cost from Firm Sources	Short-term power purchase cost to meet restricted demand	Total Power Purchase Cost
FY 2013-14	2714.89	931.65	3646.54
FY 2014-15	2897.40	1054.95	3952.35
FY 2015-16	3466.40	877.75	4344.15

#### 2.2.5.16 Inter-State and Intra-State Transmission Charges

The Petitioner has projected Transmission charges from FY 2013-14 to FY 2015-16 based on the following assumption:

- Inter-state Transmission Charges have been projected on “per MU basis”, ie. power projected to be procured from outside the State for each year is multiplied by the ratio of actual PGCIL charges for FY 2011-12 and quantum of power procured from outside the State in that particular year.
- For projecting ULDC and NRLDC charges, an escalation of 10% has been considered in each year over the actual charges of FY 2011-12.

- c) Intra-state transmission charge has been projected by assuming an escalation of 10% in each year over FY 2011-12.

Transmission Charge for FY 2013-14 to FY 2015-16 as projected by the Petitioner is detailed below:

**Table 2.47: Transmission Charges for the first Control Period (Rs. Crore)**

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
PGCIL Charges	216.36	240.38	264.83	312.48
ULDC Charges	1.56	1.72	1.89	2.08
NRLDC Charges	1.31	1.44	1.58	1.74
PTCUL Charges	159.54	175.49	193.04	212.35
<b>Total Transmission Charges</b>	<b>378.80</b>	<b>419.00</b>	<b>461.13</b>	<b>528.60</b>

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

The Petitioner submitted that as per the UERC Tariff Regulations, 2011, the O&M ('Operation & Maintenance') expenses for the nth year shall comprise of the following components.

- R&Mn: Repairs and maintenance expenses
- EMPn: Salaries, wages, pension contribution and other employee costs
- A&Gn: Administrative and general expenses, including insurance charges, if any

The Petitioner submitted that the O&M expenses for the first year of the Control Period (FY 2013-14 to FY 2015-16) shall be approved by the Commission taking into account the actual O&M expenses for last five years till Base Year (FY 2011-12) subject to prudence check and any other factors considered appropriate by the Commission. Clause 84(3) of the Multi Year Tariff Regulations, 2011 further specifies that the method for calculation of O&M expenses for the nth year (FY 2013-14) and for the year immediately preceding the Control Period, shall be as follows.

$$O\&Mn = R\&Mn + EMPn + A\&Gn$$

### Employee Expenses

The Petitioner submitted that it has projected the employee expenses namely under four heads, i.e. net existing employee costs, net employee cost for new recruitment, training and development cost and retirement cost.

For existing employees, the Petitioner has considered escalation factor of 10.40% which is

equivalent to average increase in CPI for immediately preceding three years. The Petitioner has further increased other factors like basic pay and grade pay by 3%, DA at 72% of basic plus grade pay etc. For new recruitment, the Petitioner has submitted the detailed recruitment plan and the projected expenses on the same. As regards Training and Development cost, the Petitioner has projected to incur the same at the rate of 1.25% of the total employee cost. The details of the same have been further discussed in detail in Section 6 of this Order.

### **A&G Expenses**

The Petitioner submitted that A&G expenses have been projected broadly under two heads, namely, existing expenses and new initiatives, and under Provisions.

For existing A&G expenses the Petitioner has considered escalation factor of 7.43% which is equivalent to average increase in WPI for immediately preceding three years.

The Petitioner has submitted that 23.60% of A&G expense are proposed to be capitalised based on five year average of A&G expenses capitalized over A&G expenses from FY 2007-08 to FY 2011-12. The details of the same have been further discussed in detail in Section 6 of this Order.

### **R&M Expenses**

For projecting R&M expenses the Petitioner has considered escalation factor of 7.43% which is equivalent to average increase in WPI Inflation for immediately preceding three years. Further, the Petitioner has computed the constant 'K' based on the three year weighted average (FY 2009-10 to FY 2011-12) of the actual/provisional R&M expenses to Gross Fixed Asset (GFA), which is 2.47% and escalated the same by 8%. Value of 'K' used for projections is 2.67%. The details of the same have been further discussed in detail in Section 6 of this Order.

The summary of total Operation and Maintenance expenses as projected by the Petitioner is as follows:

**Table 2.48: O&M Expenses (Rs. Crore)**

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Employee Expense	258.58	291.32	305.32	328.27
A&G Expense	31.46	49.16	60.00	64.22
R&M Expense	88.36	103.49	125.34	153.83
<b>Total O&amp;M Expense</b>	<b>378.40</b>	<b>443.97</b>	<b>490.67</b>	<b>546.32</b>

## **Other Distribution Costs**

### ***2.2.7 Interest on Loan Capital and on Consumer Security Deposit***

#### **Interest on loan Capital**

The Petitioner submitted that it has computed interest expenses based on the existing loans and new loans proposed for funding the capital expenditure. The Petitioner has computed interest on existing loans based on the arrangement with the funding agency. For new loans the Petitioner has assumed the funding agencies would be REC and PFC and these loans would be on similar lines as that of existing loans from these agencies, i.e. for 3 years moratorium, 10 years repayment period and 13% rate of interest. The Petitioner has also claimed Guarantee fee of Rs 2.5 Crore in each year equivalent to the actual fees paid by the utility to the State Government in FY 2011-12. The details of Interest expenses as claimed by the Petitioner are as follows:

**Table 2.49: Projected Interest expenses (Rs. Crore)**

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Interest on existing loans	83.01	97.29	98.15	95.68
Interest on new loans	25.68	76.27	126.62	161.92
<b>Sub- total</b>	<b>108.69</b>	<b>173.56</b>	<b>224.77</b>	<b>257.67</b>
Less: IDC	89.11	72.47	41.00	33.71
<b>Net Interest</b>	<b>19.58</b>	<b>101.09</b>	<b>183.77</b>	<b>223.90</b>
<b>Guarantee Fees</b>	<b>2.50</b>	<b>2.50</b>	<b>2.50</b>	<b>2.50</b>

#### **Interest on Consumer Security Deposit**

The Petitioner submitted that it has projected Interest on Consumer Security Deposit based on enhancement of load at a rate of 9.50% as approved in the Tariff Order of FY 2012-13 on the average of opening and closing balance of Consumer Security Deposit.

**Table 2.50: Variation in Interest and Finance Charges for FY 2009-10 (Rs. Crore)**

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Opening balance of Security Deposit	380.80	405.10	431.60	460.53
Estimated addition during the year	24.30	26.50	28.94	31.61
Closing Balance of CSD	405.10	431.60	460.53	492.14
Average Balance	392.95	418.35	446.07	476.34
Interest Rate	9.50%	9.50%	9.50%	9.50%
Interest on CSD	37.33	39.74	42.38	45.25

### ***2.2.8 Depreciation***

The Petitioner submitted that it has computed asset wise depreciation based on the projected capital expenditure expected to be incurred in each year at the rates specified by the Commission in its MYT Regulations, 2011. The Depreciation submitted by the Petitioner is as follows:

**Table 2.51: Depreciation (Rs. Crore)**

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Opening GFA	3098.33	3606.67	4368.15	5361.03
Closing GFA	3606.67	4368.15	5361.03	6142.49
Average Rate of Depreciation	5.20%	5.20%	5.20%	5.20%
<b>Depreciation</b>	<b>174.43</b>	<b>207.47</b>	<b>253.11</b>	<b>299.27</b>

### 2.2.9 Provision for Bad & Doubtful Debts

The Petitioner submitted that as per UERC, MYT Regulations 2011, the Commission shall allow a provision for bad and doubtful debts upto one percent (1%) of the estimated annual revenue of the distribution licensee, subject to actual writing off bad debts by it in the previous years. The Petitioner further submitted that the target of 99% collection efficiency specified by the Commission needs to be relooked taking into ground realities of geographical spread of its license area and the current level of collection efficiency of 92.67%. The Petitioner requested the Commission to approve bad debts @ 2%, which is lower than 2.50%, which the Commission has been approving in its previous Tariff Orders. Provision for bad debts for the Control Period as submitted by the Petitioner is as follows:

**Table 2.52: Provision for Bad Debts (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Collection efficiency (%)	96.00%	96.50%	97.00%
Bad Debts (%)	2.00%	2.00%	2.00%
Projected Revenue	4834.20	5404.66	6052.82
<b>Provision for Bad Debts</b>	<b>96.68</b>	<b>108.90</b>	<b>121.06</b>

### 2.2.10 Interest on Working Capital

The Petitioner submitted that it has worked out Interest on Working Capital in line with Regulation 34(a) (i) of the MYT Regulations, 2011 and accordingly, it has considered a rate of 14.5%, which is the prevailing SBAR. Detailed computation of Interest on Working capital submitted by the Petitioner is as follows:

**Table 2.53: Projected Interest on Working Capital (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
One month Operation and Maintenance Expenses	37.00	40.89	45.53
Add: Maintenance spares at 15% of O&M	66.60	73.60	81.95
Add: 2 months of expected revenue at prevailing tariff	805.70	900.87	1008.80
Less: Amount held as Security Deposit	418.35	446.07	476.34
Less: One month of Power Purchase cost	336.64	365.95	400.02
<b>Total</b>	<b>154.30</b>	<b>203.25</b>	<b>259.74</b>
<b>Interest Rate</b>	<b>14.50%</b>	<b>14.50%</b>	<b>14.50%</b>
<b>Interest on working capital</b>	<b>22.37</b>	<b>29.47</b>	<b>37.66</b>

### 2.2.11 Return on Equity

The Petitioner submitted that as per UERC MYT Regulations, 2011, equity has to be calculated on post tax basis at 16% and, therefore, it has claimed Return on equity at 16% on the average equity. The Petitioner has further submitted that it has considered the closing equity of FY 2011-12 as the opening equity of FY 2012-13 and based on the investment plan proposed in Tariff Petition for FY 2012-13, it is expecting no addition in equity in FY 2012-13. The computation of Return on Equity for the Control Period from FY 2013-14 to FY 2015-16 as submitted by the Petitioner is as follows:

**Table 2.54: Projected Return on Equity (Rs. Crore)**

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Opening Equity	645.16	645.16	825.35	1008.06
Additions	0.00	180.19	182.71	142.98
Closing Equity	645.16	825.35	1008.06	1151.04
Average Equity	645.16	735.26	916.71	1079.55
Rate of Return	16.00%	16.00%	16.00%	16.00%
<b>Return on Equity</b>	<b>103.23</b>	<b>117.64</b>	<b>146.67</b>	<b>172.73</b>

### 2.2.12 Non-Tariff Income

The Petitioner submitted that the Non-Tariff income for each year of the Control Period has been calculated by considering an escalation of 5% over the actual NTI of FY 2011-12. The Petitioner submitted that it has not included Delayed payment charge as the utility has to make short-term arrangements against that amount when the revenue is not received on time. The details of Non-Tariff Income submitted by the Petitioner are as follows:



**Table 2.55: Projected Non-Tariff Income (Rs. Crore)**

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Miscellaneous Receipts	4.16	4.36	4.58	4.81
Income from Staff Welfare Activities	0.14	0.15	0.15	0.16
Rebate / incentives	49.86	52.36	54.98	57.72
Miscellaneous Income from consumers	205.97	205.97	205.97	205.97
<b>Total</b>	<b>260.13</b>	<b>262.84</b>	<b>265.68</b>	<b>268.67</b>

**2.2.13 Aggregate Revenue Requirement for the Control Period**

Based on above submissions, the ARR summary for each year of the Control Period from FY 2013-14 to FY 2015-16 proposed by the Petitioner is as follows:

**Table 2.56: Proposed ARR for the Control Period from FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Power purchase Expenses	3284.60	3646.54	3952.35	4344.16
Transmission Charges (including PGCIL & PTCUL)	378.77	419.03	461.34	528.65
O&M Expenses				
Employee Expense	308.45	347.55	364.27	391.66
A&G Expense	36.87	59.65	71.63	77.14
R&M Expense	88.36	103.49	125.34	153.83
Interest and Finance charges	148.52	215.80	269.65	305.36
Depreciation	174.43	207.47	253.12	299.27
Interest on working capital	13.68	22.37	29.47	37.66
<b>Gross Expenditure</b>	<b>4433.68</b>	<b>5021.91</b>	<b>5527.15</b>	<b>6137.73</b>
Less: Expenses Capitalisation				
Interest Capitalised	89.11	72.47	41.00	33.71
Employee Expense Capitalised	49.87	56.23	58.94	63.39
A&G expense capitalised	5.41	10.50	11.63	12.92
<b>Total Expenses net of capitalisation</b>	<b>4289.28</b>	<b>4882.71</b>	<b>5415.58</b>	<b>6027.70</b>
Other Expenses				
Return on Equity	103.23	117.64	146.67	172.73
Provision for Bad and Doubtful Debts	84.33	96.68	108.09	121.06
<b>Net Expenditure</b>	<b>4476.84</b>	<b>5097.04</b>	<b>5670.34</b>	<b>6321.49</b>
Less: Non-Tariff Income	260.13	262.84	265.68	268.67
<b>Net Aggregate Revenue Requirement</b>	<b>4216.71</b>	<b>4834.20</b>	<b>5404.66</b>	<b>6052.82</b>

**2.2.14 Revenue Gap at existing Tariff**

The Petitioner submitted that the Net Aggregate Revenue Requirement for FY 2013-14 works out as Rs. 4834.20 Crore and the projected revenue at the existing tariff comes to Rs. 3747.76 Crore. Based on this, the Petitioner has assessed the revenue gap for FY 2013-14 at Rs 1086.44 Crore.

The detail of revenue gap for FY 2013-14 at the existing tariff as submitted by the Petitioner is as follows:

**Table 2.57: Revenue Gap for FY 2013-14 (Rs. Crore)**

Particulars	Actual
Net ARR	4834.20
Revenue at existing Tariff	3747.76
(Gap)/Surplus	(1086.44)

The Petitioner submitted that the revenue at existing tariff for FY 2013-14 works out to Rs. 3747.76 Crore which indicates that the existing tariff rates are not sufficient to meet the projected expenditure for FY 2013-14 and there is a need for revision in tariff.

The Petitioner has proposed to recover the gap of Rs. 1086.44 Crore along with the gap on account of true-up for FY 2010-11 and FY 2011-12 including carrying cost, by way of tariff hike in the FY 2013-14.

The break-up of the total gap to be recovered in FY 2013-14 as submitted by the Petitioner is detailed in the Table below:

**Table 2.58: Projected Revenues for FY 2013-14 at Proposed Tariff (Rs. Crore)**

Particulars	Amount
Gap on account of true-up of FY 2010-11	(49.28)
Gap on account of true-up of FY 2011-12	(559.50)
Total Gap (A)	(608.78)
Carrying Cost on the total gap (B)	(189.90)
Gap for FY 2013-14 at existing tariff (C)	(1086.44)
Total Gap to be recovered in FY 2013-14 (A+B+C)	(1885.12)

### **2.2.15 Revenue at proposed Tariff in FY 2013-14**

Based on the gap depicted above, the Petitioner has proposed to recover the entire gap in FY 2013-14 and, accordingly, the revenue at proposed tariff has been calculated at Rs. 5632.86 Crore.

The summary of revenue from various consumer categories at the proposed tariff is shown in the following Table:

**Table 2.59: Projected Revenues for FY 2013-14 at Proposed Tariff (Rs. Crore)**

Sr. No.	Category	Projected Sales (MU)	Average Tariff (Rs./unit)	Revenues (Rs. Crore)
1	RTS-1: Domestic	1989.83	4.16	828.68
2	RTS-2: Non Domestic	1038.46	7.12	739.35
3	RTS-3: Public Lamps	82.11	5.91	48.49
4	RTS-4: Private Tube Wells	229.11	1.50	34.48
5	RTS-5: Government Irrigation System	167.26	6.16	102.96
6	RTS-6: Public Water Works	399.07	6.22	248.37
7	RTS-7: Industry	5658.87	6.12	3512.52
	LT Industry	338.36	6.22	210.45
	HT Industry*	5320.51	6.11	3302.07
8	RTS-8: Mixed Load	194.95	5.70	111.02
9	RTS-9: Railway Traction	9.36	7.48	7.01
	<b>Total</b>	<b>9769.02</b>	<b>5.71</b>	<b>5632.86</b>

*\*Revenue from Continuous Supply Surcharge has not been considered for calculating average tariff for 'Total HT' (and therefore for LT and HT Industry category and Total average Tariff)*

## 2.3 Tariff Proposal for FY 2013-14

The Petitioner has submitted revised tariff proposals for different category of consumers which are summarised below:

**Table 2.60: Category-wise and Slab-wise Existing Tariff vis-a-vis Proposal Tariff**

Consumer Category	Existing Tariff		Proposed Tariff	
	Energy Charge	Fixed Charge	Energy Charge	Fixed Charge
<b>RTS-1: Domestic</b>				
1.1 Life Line Consumers	1.50 Rs. /kWh	6.00 Rs. /Connection/month	2.00 Rs. /kWh	10.00 Rs./Connection/month
1.2 Other Domestic Consumers having load upto 4 KW				
(i) 0-100 Units/month	2.30 Rs. /kWh	30.00 Rs. /Connection/month	2.98 Rs. /kWh	50.00 Rs. /Connection/month
(ii) 101-200 Units/month	2.60 Rs. /kWh	30.00 Rs. /Connection/month	3.65 Rs. /kWh	50.00 Rs. /Connection/month
(iii) Above 200 Units/month	3.10 Rs. /kWh	30.00 Rs. /Connection/month	4.50 Rs. /kWh	50.00 Rs. /Connection/month
1.3 Other Domestic Consumers having load above 4 KW				
(i) 0-100 Units/month	2.30 Rs. /kWh	80.00 Rs. /Connection/month	2.98 Rs. /kWh	50.00 Rs. /Connection/month
(ii) 101-200 Units/month	2.60 Rs. /kWh	80.00 Rs. /Connection/month	2.98 Rs. /kWh	50.00 Rs. /Connection/month
(iii) Above 200 Units/month	3.10 Rs. /kWh	80.00 Rs. /Connection/month	4.50 Rs. /kWh	50.00 Rs. /Connection/month
2. Single Point Bulk Supply above 50 kW	2.80 Rs. /kWh	30.00 Rs. /Connection/month	4.20 Rs. /kWh	50.00 Rs. /Connection/month

**Table 2.60: Category-wise and Slab-wise Existing Tariff vis-a-vis Proposal Tariff**

Consumer Category	Existing Tariff		Proposed Tariff	
	Energy Charge	Fixed Charge	Energy Charge	Fixed Charge
3.1 Un-metered in Rural (Hilly) Areas		130.00 Rs. /Connection/month		185.00 Rs. /Connection/month
3.2 Un-metered in Rural (Other) Areas		285.00 Rs. /Connection/month		400.00 Rs. /Connection/month
<b>RTS-1A: Snowbound</b>				
1. Domestic	1.50 Rs. /kWh	6.00 Rs. /Connection/month	2.00 Rs. /kWh	10.00 Rs. /Connection/month
2. Non-Domestic upto 1 kW	1.50 Rs. /kWh	6.00 Rs. /Connection/month	2.25 Rs. /kWh	10.00 Rs. /Connection/month
3. Non-Domestic above 1 kW & upto 4 kW	2.05 Rs. /kWh	6.00 Rs. /Connection/month	2.98 Rs. /kWh	10.00 Rs. /Connection/month
4. Non-Domestic above 4 kW	3.10 Rs. /kWh	12.00 Rs. /Connection/month	4.50 Rs. /kWh	20.00 Rs. /Connection/month
<b>RTS-2: Non-Domestic</b>				
(i) Government/Municipal Hospitals (ii) Government/Government Aided Educational Institutions (iii) Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act				
1.1 Upto 25 kW	Rs. 3.70/kWh	30 Rs./kW/month	Rs. 5.70/kWh	50.00 Rs. /kW/month
1.2 Above 25 kW	Rs. 3.30/kVAh	30 Rs./kW/month	Rs. 5.00/ kVAh	45.00 Rs. /kW/month
2. Other non-Domestic/Commercial Users				
2.1 Upto 25 kW	4.40 Rs. /kWh	30 Rs./kW/month	6.65 Rs./ kWh	50.00 Rs./kW/month
2.2 Above 25 kW	4.40 Rs. /kVAh	30 Rs./kW/month	6.65 Rs./kWh	45.00 Rs./kVAh/month
3. Single Point Bulk Supply above 50 kW	4.30 Rs. /kVAh	30 Rs. /kW/month	6.30 Rs./kWh	45.00 Rs. /kVAh/month
<b>RTS-3: Public Lamps</b>				
1. Metered	3.95 Rs. /kWh	25 Rs. /kW/month	6.20 Rs. /kWh	45.00 Rs./kWh/month
2. Un-metered (Rural)		155 Rs./100W lamp		210.00 Rs. /100W lamp
<b>RTS-4: Private Tube-wells / Pumping sets</b>				
1. Metered	1.00 Rs./KWh		1.50 Rs. /KWh	
2. Un-metered		165.00 Rs. /BHP/month		250.00 Rs./BHP/month
<b>RTS-5: Government Irrigation System</b>				
1.1 Upto 75 kW	3.95 Rs./kWh	25.00 Rs./kW/month	6.00 Rs. /kWh	40.00 Rs./kW/month
2.2 Above 75 kW	3.80 Rs. /kVAh	25.00 Rs. /kVAh/month	5.85 Rs. /kVAh	35.00 Rs. /kVAh/month

**Table 2.60: Category-wise and Slab-wise Existing Tariff vis-a-vis Proposal Tariff**

Consumer Category	Existing Tariff		Proposed Tariff	
	Energy Charge	Fixed Charge	Energy Charge	Fixed Charge
<b>RTS-6: Public Water Works</b>				
1. Public Water Works	3.80 Rs. /kVAh	25.00 Rs. / kVAh/month	5.85 Rs./kVAh	35.00 Rs. /kVAh/month
<b>RTS-7: LT &amp; HT Industry</b>				
Total LT				
1. LT Industries (upto 25 kW)	3.60 Rs. /kVAh	90 Rs. /kW/month	5.4 Rs. /kWh	130.00 Rs. /kw/month
2. LT Industries (above 25kW & upto 75 kW)	3.25 Rs. /kVAh	90 Rs. /kW/month	5.00 Rs. / kVAh	130.00 Rs. /kVAh/month
Total HT				
3. HT Industries (above 75 KW/88KVA & upto 1000 KVA)				
3.1 Load factor upto 33%	2.85 Rs. /kVAh	200.00 Rs. /kVA of billed demand	4.15 Rs. /kVAh	285.00 Rs. /kVA of billed demand
3.2 Load factor above 33% & upto 50%	3.10 Rs. /kVAh	200.00 Rs. /kVA of billed demand	4.65 Rs. /kVAh	285.00 Rs. /kVA of billed demand
3.3 Load factor above 50%	3.40 Rs. /kVAh	200.00 Rs. /kVA of billed demand	5.15 Rs. /kVAh	285.00 Rs. /kVA of billed demand
4. HT Industries (above 1000 KVA)				
4.1 Load factor upto 33%	2.85 Rs. /kVAh	260.00 Rs. /kVA of billed demand	4.15 Rs. /kVAh	375.00 Rs. /kVA of billed demand
4.2 Load factor above 33% & upto 50%	3.10 Rs. /kVAh	260.00 Rs. /kVA of billed demand	4.65 Rs. /kVAh	375.00 Rs. /kVA of billed demand
4.3 Load factor above 50%	3.40 Rs. /kVAh	260.00 Rs. /kVA of billed demand	5.15 Rs. /kVAh	375.00 Rs. /kVA of billed demand
<b>RTS-8: Mixed Load</b>				
Mixed Load Single Point Bulk Supply above 50 kW including MES as deemed licensee	3.60 Rs. /kWh	30 Rs./kW/month	5.50 Rs. /kWh	50.00 Rs. /kW/month
<b>RTS-9: Railway Traction</b>				
1. Railway Traction	3.2 Rs. /kVAh	180.00 Rs. /kVA/month	4.80 Rs./kVAh	265.00 Rs. /kVA/month

The Petitioner further submitted that the tariff proposal has been formulated by the Petitioner with an attempt to keep the impact on the consumers to the minimum possible and at the same time not defer a large portion of recovery on the tariff in the coming years. Also the provision of the Section 61(g) of the Electricity Act, 2003 states that the appropriate Commission should be guided by the objective that the tariff progressively reflects the efficient and prudent cost of Supply of electricity.

Some of the key alteration proposed by the Petitioner in retail tariffs for FY 2013-14 is as follows:

- a) Continuous supply surcharge for consumers in the HT Industry category as specified in the Retail Tariff Order of the Petitioner for FY 2012-13 is 15%. The Petitioner has proposed a surcharge of 20% for such consumers.
- b) The Petitioner proposes to provide its high value HT industrial consumers 24x7 uninterrupted supply. To provide for this, the Petitioner proposes to introduce the scheme of express/independent feeders. Currently only Continuous supply industries (continuous process industries) are provided 24x7 uninterrupted supply. But the Petitioner has received many queries for providing uninterrupted supply to those industries which are not covered under the continuous process industries. So the Petitioner intends to give the option of uninterrupted supply to those consumers who are willing to participate in this. The basic conditions of giving uninterrupted supply to such HT industrial consumers are as follows:
  - HT industrial consumers who wish to participate in this scheme should approach the Petitioner with a written request.
  - These types of consumer should be connected on express/independent feeders.
  - If the consumer is currently not connected on the express/independent feeder but now wishes to connect to one, then all the capital expenditure involved in getting connected on the express/independent feeder will be borne by the consumers.
  - If one or more consumers are connected on the same feeder then consent of all those connected consumers will be needed for conversion to express feeder.
  - The surcharge for such consumers is proposed to be 25%.
- c) Temporary Supply: This schedule shall apply to temporary supply of light & fan up to kW, public address system and illumination loads during functions, ceremonies and festivities, temporary shops not exceeding three months. The changes in the rates proposed are as follows.

**Table 2.61: Temporary Supply Existing & Proposed Fixed Charges**

Description	Existing Fixed Charge	Proposed Fixed Charge
(1) For Illumination/ public address/ceremonies for load up to 15 kW	Rs. 1050/day	Rs. 1600/day
(2) Temporary shops set up during	Rs. 65/day	Rs. 100/day
(3) Other Temporary shops/Jhuggi/Jhopris for load up to 1 kW		
3.1) Rural	Rs. 95/month/connection	Rs. 150/month/connection
3.2) Urban	Rs. 190/month/connection	Rs. 300/month/connection

- d) The Petitioner proposes to shift (i) Government/Municipal Hospitals and (ii) Government/Government Aided Educational Institutions under schedule rate RTS-2 (1.1 & 1.2) to RTS-2 (2.1 & 2.2). Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act will remain in RTS-2 (1.1 & 1.2) as in the existing rate schedule in the Retail Tariff Order for FY 2012-13.
- e) The Petitioner wishes to clarify that all places of worship, i.e. Mandir, Masjid, Gurudwara, Church are included under rate schedule RTS-2 (1.1).
- f) Fixed charges will be in Rs./kW/month for all domestic consumers except for lifeline and unmetered consumers.
- g) With reference to the previous Table, proposed fixed charges unit for the slabs/categories - 'RTS-2 Non-Domestic: 1.2 Above 25 kW'; 'RTS-2 Non-Domestic: 3. Single Point Bulk Supply above 50 kW'; 'RTS-6: Public Water Works' and 'RTS-7: LT & HT Industry 2. LT Industries (above 25kW & upto 75 kW)' have been changed to Rs./kVA/Month from Rs./kW/Month (as in existing tariff rates).

The Petitioner has estimated the average tariff of Rs. 3.84 per unit at the existing tariffs and Rs. 5.71 per unit at the proposed tariffs in FY 2013-14, resulting in an average increase of 50.30%. The Table below captures the revenue from existing tariffs and proposed tariffs for various consumer categories along with percentage increase in average tariff sought for each category.

**Table 2.62: Category-wise Revenue at Existing and Proposed Tariff for FY 2013-14**

Sr. No.	Consumer Category	Existing Tariff			Proposed Tariff		% age increase in Average Tariff
		Sales (MU)	Revenues (Rs. Crore)	Avg. Tariff (Rs. /unit)	Revenues (Rs. Crore)	Avg. Tariff (Rs. /unit)	
1	RTS-1: Domestic	1989.83	563.45	2.83	828.68	4.16	47.07%
2	RTS-2: Non-Domestic	1038.46	482.74	4.65	739.35	7.12	53.16%
3	RTS-3: Public Lamps	82.11	32.56	3.97	48.49	5.91	48.93%
4	RTS-4: Private Tube-wells / Pumping sets	229.11	22.97	1.00	34.48	1.50	50.12%
5	RTS-5: Government Irrigation System	167.26	67.66	4.04	102.96	6.16	52.18%
6	RTS-6: Public Water Works	399.07	161.50	4.05	248.37	6.22	53.79%
7	RTS-7: LT & HT Industry	5658.87	2339.73	4.13	3512.52	6.12	50.12%
	LT Industry	338.36	139.27	4.12	210.45	6.22	51.11%
	HT Industry	5320.51	2200.46	4.14	3302.07	6.11	50.06%
8	RTS-8: Mixed Load	194.95	72.46	3.72	111.02	5.70	53.22%
9	RTS-9: Railway Traction	9.36	4.70	5.02	7.01	7.48	49.09%
	<b>Total</b>	<b>9769.02</b>	<b>3747.76</b>	<b>3.84</b>	<b>5632.86</b>	<b>5.71</b>	<b>50.30%</b>



### 3. Stakeholders' Responses and Petitioner's Comments

The Commission has received suggestions and objections on MYT and Business Plan Petition for the Control Period for FY 2013-14 to FY 2015-16 of UPCL. A list of respondents who have submitted these responses are given in **Annexure-4** and the respondents who appeared in the public hearings are enclosed in **Annexure-5**. The Commission has also obtained responses from UPCL on the comments received from the stakeholders. Since, several issues are common and have been raised by more than one respondent all comments have been clubbed issue-wise and summarized below. Apart from the objections raised on UPCL's Business Plan and MYT Petition, several other issues were raised by the stakeholders, which have not been summarised in this Order as those issues were not related to Business Plan and MYT Petition of UPCL. In the subsequent Chapters of this Order, the Commission has, as far as possible, tried to consider the objections/suggestions/comments of the stakeholders related on UPCL's Business Plan and MYT Petition for FY 2012-13 in light of reply of the Petitioner while approving the Business Plan and MYT Petition of UPCL for the first Control Period from FY 2013-14 to FY 2015-16.

#### 3.1 General

##### 3.1.1 *Compliance to Regulations/Directions of Commission*

###### 3.1.1.1 *Stakeholder's Comment*

Shri. Pramod Singh Tomar, Director, Galwalia Ispat Udyog Ltd. submitted that UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011 provide that UPCL has to file Business Plan for the Control Period of 3 years for April 1, 2013 to March 31, 2016 by May 31, 2012, which was further extended by UERC upto November 20, 2012. However, UPCL has filed the same on January 31, 2013, due to which Tariff Order will be delayed. Further, Shri Vikas Jindal, President, Kumaon Garhwal Chamber of Commerce & Industry submitted that UPCL has delayed filing of Business Plan.

Shri Suresh Kumar of La Opala RG Ltd. and Shri. Rajeev Gupta of KVS Infratech LLP submitted that since its very first Tariff Order dated September 20, 2003, the Commission has been directing UPCL in every Tariff Order to workout actual voltage wise, category wise losses and cost of supply for fixation of category wise tariffs. However, UPCL has again ignored the direction of the Commission and the current filing does not depict any such initiative taken by UPCL. In this

regard, he requested the Commission to take serious note for such non-compliance on the part of UPCL and fix the tariff of the HT consumers considering HT level losses on a rational basis.

Shri Pankaj Gupta, President, Industries Association of Uttarakhand submitted that Tariff/ARR fixation exercise is not only about approving the revenue, but also an exercise of taking stock of the past work done and setting a road map for future performance. In this respect the Commission gave various directions to UPCL. These directions have huge implications on the overall performance of UPCL and impacts cost of supply to the consumers. These directives are being reiterated in every ARR Tariff Order however, with great regret, it is pointed out that in this Petition there is no mention or action taken with respect of the follow up in respect of these directives. Therefore, he requested UERC to take up the matter seriously with UPCL for compliance to these directives.

#### ***3.1.1.2 Petitioner's Response***

The Petitioner submitted that the compliance status of the directions issued by the Commission has been submitted to the Commission. Further, the progress reports in respect of various works are submitted by UPCL as and when required by the Commission.

The Petitioner submitted that the delay in filling of Business Plan and MYT petition took place due to some unforeseen circumstances which were beyond the control of UPCL. Uttarakhand is entering into the MYT regime for the first time from FY 2013-14, prior to which the tariff determination was done on yearly basis. Under the new regime all the data formats in which information had to be supplied to the Commission have been revised. Also the basis of projections have undergone changed. Thus being the first time, some unavoidable delays happened in filling of MYT and Business Plan. However the Commission was fully duly informed about these delays and extension was sought.

Further, as regard the contention raised by Shri. G. S. Bedi, the Petitioner submitted that UPCL is following the regulations of UERC for release of new HT & EHT connections, enhancement and reduction of load and there is no avoidance by UPCL on their part for the same.

Further, UERC Regulation 2008 (Release of new HT & EHV Connections, Enhancement and Reduction of Loads) were effective from April 21, 2007.

### **3.1.2 Consumption Security Deposit**

#### **3.1.2.1 Stakeholder's Comments**

Shri R. K. Saxena, Chief Electrical Distribution Engineer, Northern Railway submitted that the mode of payment of consumption security deposit should be in the form of bank guarantee instead of cash.

#### **3.1.2.2 Petitioner's Response**

The Petitioner submitted that as per provisions of Electricity Act, 2003 and Regulations, security deposits should be deposited only in cash.

### **3.1.3 Implementation of MYT Framework**

#### **3.1.3.1 Stakeholder's Comments**

Shri Ajay Bhargava of Hotel Surya Kiran, The Mail Mussoorie submitted that MYT regime should be introduced.

#### **3.1.3.2 Petitioner's Response**

The Petitioner submitted that MYT regime shall be introduced in State of Uttarakhand from FY 2013-14. UPCL has already filed the ARR and Tariff Petition for the Control Period 2013-2014 to 2015-16 before the Commission, under MYT regulations.

### **3.1.4 Employee Strength**

#### **3.1.4.1 Stakeholder's Comments**

Shri. Ganesh Upadhyay submitted that UPCL lacks sufficient staff. He further added that one lineman should be available to provide service to around 1000 consumers and one Junior Engineer should be available to provide service to around 5000 consumers. Shri. Atar Singh Aswal requested the Commission to direct UPCL to induct more employees and place young qualified linemen in order to remove the recurring problems in the lines on urgent basis. Shri S. P. Joshi of Nakroda, Dehradun submitted that employee strength of UPCL should be increased.

Shri. Pawan Agarwal submitted that the Line men are not available to attend the night breakdowns and requested the Commission to give a strict direction to UPCL that the night breakdowns could be attended.

### **3.1.4.2 Petitioner's Response**

The Petitioner submitted network management in UPCL is being carried out with utmost care and efficiency and it is ensured that all the line operating staff in the field undergo all the necessary training required by them to do their work efficiently.

The Petitioner further submitted that UPCL has already put forth the requirement for additional recruitments against the sanctioned posts before the State Govt. The recruitment against the same will commence once the necessary approval is accorded.

### **3.1.5 Submission of Annual Accounts**

#### **3.1.5.1 Stakeholder's Comments**

Shri S. P. Joshi of Nakroda, Dehradun submitted that UPCL should submit Annual Accounts to the Commission.

#### **3.1.5.2 Petitioner's Response**

The Petitioner submitted that Annual Accounts of UPCL have been submitted to UERC along with the ARR/MYT Petition

### **3.1.6 Approach of MYT Petition**

#### **3.1.6.1 Stakeholder's Comments**

Shri Rakesh Bhatia and Shri Mahesh Sharma of Uttarakhand Industrial Welfare Association submitted that the Petition on MYT has been prepared on the basis of false data and no authenticated proof is enclosed for the same. Further, the following observations on MYT Petition have been raised:

- Power Purchase Expenses were Rs. 2884.64 Crore in FY 2012-13, whereas, it is claimed Rs. 3646.54 Crore in FY 2013-14 (which shows relatively hike of 26.41%).
- Transmission Charges by PGCIL were Rs. 119.02 Crore in FY 2012-13, whereas, it is claimed Rs. 243.54 Crore in FY 2013-14 (which shows relatively hike of 100.04%).
- Transmission Charges by PTCUL were Rs. 159.54 Crore in FY 2012-13, whereas, it is claimed Rs. 175.49 Crore in FY 2013-14 (which shows relatively hike of 9.74%).

- O&M Expenses were Rs. 353.50 Crore in FY 2012-13, whereas, it is claimed Rs. 443.96 Crore in FY 2013-14 (which shows relatively hike of 25.60%).
- Interest Charges were Rs. 90.23 Crore in FY 2012-13, whereas, it is claimed Rs. 143.33 Crore in FY 2013-14 (which shows relatively hike of 59%).
- Depreciation was Rs. 23.19 Crore in FY 2012-13, whereas, it is claimed Rs. 207.47 Crore in FY 2013-14 (which shows relatively hike of 894%).
- Provision for Bad Debts was nil in FY 2012-13, whereas, it is claimed Rs. 96.68 Crore in FY 2013-14.
- Return on Equity was Rs. 10.75 Crore in FY 2012-13, whereas, it is claimed Rs. 117.64 Crore in FY 2013-14 (which shows relatively hike of 109.4%).
- Interest on Working Capital was Rs. 13.59 Crore in FY 2012-13, whereas, it is claimed Rs. 22.37 Crore in FY 2013-14 (which shows relatively hike of 164%).

#### 3.1.6.2 *Petitioner's Response*

The Petitioner submitted with due respect to the consumer that it completely denies the allegations being put upon it. The MYT petition has been prepared with utmost care and all the assumptions have been based on available details or past trends. The requisite proofs have already been submitted to the Commission for its necessary consideration. Regarding the comparative sheet put forth by the consumer, the Petitioner replied that:

- 1) **Power Purchase Expenses:** The power purchase expenses have been projected station wise for each generating station currently supplying power to UPCL or expected to commissioned during the Control Period. The fixed charges and the variable charges have been projected based on the predefined norms as per CERC or UERC regulations. The details of arriving at power purchase cost have been clearly outlined in section A7 of the MYT Petition. The huge hike as projected by UPCL is on the account of fuel price adjustment in variable cost foreseen in the future on the account of rising fuel costs.
- 2) **Transmission Charges by PGCIL:** The Inter-State Charges have been projected on “per MU basis” i.e., power projected to be procured from outside the state for each year is multiplied by the ratio of actual PGCIL charges for FY 2011-12 and quantum of power

procured from outside the state in that particular year. Thus there is no hike claimed in per unit transmission charges

- 3) **Transmission Charges by PTCUL:** The transmission charges by PTCUL have been considered based on the past trend and the proposed tariff hike by PTCUL.
- 4) **O&M Expenses:** UPCL keeping the base year of FY 2011-12 has estimated the operation and maintenance expenses strictly as per the provision of MYT Regulations, 2011. It is hereby assured that UPCL has tried to keep the estimates as conservative as possible considering the existing rates of inflation. The head wise break up of estimation of O&M Expenses has been provided in detail in Section A9 and the subsequent justification has already been provided to the Commission during Technical Validation Sessions.
- 5) **Interest Charges:** For calculation of interest charges based on the existing loans and the financing of the capital expenditure planned during the Control Period, the interest rates have been taken based on existing interest rates for old as well as new loans. The loan wise details have been submitted in the Petition.
- 6) **Depreciation:** The huge claim of depreciation is on account of restatement of assets of UPCL, owing to the finalization of transfer scheme. Therefore, UPCL requested the Commission to consider its submission on impact of transfer scheme while considering depreciation.
- 7) **Provision for bad and doubtful debts:** As per fundamentals of accounting and costing (matching principle and principle of conservatism) every business should provide that portion of debtors which is likely to be bad and not recoverable. This should be provided as an expense in the same year in which sales revenue is recognized. UPCL would like to submit that the Collection Efficiency for the FY 2011-12 is 92.67%. Although UPCL shall make all the efforts to achieve 100% Collection Efficiency, but bringing it down from the current level of 92.67% to 99% within in a span of one year seems impossible. Therefore, UPCL requested the Commission to approve bad debts @ 2% of estimated revenue, which is also lower than 2.50% allowed by the Commission in its previous Tariff Orders.
- 8) **Return on Equity:** As per UERC MYT Regulations, 2011, equity has to be calculated on post tax basis at 16%. Accordingly, UPCL has computed RoE at 16% on the average

equity. The opening equity for FY 2012-13 has been considered based on the closing equity for FY 2011-12 as per the provisional accounts of FY 2011-12 and no addition in equity is expected in FY 2012-13, therefore the same has not been taken for the said year. The addition in equity in each year during the control period is based on the funding pattern projected for investing in the capital expenditure plan.

- 9) **Interest on Working Capital:** The interest on working capital has been estimated based on the provision of the MYT Regulations, 2011.

### **3.1.7 Information in Public Domain**

#### **3.1.7.1 Stakeholder's Comments**

Shri Pratap Singh of Vasant Vihar Members Welfare Association submitted that the Commission should make all the figures of the expenditure of UPCL available to public.

#### **3.1.7.2 Petitioner's Response**

The Petitioner submitted that all details of the actual expenditure for FY 2010-11 and FY 2011-12 and the projected expenditure for the Control Period has already been provided in the MYT Petition.

### **3.1.8 Billing and Payment**

#### **3.1.8.1 Stakeholder's Comments**

The electricity bills sent to consumers mentions the "due date", which is 1 or 2 days after the bill generation date. In this regard, he suggested that this due date should be at-least 15 days after the bill generation date. Whereas, the disconnection date should be at least 1 month after the due date. Further, E-payment gateway should be introduced for online payment of electricity bill.

Shri Ram Kumar, Senior Vice President, Mussourie Hotels Association submitted that online payment of bills should be introduced and incentive should be given to consumers for paying online bills. This would make the bill payment process smooth for the consumer and department as well.

#### **3.1.8.2 Petitioner's Response**

The Petitioner submitted that keeping in view the late delivery of the bills to the consumers, the Commission has allowed 15 days additional time for payment of the bills. Also, the

disconnection date has been kept after 15 days from due date as per section 56(1) of Electricity Act, 2003 and therefore it cannot be after 1 month from due date.

With regard to E-payment gateway, the Petitioner submitted that it is currently being implemented by UPCL where the consumers shall have the option to pay online their electricity bills through NEFT/RTGS. The suggestion of discount on online payment cannot be considered since it is a convenience being provided to consumers for which additional charges should be paid.

## **3.2 Domestic Tariff**

### **3.2.1 Tariff Hike**

#### **3.2.1.1 Stakeholder's Comments**

Shri S. P. Joshi submitted that proposal to increase the tariff is might be due to the consumers not paying the bills and the maximum effect of increase in Tariff would be on domestic consumers. Shri Pratap Singh of Vasant Vihar Members Welfare Association and Shri S. P. Joshi submitted that UJVN Ltd. has proposed 16% increase in Tariff, PTCUL has proposed 9% increase in Tariff and UPCL has proposed 50% increase in Tariff and requested to clarify the net increase in Tariff of electricity for consumers of the State. Shri Pratap Singh of Vasant Vihar Members Welfare Association further submitted that there should be analysis and justification behind huge difference between the tariff hike proposed by UJVNL and PTCUL. Shri S. P. Joshi also submitted that as UPCL is using PTCUL's Lines, PTCUL proposal to increase tariff might be due to UPCL not paying its bills to PTCUL. Further, a separate Committee should be formed to monitor the receivables.

Shri. H. D. Arora and Shri. S. P. Joshi submitted that there should not be any tariff hike as it will burden the honest consumers. Shri Umesh Charan Gosai, Chief, Nagarpalika Parishad, Tehri Garhwal submitted that tariff hike should not be done for unmetered category in hilly areas. Shri. Ganesh Upadhyay, Member of Uttarakhand Pradesh Congress Committee submitted that the electricity tariff should not be charged in slabs and all the consumers should be charged electricity at equal rate.

Shri G. S. Bedi, General Manager, Indian Drugs & Pharmaceuticals Ltd. (IDPL) and M/s Asahi India Glass Limited submitted that PTCUL and UJVNL in their ARR and Tariff Petition for FY 2013-14 have necessitated approx 26.28 % in consumer tariffs in addition to the hike of 67.39%



proposed by UPCL for FY 2013-14. This abrupt and exorbitant increase is not justified on any account. If unavoidable, only very marginal increase should be considered.

Shri. Sanjay Kumar Agarwal (President and General Secretary, Shri Karuna (Jan Kalyan Samiti, Almora) submitted that the tariff rates are already on higher side and therefore there should be maximum tariff hike of 5% to 10%. Further, the unmetered category in rural hilly areas has a very high tariff rate of Rs. 130/Connection/month. In this regard, he requested UPCL to increase metering in rural hilly areas, which will result in reduction of theft practices.

Shri Raj Kumar Arora of M/s Kashi Vishwanath Textile Mill Ltd. and Shri Pratap Singh of Vasant Vihar Members Welfare Association submitted that the proposal to increase the present electricity tariff to a high extent of 50% seems to be arbitrary and is not justifiable. The increase has to be gradual and in a phased manner. Further, the Commission should ask UPCL to state the basis/ground for proposing such an exorbitant rise in tariff and this should be known to the consumers so that consumers can argue about the same forcefully. There should be special consideration for the retired senior citizen above the age of 70 years and widows.

Ms. Rashmi Agarwal of Kashipur submitted that the honest domestic consumer who is paying electricity charges regularly should not be penalized by increasing tariff abnormally thereby forcing consumers to adopt pilferage and theft practices.

Shri. Pradeep Datta submitted that the domestic/ commercial/ small industry consumers unnecessarily has been made to pay higher tariff every year due to increased requirement of power by large industry which Petitioner purchased at higher rates. He further submitted that load requirement of the domestic/ commercial/ small industry consumers can be easily met by Hydro Power Sources as existed in Uttarakhand in FY 2000. These categories of consumers are suffering from increase in tariff due to pooling of power cost as large quantity of power is procured by the Petitioner to meet the increased demand of the large industry.

Shri. Pradeep Datta submitted that the Commission has accumulated a large bank balance (more than Rs. 50 Crore) by way of fees realised from the Distribution Licensee, viz., UPCL and the Generating Companies of Uttarakhand. This is basically consumers' money which should be refunded to UPCL or Generating Companies either through reduction in fees or for financing consumers related activities. This will in turn lead to reduction in Tariff for Consumers.

### 3.2.1.2 Petitioner's Response

The Petitioner submitted that Electricity Act, 2003 mandates for a two part tariff. The two part tariff exercise involves determination of fixed and energy charges to meet the cost of supply, any reduction in fixed charges would thus call for increase in energy charges to match the tariff with Cost of Supply.

With regards to the contention raised regarding the tariff hike, the Petitioner submitted that UPCL is a commercial organization and is required to meet its Annual Revenue Requirement out of the revenue realised from the consumers through electricity tariffs. The revenue deficit for the period upto FY 2013-14 excluding the deficit of FY 2012-13 is expected to be Rs 1885.12 Crore, which requires 50.30% increase in tariff. The regulatory surcharge of 11.37% which has been proposed by UPCL is for the recovery of Rs 640.38 Crore in FY 2013-14 on the account of finalization of Assets and Liability Transfer scheme executed between UPPCL and UPCL for which the claims were denied by the Commission in the absence of approval/finalization of GOU on transfer scheme. Remaining unrecovered amount of Rs. 1280.77 Crore would be recovered over the next two years i.e. FY 2014-15 and FY 2015-16. The deficit for FY 2012-13 based on accounts shall be claimed in the next year during truing up exercise. Thus the Petitioner has requested UERC to consider the Tariff proposal of UPCL keeping in view the aforesaid facts submitted.

The tariff for unmetered rural hilly areas has been proposed from Rs 130/month to Rs 185/month resulting in only 42% increase. Moreover tariff of domestic category has been kept only at 72% of average cost of supply.

With regard to the review of tariff rates on monthly basis, the Petitioner submitted that the tariff determination and review exercise can be done only once a year as per the Electricity, Act 2003.

*"4) No tariff or part of any tariff may ordinarily be amended, more frequently than once in any financial year, except in respect of any changes expressly permitted under the terms of any fuel surcharge formula as may be specified."*

Further, the Petitioner submitted that there is a huge variation in the power purchase expenses from those approved by the Commission in its Tariff Order for FY 2011-12. However it does not agree that this is because of any Jugglery on the part of UPCL. Such heavy variation is on the account of increase in power purchase from the firm sources of power whereby there has been

an upward revision in tariff rates from April 2009 of the power of Central Generating Stations. This revision was from April 2009 and arrears were also paid in FY 2011-12. These costs have been taken from the actual bills of the Generating Companies.

The Petitioner further submitted that the contention of the consumer that UPCL has procured excess power at higher U.I charges or on short term basis at higher rates is also incorrect since UPCL has tried to keep itself aligned within the additional power purchase allowed by the Commission in its Tariff Order for FY 2011-12 to meet its deficit.

As regards the contention raised regarding the single tariff for entire domestic category, the Petitioner submitted that tariff of Domestic Category is subsidized by other categories. Keeping in view the necessity level of electricity requirement, level of cross subsidy has been kept more for less consumption and vice versa.

### **3.2.2 Below Poverty Line (BPL) Consumers**

#### **3.2.2.1 Stakeholder's Comments**

Shri. Sanjay Kumar Agarwal (President and General Secretary, Shri Karuna (Jan Kalyan Samiti, Almora) requested UERC that there should not be any tariff hike for the Kutir Jyoti Yojana and BPL Consumers.

Shri. Sanjay Kumar Agarwal (President and General Secretary, Shri Karuna (Jan Kalyan Samiti, Almora)) submitted that no increase should be done in tariff of BPL categories. Further, Shri Ajay Bhargava of Hotel Surya Kiran, The Mail Mussoorie and Shri Sanjay Kumar Agarwal submitted that the utilization of CFL should be promoted. Shri. Ganesh Upadhyay, Member of Uttarakhand Pradesh Congress Committee submitted that Bachat Lamp Yojana (BLY) Scheme should be introduced.

Shri Ashok, Principal Secretary, Governor submitted that UPCL while implementing its schemes should take appropriate steps for BPL and other poor category consumers and should take strict actions towards the electricity theft. Further, there should be the protection of Right of BPL families while execution of Electricity Distribution Schemes.

Further, Shri. M. C. Upreti, Additional Secretary, Uttarakhand Government submitted that currently BPL consumers are getting electricity under RTS 1.1 of Tariff Schedule at a rate of Rs.6.00/ Connection/ Month. In proposed Tariff Schedule, it is proposed to be increased to Rs.10.00/

Connection/ Month i.e. rise of 66.67%. In this regard, he requested the Commission to increase Tariff for RTS in a manner to avoid the financial burden on the BPL category.

### **3.2.2.2 *Petitioner's Response***

The Petitioner submitted that UPCL has always tried to protect the interest of BPL consumers.

In accordance with the Tariff Policy, consumers below poverty line who consume below a specified level may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply.

After the constitution of Uttarakhand, w.e.f. September 20, 2003, UPCL is providing electricity to BPL and Kutir Jyoti category consumers at subsidized rates in accordance with Tariff Policy. This is applicable till now and the same has been kept into consideration while submitting the Tariff Proposal to Commission for FY 2013-14.

Further, Section 126 and 135 of Electricity Act deals with unauthorized use/theft of Electricity. Vigilance Raids are being conducted by UPCL. Legal proceedings are being initiated against the person(s) who is found indulging in unauthorized usage/theft of electricity. During FY 2012-13, 11118 checking were done wherein 4037 cases of irregularities were detected and FIR lodged against 1866 defaulters.

The Petitioner further submitted that as per provision of Tariff policy, the tariff of BPL category should be kept at 50% of average cost of supply. However, UPCL has proposed the tariff of BPL consumers at about 36% of average cost of supply. Increase in tariff of BPL category is necessary due to the reason that the recoverable deficit of UPCL in FY 2013-14 is about Rs. 1885 Crore.

Further, UPCL has already prepared and submitted a Bachat Lamp Yojana to the Commission. This involves distribution of free CFLs to BPL and domestic consumers.

### **3.3 Non-Domestic Tariff**

#### **3.3.1 Tariff Hike**

##### **3.3.1.1 Stakeholder's Comments**

Shri. Saurabh Vaish, Managing Director of Rosewood Hospitality Pvt. Ltd. submitted that presently the Uttarakhand Power Corporation Limited (UPCL) is charging electricity tariff on hotels under RTS-2 Non-Domestic Category i.e. at a rate of Rs.4.40/KVAH. Hotels in Uttarakhand have been accorded Thrust Industry Status vide the State Industrial Policy, 2003 and Rosewood Hospitality Pvt. Ltd. has received Permanent Registration by Directorate of Industries, Government of Uttarakhand. He further submitted that UPCL should charge hotels under category RTS-7 LT 7 HT Industry i.e. at a rate of Rs. 3.40/kVAh. In this regard Rosewood Hospitality Pvt. Ltd. has also approached to the local offices of UPCL, however, the same has been rejected by UPCL.

Shri G. S. Manchanda, Proprietor of Hotel India, Shri. R.N. Mathur, President of Mussoorie Hotels Association, Shri Ram Kumar, Senior Vice President, Mussoorie Hotels Association and Shri Ajay Bhargava of Hotel Surya Kiran, the Mail Mussoorie submitted that there is a hike in energy charge from Rs. 4.40/kWh to Rs. 6.65/kWh and fixed charge from Rs. 30/- per kW to Rs. 50/- per kW per month, which is very much on the higher side. The hotels of budgeted category located in hills have limited business for two months in a year and shall not be in a position to afford these high rates.

Shri Ram Kumar, Senior Vice President, Mussoorie Hotels Association further submitted that the increase in energy charge from Rs. 4.40/kWh to Rs. 6.65/kWh is very high and should not be approved.

Shri Ajay Bhargava of Hotel Surya Kiran, the Mail Mussoorie submitted that tariff hike proposed is unjustified. Further, the disconnection date should be revised as the bills are normally distributed after the due date.

##### **3.3.1.2 Petitioner's Response**

The Petitioner submitted that hotels cannot be considered under Industrial Category for electricity tariff purposes because:

1. Unlike the industries their load requirement is concentrated in the evening time which is similar to other commercial establishments.

As per the applicable tariff schedule, industrial tariff is applicable only to those consumers, which utilize it for industrial, processing or agro-industrial purposes or to power loom as well as to Arc/Induction furnaces, Rolling/Re-rolling Mills, Mini Steel plants. The Hotels does not fall under any of these categories and hence the hotels should not be categorized under industrial category.

The Petitioner further submitted that increase in tariff should be seen by clubbing the energy charges with fixed charges. Accordingly increase in tariff for domestic category and non-domestic category has been proposed at 47% and 53% respectively. Increase in tariff has been proposed in a manner that the cross subsidy level of subsidizing category is maintained upto 20% as mandated by the law.

### **3.3.2 Minimum Consumption Guarantee Charges (MCG)**

#### **3.3.2.1 Stakeholder's Comments**

Shri G. S. Manchanda, Proprietor of Hotel India requested the Commission for the exemption in MCG charges for all stakeholders upto 25 kW. However, MCG charges should be levied and recovered for the balance additional load. This will give equal treatment to all stakeholders.

Shri V. V. Joshi, AGM, Tata Motors Ltd. submitted that levying MCG charge is based on unrealistic, double taxing methodology. Presence of MCG in tariff structure restricts the utilization of open access as it is essential for consumers to pay fix amount towards energy charges. Therefore, he requested the Commission to remove MCG from the tariff structure and to encourage open access as this is one of the best tools to reduce demand-supply gap of State and provide reliable power supply to all consumers.

Shri R. N. Mathur , President of Mussoorie Hotels Association and Shri Ajay Bhargava of Hotel Surya Kiran, the Mall Mussoorie submitted that hotels being located in hills have business only for two months, which is not sufficient to cover the minimum consumption guarantee of 75 units per kW of load per month. Further, Shri G. S. Manchanda, Shri Ajay Bhargava of Hotel Surya Kiran, the Mall Mussoorie and Shri. R. N. Mathur submitted that MCG charges get automatically

increased with the increase in the energy charges and, therefore, MCG charges should be delinked from the energy charges.

Shri Rajender Singh of Ajabpur, Kurd, Dehradun submitted that he has electricity connection of 17 kW and has floor mill small scale industry. In this regard, bill should be charged on the actual consumption of electricity and the Excess Charges due to MCG should not be charged. He requested the Commission that the electricity tariff or the Fixed Charge may be increased, however the provision of MCG should be removed for the connections up to 20 KW.

Shri Ram Kumar, Senior Vice President, Mussourie Hotels Association further submitted that the MCG on seasonal industry should be abolished as it encourages unnecessary wastage of electricity by consumers during off season.

#### **3.3.2.2 Petitioner's Response**

The levy of Minimum consumption guarantee is not on the account of power availability but for the recovery of minimum fixed charges. As regards removal of Excess charges due to Minimum Consumption Guarantee, the Petitioner submitted that Section- 45(3) of the Electricity Act, 2003, stipulates for levy of fixed charges as follows:

*"The charges for electricity supplied by a distribution licensee may include:*

- *a fixed charge in addition to the charge for the actual electricity supplied;*
- *a rent or other charges in respect of any electric meter or electrical plant provided by the distribution licensee."*

About 50% of the UPCL's total costs are fixed in nature including the capacity / fixed charge of power purchase, which should be recovered to a certain extent through fixed charges to ensure revenue stability. Levy of minimum consumption guarantee charge is a way of ensuring minimum revenue to the licensee from the consumers. Also two part tariff exercise involves determination of fixed and energy charges to meet the cost of supply, any reduction in fixed charges would thus call for increase in energy charges to match the tariff with COS.

Minimum Consumption Guarantee has been proposed at very low level of consumption i.e. at 10% load factor in respect of non-domestic category. In case during certain months, actual consumption is less than MCG, MCG is charged in those months. Any excess of billed consumption

over (actual consumption or minimum consumption, whichever is higher) is adjusted at the end of the financial year.

### **3.3.3 Tariff for Charitable Institutions**

#### **3.3.3.1 Stakeholder's Comments**

With regard to Non Domestic Consumer Category, Shri Rakesh Bhatia and Shri Mahesh Sharma of Uttarakhand Industrial Welfare Association submitted that UPCL should not be allowed to increase fixed charges and tariff rates for the Govt. Hospitals/ Charitable Institutions and the difference for 25 kW and above 25 kW should also get abolished and the principle of “One Electricity One Rate” should be adopted for these institutions too.

Shri. Sanjay Kumar Agarwal (President and General Secretary, Shri Karuna (Jan Kalyan Samiti, Almora)) submitted that Subsidy should be provided on electricity tariff for places of worship.

Shri Surendra Bhardwaj of Akhil Bhartiya Dharamshala Prabandhak Sabha, Haridwar and Shri Gopal Singhal of Khetriya Dharamshala Prabandh Samiti, Haridwar submitted that Electricity Tariff for Dharamshala/Trusts/Ashram should not be increased. Further, the religious organisations such as dharamshalas, trusts, gurudwaras, etc. have been kept under commercial category. Such religious organisations provide services in public interest. The money collected in charity could not be considered as rental because it is used for the normal maintenance and management. In this regard, they have requested the Commission that the electricity connection of such religious organisations should be changed from Commercial Category to Domestic Category.

Shri Raj Singh, President of Devbhumi Dharamshala Prabandhak Sabha, Haridwar submitted that proper hearing should be done as per the directions of the Appellate Tribunal of Electricity. The dharamshalas/trusts have been kept under industrial (charitable)/commercial category. He has requested UERC that all the dharamshalas/trusts should be exempted from the compulsion of Income-tax Act 1961. Further, the electricity connection of all the dharamshalas/trusts should be changed from industrial/commercial Category to Domestic Category.



Shri. M. C. Upreti, Chief Secretary, Uttarakhand Government requested to add worship places like Temple, Mosque, Gurudawara and Church in the category of RTS 2.1 apart from the charitable trust enrolled under Income Tax Rule 1961 and free from income tax.

#### **3.3.3.2 Petitioner's Response**

UPCL is a commercial organization and is required to meet its Annual Revenue Requirement out of the revenue realized from the consumers through electricity tariffs. UPCL has not discriminated against any specific category while proposing tariff hike and has requested for a uniform tariff hike across all categories. Thus the Commission is requested to consider the Tariff Proposal of UPCL keeping in view the aforesaid facts submitted.

With regard to the contention raised regarding relaxation of income tax on worship places, the Petitioner has submitted that UPCL appreciates the concern of the Govt. and requested the Commission to consider the proposal for the same.

Further, the rate schedule approved by the commission in its Tariff Order dated April 11, 2012, Dharamshala/Trust/Ashrams fall under the category of RTS-2 (Non-domestic). The domestic category applies only on the residential premises for light, fan & power and other domestic purposes including single point bulk supply above 50 KW for residential colonies, residential multi-storeyed buildings where energy is exclusively used for such purpose. Non-domestic category is a subsidizing category whereas the domestic category is subsidized category. As per the provisions of Electricity Act, 2003 and National Tariff Policy, the cross subsidy should be maintained at the level of  $\pm 20\%$  of the average cost of supply.

In view of the facts mentioned hereinabove, consumers covered under subsidizing category cannot be transferred into the subsidized category. Thus, the Dharamshala/Trust/Ashrams are rightly categorized under Rate Schedule RTS-2 (Non-domestic).

The Petitioner further submitted that no details have been provided by the stakeholders regarding the directions which are being discussed regarding the Appellate Tribunal of Electricity. Thus the same cannot be commented upon. However it is to inform that on the tariff proposal of UPCL, the Commission conducted hearing at various places of the State.

Further, the condition of exemption under Income Tax Act for concessional tariff under rate schedule RTS-2 has been kept with a view to ensure that the charitable institutions is working for the benefit of general public.

With regard to the subsidy for places of workshop the Petitioner submitted that in its MYT Petition it has already proposed for consideration of places of worship under RTS -2 (1.1) category, the tariff for which is less than other non-domestic consumers. Regarding the subsidy, the consumer is requested to approach the State Govt. since the same falls under its prerogative.

### **3.3.4 Government Offices**

#### **3.3.4.1 Stakeholder's Comments**

Office of Additional Zila Adhikari Tehri Garhwal submitted that offices of State Supervisor and State Vice- Supervisor (Patwari) should be charged with domestic tariff rates.

#### **3.3.4.2 Petitioner's Response**

The Petitioner submitted that as per the existing categorization of consumers, based on the rate schedule approved by the commission in its Tariff Order dated 11.04.2012, the mentioned offices fall under the category of RTS-2 (Non-domestic).

### **3.3.5 Public Toilets**

#### **3.3.5.1 Stakeholder's Comments**

Office of Secretary, Mussoorie – Dehradun Development Authority, Mussoorie and Shri A. K. Singh, President of Biofriends submitted that the public toilets and urinals in mussoorie provide facility in public interest and not used for commercial purpose. In this regard, they have requested UERC that electricity connection of such public toilets should be changed from Commercial Category to Domestic Category.

#### **3.3.5.2 Petitioner's Response**

The Petitioner submitted that as per the existing categorization of consumers, based on the rate schedule approved by the commission in its Tariff Order dated 11.04.2012, Public Urinals fall under the category of RTS-2 (Non-domestic). The domestic category applies only on the residential premises for light, fan & power and other domestic purposes including single point bulk supply above 50 KW for residential colonies, residential multi-storeyed buildings where energy is

exclusively used for such purpose. Non-domestic category is a subsidizing category whereas the domestic category is subsidized category. As per the provisions of Electricity Act, 2003 and National Tariff Policy, the cross subsidy should be maintained at the level of  $\pm 20\%$  of the average cost of supply. In view of the facts mentioned hereinabove, consumers covered under subsidizing category cannot be transferred into the subsidized category. Thus, the public urinals are rightly categorized under Rate Schedule RTS-2 (Non-domestic).

### **3.4 Temporary Supply**

#### **3.4.1.1 Stakeholder's Comments**

Shri Ganesh Upadhyay, Member of Uttarakhand Pradesh Congress Committee submitted that the temporary connection is provided for not more than 3 months. For extending the time limit of temporary connection beyond 3 months, consumers have to face lot of problems. Further, Shri. S. P. Joshi and Shri. Ganesh Upadhyay submitted that UPCL should provide prepaid meters to facilitate the consumers.

Shri. Sanjay Kumar Agarwal (President and General Secretary, Shri Karuna (Jan Kalyan Samiti, Almora) submitted that UPCL should further sub-categorize Temporary Connections Category based on financial condition of persons and 11.37% surcharge should not be applied on domestic and non domestic categories.

#### **3.4.1.2 Petitioner's Response**

The Petitioner submitted that recovery of cost from all category of consumers is done on the basis of average cost of supply with cross subsidy as per law and there is no provision in law to fix the tariff according to financial conditions of persons. Thus it is not possible that 11.37% surcharge is not recovered from domestic and non domestic categories.

Further, the Petitioner has ensured that the temporary connections are released at the earliest after receipt of application. Further, UPCL is in process to implement prepaid metering scheme on all temporary connections and all LT consumers with load upto 30 KW who give a written consent. The scheme has already been notified and approved by the Commission.

### **3.5 Drinking Water Supply Schemes**

#### **3.5.1.1 Stakeholder's Comments**

Chairman, Consumer water and Hygiene Mission, Chairman, U.W.S.S.C – Ranjeetpur and Shri T.C. Mathur, Project Organizer, Uttarakhand Rural Drinking Water and Hygiene Project, Drinking Water Department submitted that electricity tariff charged to Water Supply Schemes being developed under World Bank funding should be replaced from existing commercial rates to domestic rates to make O&M sustainable for rural communities. Further, Shri S. K. Goyal, Chief Engineer, State Water & Sanitation Mission, Shri S. K. Pawar and Shri R. K. Rajvaar of Swajal Pariyojna submitted that the rural community do not get any grant from the state government for the payment of electricity bills for the Drinking Water Supply Schemes and the bill is paid through contribution. In this regard, they requested that the electricity connection used in Drinking Water Supply Pumping Scheme (Peyajal Pumping Yojna) under the maintenance of Gram Panchayat/Consumer Drinking Water and Sanitation Committee and User Water and Sanitation Sub-Committee (UWSSC) should be changed from Commercial Category to Domestic Category. Further, Smt. Shakuntala Devi of Bahadrabad, Shri Shakkil Ahmad and Smt Naushaba of Naarsan, Shri Kamar Alam of Roorkee, Shri Sureshna of Bahadrabad, Shri Bala Saini of Shahjahanpur and the members of Consumer Drinking Water and Sanitation Sub-Committees of various Gram Panchayats of Districts Haridwar and Dehradun have requested the Commission to change the electricity connection of the Drinking Water Supply Schemes of their villages from Commercial Category to Domestic Category.

Shri S. K. Goyal and Shri S.C. Gupta Chief Engineer, Rajya Jal Avam Swachhata Mission, Pey Jal Vibhag Government of Uttarakhand, submitted that with the assistance of World Bank, the development of Pey Jal schemes in the rural areas are undertaken by rural communities. They submitted that after the completion, the Operation and Maintenance of such schemes is also done by rural communities for which all electricity bills are paid by rural communities from their own sources. He further, submitted that 195 such schemes have been undertaken in Haridwar and Dehradun which are dependent on electricity. He submitted that the World Bank mission in its aide-memoire commented that, in order to make the O&M sustainable for rural communities, the electricity bill for supply of water, charged to the rural communities at commercial rates should be replaced by the domestic rates. They requested that in view of the above and in accordance with the

Electricity Act, 2003 the electricity consumption for Pey Jal pumping schemes shall be allowed to be billed at domestic rates.

#### **3.5.1.2 *Petitioner's Response***

It is submitted that as per the existing categorization of consumers, based on the rate schedule approved by the Commission in its Tariff Order dated 11.04.2012, Public water supply schemes functioning under Jal Sansthan, Jal Nigam or other local bodies fall under the category of RTS-6, where tariff is lower than tariff applicable to Non -Domestic categories.

It is also submitted that while determining the tariff for any particular category of consumer, the Hon'ble Commission is to be guided by the principles of National Tariff Policy and Electricity Act, 2003. The tariff for any category of consumers should be reflective of the cost of supply for that particular category of consumers and differentiation between consumers can be done only on the basis of consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required.

Thus, the water supply scheme is rightly categorized under RTS-6 (Public Water Works) and cannot be considered under domestic category.

The domestic category applies only on the residential premises for light, fan & power and other domestic purposes including single point bulk supply above 50 KW for residential colonies, residential multi-storeyed buildings where energy is exclusively used for such purpose.

### **3.6 Agricultural tariff**

#### **3.6.1 *Private Tube Wells***

##### **3.6.1.1 *Stakeholder's Comments***

Shri Tika Singh Saini, President, Sanyukt Kisan Sangharsh Samiti, Kashipur, Uttarakhand submitted that P.T.W (private tube wells) Bill should not be increased as the farmers are unable to pay the bill. The financial health of the farmers is bad due to less revenue generated in on account of high prices of agricultural equipments/ input products. He further submitted that there is delay in providing new connections for private tube wells (P.T.W). The applications for the new electricity connections for private tube wells are still pending from 1 year and the excuse given for this delay is

poor availability of electricity poles, wires, transformer, etc. They further submitted that UPCL delays in replacing the defective power transformers and finally replacement is done after heavy protest by the farmers. They also submitted that the temporary electricity connections should be provided on advance payment to agricultural consumers due to high irrigation need during summer season in May-June. They

Shri Kuldeep Cheema of Bhartiya Kisan Union submitted that the water level is high in irrigation land of their area. In this regard, he has requested the Commission to provide 3 H.P of electricity connection.

Shri Tika Singh Saini, President, Sanyukt Kisan Sangharsh Samiti, Kashipur, Uttarakhand further submitted that a time frame of 6 months is provided to farmers to submit the PTW bills, when the crops are ready. This bill is to be paid without any surcharge, however, interest is charged on the same. On complaint regarding charging of interest, the officials ignore it on the reason of computer mistake.

#### **3.6.1.2 *Petitioner's Response***

The Utility is making concerted efforts to improve its performance and efficiency by incurring proposed capital expenditure which has been dealt along with the capital expenditure plan. The utility aims to achieve the collection efficiency level of 97% by the end of FY 2015-16.

The following initiatives have been taken for commercial loss reduction and improvement of collection efficiency:

- Implementation of R-APDRP, Part-A & Part-B in 31 towns having population above 10,000, SCADA/DMS in towns having population greater than 4 lacs and energy input greater than 350 MU/ annum
- Replacement of electromagnetic meters with tamper proof electronic meters
- Double metering, shifting of single phase & three phase meters outside the premises of the consumers
- Regularisation of unauthorised I.P. installation and thereby increasing the sales
- Convenient bill payment options like cash collection counters, online bill payment through credit card, debit card, internet banking, etc.

- More teams to be sent to rural areas for increasing collection
- Recovery of past arrears

Thus UPCL is continuously committed to improve its collection efficiency and no impact of reduced collection is passed onto the consumers.

UPCL is a commercial organization and is required to meet its Annual Revenue Requirement out of the revenue realised from the consumers through electricity tariffs. The tariff of PTW category has been proposed at only 26% of the Average Cost of Supply.

The Petitioner further submitted that the pending PTW connections shall be released shortly. All the others problems highlighted by consumers have been noted down and steps shall be taken to resolve them at the earliest as per Standards of Performance set by the Commission. Further, for irrigation purpose, connections are of permanent nature and therefore no temporary supply should be allowed to them. Further, the Petitioner submitted that late payment surcharge is being charged as per the provisions of Tariff Order on the unpaid amount of bill.

### ***3.6.2 Production and Processing of Mushroom and Floriculture***

#### ***3.6.2.1 Stakeholder's Comments***

M/s Flex Foods Limited submitted that they have electricity connection with connected load of 1450 KVA at their factory located at Lal Tappar and 1000 KVA for Mushroom Farm located at Chidderwala, Dehradun. M/s Flex Foods Limited submitted that in accordance with Tariff Order for FY 2012-13 of UPCL, they are paying tariff at a rate of Rs. 4.45/unit. Any increase in electricity tariff may impact the feasibility of their business as they are already facing tough competition from China and international market. M/s Flex Foods Limited further submitted that in FY 1997-98 it had faced tough competition in international market due to payment of comparatively very high tariff of Rs.4.50/ unit. The high power tariff forced them to close their mushroom farm for at least 3 months. At that time, they requested the Government to consider their request of lower the tariff, which government (during UP Government regime) agreed from January 25, 1999 and they were placed under category HV-5 and their power tariff was reduced to Rs.2.75/unit. They further submitted that their business is also facing tough competition from mushroom producers of Maharashtra as Maharashtra mushroom producer are placed in HT-V: HT Agricultural and paying comparatively lower power tariff of Rs.2.88/unit and fixed charge of Rs.30 per KVA per month. M/s Flex Foods

Limited requested the Commission to consider their case and put them in a separate category for high tech agricultural industry as per the Maharashtra State power tariff pattern for agro based units.

### **3.6.2.2 *Petitioner's Response***

The Petitioner submitted that UPCL is a commercial organization who is required to meet its Annual Revenue Requirement out of the revenue realised from the consumers through electricity tariffs. The revenue deficit for the period upto FY 2013-14 excluding the deficit of FY 2012-13 is expected to be Rs. 1885.12 Crore, which requires 50.30% of increase in tariff. Further, the deficit of Rs. 773.91 Crore for FY 2012-13 shall be claimed in the next year during truing up exercise. Thus, the Petitioner has requested the Commission to consider the Tariff proposal of UPCL keeping in view the aforesaid facts submitted.

## **3.6.3 *Agricultural Feeder***

### **3.6.3.1 *Stakeholder's Comments***

Shri Vivek Jha submitted that their factory is getting power from agricultural feeder and the power availability is very poor, i.e., rostering is of an average of 8 to 10 hrs. He therefore submitted that the availability of power should be increased, so that their plant could be run on power instead of generator. He further submitted that the service of feeder station is very poor and, therefore, task force for monitoring service should be made. Also, voltage fluctuation is huge and, therefore, there is a risk of the failure of costly machines due to which they are not able to run the Plant even though power is available. He accordingly submitted that proper servicing of feeder station should be carried out and voltage fluctuations should be controlled.

### **3.6.3.2 *Petitioner's Response***

The scheduled load shedding is done only after approval from the Commission. The unscheduled load shedding is done to meet the gap in demand and availability. It is done only under unforeseen and unavoidable conditions. The communication to the consumers on the same is give by the way of SMS on registered mobile numbers. Further, the suggestions of the consumer have been noted and the same shall be implemented upon.



### **3.7 Industrial Tariff**

#### **3.7.1 Tariff Hike**

##### **3.7.1.1 Stakeholder's Comments**

Shri Dhuruv Semwal of Montage Enterprises Pvt. Limited and Shri. Vishnu Dutt Tyagi, AGM, M/s Ultimate Flexipack Limited submitted that the tariff Hike proposed by UPCL for HT industry is very high as compared to other states like Maharashtra, Himachal Pradesh and J&K.

Shri. P. K. Rajput, Executive Director, M/s Vista Alps Industries Ltd. submitted that the Government of Uttarakhand, in 2003, had projected availability of surplus power in the State and offered power at a very economical rate and had assured cheaper power available throughout the period of exemption scheme. He further submitted that their textile units have given opportunity for employment to thousands of workers in the State and are generating revenue for State/Central Government by way of selling yarn in the domestic market and export to various countries. Also, the textile sector is already in downfall due to high raw cotton price, low Central Govt. incentive of only 2.9% for cotton yarn, high employment cost and high miscellaneous cost. He further added that during the last few years, lot of hydro projects were set up and this has increased the power generation capacity of the State. The power generation cost is much cheaper in case of hydro than thermal power but still the electricity rate has gone up tremendously in the last few years and hence the tariffs in FY 2013-14 shall not be increased.

Shri N. Ram Mohan, Polyplex Corporation Limited submitted that the Petitioner has proposed an average tariff hike of 50.30% in the existing retail tariffs of consumers. In addition to this the Petitioner has also claimed past adjustment of capital related expenses from November 09, 2001 to March 31, 2011 arising out of approval of the transfer scheme with UPPCL by GoU, amounting to Rs. 1581.24 Crore (including the carrying cost till March 31, 2013), which was not considered by the Commission earlier. He submitted that the Petitioner is proposed to recover the amount over a period of three years along with the carrying cost on the same. Accordingly, the Petitioner has proposed a recovery of Rs. 640.38 Crore in FY 2013-14 by imposing a regulatory surcharge of 11.37% to be levied on total fixed charges and energy charges for all the categories of consumers. He further submitted that the Regulatory Surcharge of 11.37% for FY 2013-14 would imply another 17.09% increase over the existing tariff in addition to 50.30% proposed by UPCL for

FY 2013-14, thereby, implying an overall tariff hike of 67.39% proposed by the licensee on the existing retail tariffs. He also submitted the increase in the tariff approved in various states by their respective regulatory commissions.

S.No.	State	% increase in Tariff	Month/year
1	Gujarat	2	Jun-12
2	HP	13	Apr-12
3	J&K	6	Apr-12
4	Karnataka	3	Apr-12
5	MP	7	Apr-12
6	Punjab	12	Jul-12

Based on the above table, he submitted that average tariff hike for the nine states comes to around 7.2%. He requested the Commission to consider the facts provided by him while approving the tariff for FY 2013-14.

Shri Raj Kumar Arora, Kashi Vishwanath and Shri. Yogesh Kumar Jindal, Director, Kashi Vishwanathan Textile Mill Ltd. submitted that proposed hike of 50% in power tariff in Uttarakhand is unjustified.

Shri Jai Bhagwan Agrawal of Kashi Vishwanath Steels Ltd., Shri Raj Kumar Arora of M/s Kashi Vishwanath Textile Mill Ltd., Shri Devendra Kumar Agrawal, Managing Director, M/s Kashi Vishwanath Steels Ltd. and Shri. Rajeev Gupta of KVS Infratech LLP submitted that UPCL is working like a commercial institution, which should be bound to apply all business norms and techniques for reducing its cost structure by minimizing their expenses and improving their working, purchasing low cost power from open access. In this regard, he requested the Commission to study the financial calculations of UPCL at micro level and approve a reasonable power tariff.

Shri. Pawan Agarwal, Vice President, Uttarakhand Steel Manufacturers Association submitted that Govt. of Uttarakhand charges a cess of 40 to 50 Paise per kWh for the power sourced from UJVNL. This cess amount is charged so that the consumers are not habitual of cheaper power and the amount collected is utilized in the power development of the State. He further requested the Commission that the cess amount should be included in the tariff determination for FY 2013-14 to reduce the tariff hike.

Shri Suresh Kumar of La Opala RG Ltd. submitted that the proposed 68% tariff hike is mainly due to inefficiency of UPCL in different segments of operations and the tariff increase should be limited to around 5-7%.

Shri Rakesh Bhatia and Shri Mahesh Sharma of Uttarakhand Industrial Welfare Association further submitted that UPCL should not be allowed any further hike in tariff for the Industries. There is no reason to charge fixed charges, when actual electricity consumption charges are paid. In this regard, UPCL should be allowed to charge fixed expenses for few years from the date of service connection and for the old connection fixed charges should not be levied.

#### **3.7.1.2 Petitioner's Response**

UPCL is a commercial organization and is required to meet its Annual Revenue Requirement out of the revenue realised from the consumers through electricity tariffs. The revenue deficit for the period upto FY 2013-14 excluding the deficit of FY 2012-13 is expected to be Rs. 1885.12 Crore, which requires 50.30% of increase in tariff. The deficit for FY 2012-13 based on accounts shall be claimed in the next year during truing up exercise. Thus the Commission is requested to consider the Tariff proposal of UPCL keeping in view the aforesaid facts submitted.

As regards the contention raised by Shri. Vishnu Dutt Tyagi regarding tariff hike, the Petitioner submitted that the tariff hike proposed has been spread evenly across all categories.

The Petitioner has submitted the average effective rate of Electricity charges applicable on HT Industries in FY 2012-13 in various States as follows:

Uttarakhand	-	Rs. 4.14/Unit
Uttar Pradesh	-	Rs. 6.25/Unit
Himachal Pradesh	-	Rs. 4.77/Unit
Delhi	-	Rs. 7.60/Unit
Maharashtra	-	Rs. 6.96/Unit

The Petitioner submitted that is clear from the above that tariff applicable in Uttarakhand is lowest. UPCL further submitted that Electricity Act, 2003 mandates for a two part tariff.

About 50% of the UPCL's total costs are fixed in nature including the capacity / fixed charge of power purchase, which should be recovered to a certain extent through fixed charges to ensure revenue stability. Also two part tariff exercise involves determination of fixed and energy charges to meet the cost of supply, any reduction in fixed charges would thus call for increase in energy charges to match the tariff with Cost of Supply.

### **3.7.2 Textile Industry**

#### **3.7.2.1 Stakeholder's Comments**

Shri. Yogesh Kumar Jindal, Director, Kashi Vishwanathan Textile Mill Ltd. submitted that he is successfully running spinning mill at Kashipur, for more than a decade in very tough conditions, when so many other spinning industries in the State are either shutdown or are struggling to survive. He submitted that the hike in power tariffs will adversely hamper this industry which is operating on very thin margins due to acute shortage of workers resulting in poor efficiency achievement. In view of the above, he requested the Commission to consider textile industry for special relaxation in power tariff as this industry is one of the major sector which creates employment in the State and gives revenue to the State as well as Central government.

#### **3.7.2.2 Petitioner's Response**

The Petitioner submitted that while determining the tariff for any particular category of consumer, the Commission is to be guided by the principles of National Tariff Policy and Electricity Act, 2003.

The tariff for any category of consumers should be reflective of the cost of supply for that particular category of consumers and differentiation between consumers can be done only on the basis of consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. Based on the above submission any specific concession cannot be given to the textile industry.

The Petitioner submitted that MES is currently categorized in mixed load (RTS-8) which is subsidized category (subsidized by the categories whose average billing rate is above average cost of supply) and, therefore, no further reduction in MES tariff is possible.

### **3.7.3 Fixed Charge/Demand Charge**

#### **3.7.3.1 Stakeholder's Comments**

Shri. V.K. Aggarwal of Balaji Action Buildwell and Shri. R.K. Gupta, General Manager of Gujarat Ambuja Exports Ltd. submitted that the Petitioner has proposed a hike in the tariff of Industrial category by increasing fixed/demand charges as well as energy charges. The fixed charges to LT industries have been proposed as Rs.130/- per KW as against existing rate of Rs.90/-

per KW and demand charges for HT industries as Rs.285/- and Rs.375/- per KVA as against existing rate of Rs.200/- per KVA and Rs.260/- per KVA.

Shri V.P. Chitturi, Hindustan National Glass and Industries Limited submitted that fixed demand charges should be reduced. Shri Rakesh Bhatia and Shri Mahesh Sharma of Uttarakhand Industrial Welfare Association submitted that fixed charges should be discontinued.

Shri. Atar Singh Aswal requested the Commission to charge actual energy charges on readings only as excess charges are unjustifiable over and above the actual energy charges. Further, Fixed Charges should be reduced on counter load, as rostering happens during working hours.

Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry, Shri Suresh Kumar of La Opala RG Ltd. submitted that maximum demand charges should not be increased at all as it is already high.

#### **3.7.3.2 Petitioner's Response**

As regards the reduction of Fixed Charges, the Petitioner submitted that the Section 45(3) of the Electricity Act, 2003 mandates for a two part tariff, the relevant clause has been extracted below

*"The charges for electricity supplied by a distribution licensee may include:*

- (a) a fixed charge in addition to the charge for the actual electricity supplied;*
- (b) a rent or other charges in respect of any electric meter or electrical plant provided by the distribution licensee."*

About 50% of the UPCL's total costs are fixed in nature including the capacity / fixed charge of power purchase, which should be recovered to a certain extent through fixed charges to ensure revenue stability. Further, the two part tariff exercise involves determination of fixed and energy charges to meet the cost of supply, any reduction in fixed charges would thus call for increase in energy charges to match the tariff with COS.

#### **3.7.4 ToD Tariff**

##### **3.7.4.1 Stakeholder's Comments**

Shri G. S. Bedi, General Manager, Indian Drugs & Pharmaceuticals Ltd. (IDPL) and M/s Asahi India Glass Limited submitted that the proposed increase of ToD charges for industries, specifically peak hour rates of Rs. 8.10/kVAh and Rs. 7.73/kVAh is so very high. They also

submitted that the abolition/reduction of morning peak hours beyond 8 AM needs to be considered.

Shri. V.K. Aggarwal of Balaji Action Buildwell and Shri. R.K. Gupta, General Manager of Gujarat Ambuja Exports Ltd. submitted that the TOD tariff off peak rate for night consumption has been proposed to be 10% lower than the normal rate and peak hours rate as Rs.7.75/KVAh besides continuing with the load factor based energy charges as in the existing tariff. The proposed peak energy rate of Rs.7.73 per KVAh is very high and is not supported by any justification by the Petitioner. Further, the morning peak hours as envisaged in the tariff needs to be reviewed and done away with as in no other hill State except for Uttarakhand, the morning peak hours have been specified for charging higher energy charges while the usage pattern there is almost the same. They further suggested that the peak energy rate should not be more than 30% of the normal rate and off-peak energy rate should not be less than the 20% of the normal rate so that the deviation for peak and off-peak consumption from normal rates are more logical and closer to the cost of supply.

Shri. Atar Singh Aswal submitted that Industrial and Commercial consumer pays excess charges, fixed demand charges on counter load and actual energy charges in a situation when daily 4 hrs to 6 hrs of rostering happens in the State. Sometimes they do not receive power for 15 hrs in a day. According to him, rostering happens during the working hours of 8:00 AM to 2:00 PM due to which working hours reduces from 8 hrs to only 3 hrs. In this regards, he requested the Commission for non implementation of excess charges in terms of TOD tariff since TOD tariff is not justified more so when consumers receive interrupted power supply for the period 8:00 AM to 2:00 PM.

Smt. Vibha Malhotra, Director & Head (Uttarakhand State Office), CII, Vikas Jindal, President, Kumaon Garhwal Chamber of Commerce & Industry, M/s BST Textile Mills Pvt. Ltd., Shri. V. V. Joshi, AGM, Tata Motors Ltd. and Shri Jai Bhagwan Agrawal of Kashi Vishwanath Steels Ltd. submitted that the winter season peak hours in morning from 6 AM to 9:30 AM is completely wrong and illegal and should be abolished immediately.

Shri Jai Bhagwan Agrawal of Kashi Vishwanath Steels Ltd. further submitted that in the existing tariff, peak hour charges is more than sufficient for all types of load factors. In this regard, he suggested that peak hour charges should remain same.

Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry, Shri Suresh Kumar of La Opala RG Ltd. and Shri Raj Kumar Arora of M/s Kashi Vishwanath Textile Mill Ltd. submitted that the morning peak hours as envisaged in the tariff needs to be reviewed. They further submitted that at present off peak energy charge is 10% lower than the normal rate while peak rate is 50% higher than the normal rate for more than 50% load factor. Thus, there is a great anomaly in the off peak and peak hour rates. In this regard, he suggested that the peak energy rate should not be more than 30% of the normal rate and the off peak rate should not be less than 20% of the normal rate so that such deviations for peak and off peak consumption from normal rates are more logical and closer to the cost of supply.

Shri. Pawan Agarwal, Vice President, Uttarakhand Steel Manufacturers Association further submitted that the morning peak hours should not be allowed as it is not allowed in all other States including Himanchal Pradesh. He further submitted that tariff rate for night off peak hours should be 20%, instead of 10%.

Shri N. Ram Mohan, Vice President, Polyplex Corporation Ltd. submitted that consumers of the State are paying exorbitant peak hour charges unlike consumers of other States as shown in the table below:

State	Peak Hour Surcharge
Uttarakhand	50% on normal rate of Energy Charge at load factor above 50%
Maharashtra	Between 17% to 24% (charged at additional Rs 0.80-1.10 per unit in peak hours)
Madhya Pradesh	15% of Normal rate of Energy Charge as Surcharge
Andhra Pradesh	Rs 1/kVAh
Uttar Pradesh	15% high charges during peak hours

He further submitted that the duration of peak hours for consumers of the Petitioner in FY 2007-08 was 8 hours and surcharge levied on power consumption during this period was 25%. In FY 2011-12, after 4 years the peak period remains the same (for 8 hours) but the peak hour charges have been doubled. Even after 4 years, the licensee has not been able to reduce the peak period which should be seen as an incompetence in power supply planning by the State. Moreover, the consumers in the state are not aware of changes in load curves over the years to come to a conclusion that peak period for the utility has not changed. There is a need to re-assess the current peak load curves to arrive at reasonable peak duration. He also submitted that the States like

Madhya Pradesh, Andhra Pradesh, Uttar Pradesh and Himachal Pradesh have peak hour duration in the range of 3 to 5 hours, which is less than the Uttarakhand.

Shri N. Ram Mohan further requested the Commission to direct the Petitioner to provide annual load curves with the Petition so that a clear picture of peak load period is available before the consumers. He also requested to reduce the peak period to less than 5 hours.

#### **3.7.4.2 Petitioner's Response**

As regards the contention raised regarding non implementation of excess charges in terms of TOD tariff the Petitioner submitted that implementation of TOD tariff is in line with National Tariff Policy. The relevant section has been extracted below:

*"Provision in Tariff policy:*

*6.2 Tariff structuring and associated issues*

.....

*The Appropriate Commission may also introduce differential rates of fixed charges for peak and off peak hours for better management of load."*

The peak hours from April to September are 1800-2300 hours (5 hours in a day) and from October to March are 0600-0930 hours and 1730-2200 hours (8 hours in a day). During deficit situations, UPCL buys power from the Grid through UI mechanism and the rate of this power is upto Rs. 9.00/kWh. After incorporating the losses, this rate becomes more than Rs. 11/kWh. Accordingly, it is justified to have the energy charges during peak hours at 50% higher than the energy charges during normal hours.

By implementing TOD tariff it is possible to motivate individual consumers to either reduce the consumption or shift their consumption from one point of time to another time during the day. It is desirable from the system point of view to reduce peak demand and encourage consumption/enhance load during off peak hours.

The Petitioner further submitted that the Commission in its previous order has found that

*" during all the months covered under winter season, i.e. October to March in a Financial year, both morning as well as evening peak demand exists in the State. Infact, in the months of January and February, the morning peak demand has been found to be even higher than the evening peak demand.*



*Even, in the remaining winter months, i.e. October to December and March, where morning peak demand is lower than the evening peak demand, the total demand is much higher than the demand met and, hence, there is a shortfall experienced during morning peak hours also."*

This substantiates the view of UPCL that the peak hours should continue and TOD tariff should be implemented. With regard to the review of morning peak hours, the Petitioner submitted that the morning peak hours have been kept only in the winter season i.e. from October to March of the financial year with timing from 06:00 hrs to 09:30 hrs. Morning peak hours have been provided due to heating load and reduced generation in winter season, whereas the Air conditioning load during summer season in the Hilly State of Uttarakhand from 06:00 hrs to 09:30 hrs is negligible. Therefore, morning peak hours in winter are required to be continued.

Further, with regard to off peak hours, the Petitioner submitted that there is deficit situation throughout the day, but the quantum of deficit during peak hours is much more than the quantum of deficit during off peak hours. Further, the rates of electricity in the open market / grid during peak hours are also much more than the rates of electricity during off peak hours. Keeping in view this situation peak hour extra charges have been kept at a rate more than the rate of rebate during off peak hours so that the load during peak hours may be shifted to the off peak hours.

### **3.7.5 Rebate and Incentives**

#### **3.7.5.1 Stakeholder's Comments**

Shri G. S. Bedi, General Manager, Indian Drugs & Pharmaceuticals Ltd. (IDPL) submitted that there should be a rebate for timely payment and incentive for reactive power management by keeping power factor nearing Unity.

Shri Suresh Kumar of La Opala RG Ltd. and Shri Raj Kumar Arora of M/s Kashi Vishwanath Textile Mill Ltd. submitted that UERC should review the rebate mechanism for higher supply voltages of 33 kV & 132 kV and restore the original rebate in the coming Tariff Order or otherwise compute the new tariff for FY 2013-14 on the basis of voltage wise and category wise cost of supply to all the consumer categories.

Shri Jai Bhagwan Agrawal of Kashi Vishwanath Steels Ltd. further submitted that 5% rebate should be given to industries connected to Independent Feeder at 33 kV voltage supply and 7.5% rebate should be given to industries connected on Independent Feeder at 132 kV voltage supply.

Further, Smt. Vibha Malhotra, Director & Head (Uttarakhand State Office), CII and Shri. V. V. Joshi, AGM, Tata Motors Ltd. requested the Commission to increase the high voltage rebate for 33 kV consumers from 1.5% to 5% and for 220 kV consumers from 5% to 10%.

Shri. Sanjay Kumar Agarwal (President, Shri Karuna Jan Kalyan Samiti, Almora) submitted that there should be an incentive of 10% for timely payment within 15 days and 5% for timely payment within 30 days.

Shri. Sanjay Kumar Agarwal (President, Shri Karuna Jan Kalyan Samiti, Almora) and Shri R. K. Saxena, Chief Electrical Distribution Engineer, Northern Railways further submitted that Late Payment surcharge on account of non receipt of bills should not be charged. Shri R. K. Saxena further submitted that a single consolidated bill should be issued incorporating consumptions of all such connections to Northern Railways.

Shri V.K. Aggarwal of Balaji Action Buildwell and Shri R.K. Gupta, General Manager of Gujarat Ambuja Exports Ltd. have submitted that in the Commission's Tariff Order dated April 25, 2005, the high voltage rebates to the consumers were provided on rate of charge as follows:

- a. LT Consumers – 5% for supply voltage at 11 KV and 2.5% for higher supply voltages.
- b. HT Consumers – 2.5% for supply voltage at 33 KV, 5% for supply voltage above 33 KV i.e. for 132 KV and 220 KV.

They submitted that in the next Tariff Order dated July 12, 2006, the Commission linked the rebate mechanism on energy charges to systems technical requirement ignoring the fact that the tariff therein was not reflecting cost of supply at different voltages but was being computed on average cost of supply.

They further submitted that on being opposed of the approach/methodology of the Commission during objections on ARR for FY 2008-09 and FY 2009-10, the Commission restored the HV rebates but partially in the Tariff Order for the FY 2008-09 and FY 2009-10 and has continued it with the same in the Tariff Order, for FY 2010-11, FY 2011-12 and FY 2012-13 also as follows:

- a. LT Consumers – 5% for supply voltage of 11 KV and 2.5% for supply voltage of above 11 KV.
- b. HT Consumers – 1.5% for supply voltage at 33 KV, 2.5% for supply voltage of 132 KV and 5% for supply voltage of 220 KV.

They also submitted that the Commission has restored previously admissible rebates of other supply voltages, the rebate for 33 KV voltage was restored to 1.5% and that of supply voltages of 132 KV to 2.5% only without any logic/justification in its orders for such a change.

They requested the Commission to review the rebate mechanism for higher supply voltages of 33 KV & 132 KV and restore the original rebate in the coming Tariff Order or otherwise compute the new tariff for FY 2013-14 on the basis of voltage wise and category wise cost of supply to all the consumer's category-wise.

#### **3.7.5.2 Petitioner's Response**

The Petitioner submitted that it agrees with the views of the Commission in its Tariff Order for FY 2012-13 that the information on voltage wise losses is required to bring about any revision in the rates of high voltage rebate. Further, UPCL shall be in position to determine voltage wise losses once the work of energy audit being carried out in operational areas is completed.

With regard to the rebate to railway traction tariff, the Petitioner submitted that the examples provided by the consumer are very old and do not hold any relevance in the present energy scenario. Also the scenarios prevalent in one State are different from those in others. No further rebate can be provided to the consumer since composite rate of electricity will be required to be increased by the corresponding amount of rebate allowed. Moreover in case any rebate is allowed to the consumer, the energy charges or demand charges will be increased in order to have the composite tariff equivalent to cost of supply plus cross subsidy as per law. Further, in case timely payment rebate is introduced for railway traction category, the composite rate of electricity will be required to be increased by the corresponding amount of rebate allowed.

With regard to the late payment surcharge, the Petitioner submitted that bills are regularly delivered by the division offices to the consumers. In addition to this, bills of all high value consumers including railways are posted on UPCL's website immediately after the generation of the bills. Further, bill generation information is also given to the consumers through SMS. Thus to ensure compliance for consumers the late payment surcharge needs to be continued. Late payment surcharge is levied to compensate the cost of money received beyond due date and borne by UPCL by borrowing this money from market. Hence late payment surcharge cannot be discontinued.

### **3.7.6 Minimum Load for Induction Furnaces**

#### **3.7.6.1 Stakeholder's Comments**

Shri. Pramod Singh Tomar, Director, Galwalia Ispat Udyog Ltd. submitted that in para 3.7.11.1 of Tariff Order for FY 2012-13, UERC had rejected the reduction of per ton power load from 600 to 400/450 kVA per ton on the basis of incomplete justifications. However, on the other hand UERC is allowing many expenses demanded by UPCL without providing data/details and are avoiding non compliances, which is unjustified. Shri Vikas Jindal, President, Kumaon Garhwal Chamber of Commerce & Industry and Shri. Pramod Singh Tomar further submitted that in the existing rate schedule RTS-7 there is a condition of minimum required load of 600 KVA per ton capacity of furnace and no supply is permissible below this norm. This condition in the tariff is irrelevant in the present context of the Supply Code Regulations and Tariff structure to the industries. The Regulation provides that the consumers having maximum demand indicators can connect load in excess of the contracted loads without any limit. The tariff to the industries provides penal demand charges if maximum demand of a consumer exceeds beyond the contracted demand. As such the existing provision in Tariff RTS-7 regarding minimum load per ton capacity of furnace is contradictory to the provision/spirit of Supply Code Regulations and the Tariff. Further, with the advent of new technology, the manufactures are now supplying furnaces requiring power load of only 400-425 KVA/Ton.

He also submitted that the manufacturers are now supplying furnaces requiring power load for induction furnace about 300-400 KVA/Ton. In support of the above fact he submitted the copy of letter dated June 3, 2012 from Electrotherm (India) Ltd. In this regard, he requested the Commission to honour the issue while finalising the power tariff.

Shri Jai Bhagwan Agrawal of Kashi Vishwanath Steels Ltd. and Shri Pawan Agarwal, Vice President, Uttarakhand Steel Manufacturers Association submitted that in the Tariff Order for FY 2012-13, UERC has approved minimum 600 kVA/ton of induction furnace, which is an old system of calculation and should be reviewed as there has been tremendous development and improvement in the furnace technology during last 10 years. In this regard, he suggested that ceiling of minimum load requirement of one ton should be reduced from 600 kVA to 400 kVA.

### **3.7.6.2 Petitioner's Response**

The Petitioner submitted that consumer has not submitted any documentary evidence in support of its claim for minimum load for induction furnaces in Tariff schedule RTS-7. Based on the evidences submitted by the consumer in the matter of Tariff schedule RTS-7, the Commission may review the condition of minimum load for induction furnaces.

### **3.7.7 Minimum Consumption Guarantee**

#### **3.7.7.1 Stakeholder's Comments**

Shri Rakesh Bhatia and Shri Mahesh Sharma of Uttarakhand Industrial Welfare Association submitted that the old system is equally good and there is no need to introduce new system of MCG. Shri R. R. Malhotra, Executive Director of Jalpac India Ltd. submitted that Jalpac India Ltd. was declared sick by the Hon'ble BIFR on September 5, 2006 and has been fighting a grim battle for survival during the last 6 years due to financial losses. Levying of Minimum Consumption Charges over and above the fixed demand charge is unfair, inequitable and unjustified, especially when there is a power shortage in the State. Also their power have been disconnected several times during the year because of their inability to pay electricity bills in time. Since FY 2008-09, the MCG charge levied on them is Rs. 4026629, which a sick industry like Jalpac cannot bear. Therefore, this amount should be adjusted towards future electricity bills of the Company.

Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry and Shri Raj Kumar Arora of M/s Kashi Vishwanath Textile Mill Ltd. submitted that UERC should safeguard the interest of the consumers and not pass on the inefficiencies of the distribution utility to the consumer. Interestingly, despite recognizing the inefficiency of Distribution Utility as also the deficiency in the billing date of the Distribution Utility in the last Tariff Order, UERC proceeded to levy MCG charges on the consumers to bear the burden of the inefficiency of UPCL. In this regard, they submitted that UERC should have directed the distribution utility to improve its internal mechanisms to ensure prompt meter reading, billing and diligent recovery of the bills. Therefore, as per the provisions in the existing tariff, UPCL is being made to enjoy the fruits of its inefficiency at the cost of higher tariff for the industrial consumer. He further submitted that the Commission has been increasing fixed charge/demand charge almost in every Tariff Order and additionally making provision of minimum consumption guarantee in the tariff to the industries on the plea of recovery of fixed cost of the licensee. This approach is not justified.

Shri Pankaj Gupta, President, Industries Association of Uttarakhand submitted that Minimum Consumption Guarantee should not be continued as the stage of rationalized tariff structure is reached after a lot of deliberation in the past. This is also envisaged in the Electricity Act 2003. Further, UPCL has not projected revenue receipt on account of MCG. As per past data, this amount is very low and it causes very heavy burden on the consumer paying such MCG. Therefore, it is requested that MCG should be removed from this ARR Fixation. As most of the LT industries are paying MCG, this is resulting in an unnecessary extra burden on them.

Smt. Vibha Malhotra, Director & Head (Uttarakhand State Office), CII has submitted that the state of Uttarakhand is a power deficit state and MCG charge should be applied in case surplus power is available. The MCG charges is imposed in order to recover the fixed cost of the distribution company. She further submitted that the concept of MCG in two part tariff is against the guidelines of the Electricity Act, 2003 and National Electricity Policy (NEP) 2005 which stipulate to encourage Open Access and Captive Generation. The MCG is restricting consumer to utilize the open access as it is essential for consumers to pay fix amount towards energy charges either energy utilized or not. She requested the Commission to remove the MCG from the Tariff structure.

### **3.7.8 Load Factor based Tariff**

#### **3.7.8.1 Stakeholder's Comments**

Shri V.K. Aggarwal of Balaji Action Buildwell and Shri R.K. Gupta, General Manager of Gujarat Ambuja Exports Ltd. submitted that the load factor based tariff as prevailing since the Tariff Order FY 2005-06 to HT industries has increased the cross subsidy burden on the consumers. At each load factor specified in the tariff, this burden goes on increasing. They further submitted that the load factor based tariff is discriminatory and against the provisions of the Electricity Act 2003, National Tariff Policy and Regulation 20 of the UERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2004. The Regulation 20 of the UERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2004:

*"The tariff for various categories / voltage shall be bench marked with and shall progressively reflect the cost of supply based on cost that are prudently incurred by distribution licensee in its operations. Pending the availability of information that reasonably established cost of supply, average cost of supply shall be used to benchmark for determining tariffs. The Category wise/ Voltage wise cost to*

*supply may factor in such characteristics as the load factor, voltage, extent of technical and commercial losses etc."*

In this regard, they requested the Commission to review the concept of load factor based tariff for HT industries.

Shri V.K. Aggarwal of Balaji Action Buildwell and Shri R.K. Gupta, General Manager of Gujarat Ambuja Exports Ltd. submitted that an industrial consumer has the right to consume electricity up to 100% of its contract demand without attracting higher tariff. The existing load factor based tariff penalizes the industries with incremental consumption within its contracted demand up to 100% of load factor by way of higher energy rates on whole of the consumption for load factor above 33% to 50% and further higher energy rate for load factor above 50%. They submitted that the approach is a one sided approach which completely ignores the interest of the consumers and allows the Petitioner to earn higher revenue at the cost of the industrial consumer who are supposed to consume power for the load they have contracted with the Petitioner without any increase on the basis rate of energy charge.

They further submitted that the Commission in its earlier Tariff Orders has justified load factor based tariff to HT industries on the ground that the utility has to procure marginal power at a costlier rate due to increased consumption by the industrial consumers in the State. In this regard, they submitted that upon entering into a contract with the consumer to supply power, the onus is on the licensee to arrange for power up to the agreed contracted demand. They also submitted that the conclusion of the Commission to arrange the marginal power from costlier sources also defies the logic as the Tariff Orders never provided any data to substantiate that such marginal power is procured by the licensee exclusively for HT industrial category to which load factor based tariff has been levied while all other categories of consumers also drew power from the utility both in peak and non-peak hours. Even if load factor based tariff is imposed, it should provide telescopic basis for charging incremental consumption beyond specified load factor limit on higher rates instead the existing provision and practice of charging the whole consumption at higher rate of energy charge for the particular load factor slab.

M/s BST Textile Mills Pvt. Ltd. further submitted that there should be provision for automatic switching at Rudrapur 220 kVA station to Kashipur feeder when Bareilly feeder fails. The load adjustment if required should be done from 33 kV substation of Sector 9 and open access

customers should be given uninterrupted supply from Kashipur feeder as they have already given power to UPCL and paid advance for it. Further, the Commission is requested to direct UPCL Rudrapur to give refund for the breakdowns during open access power purchased hours. He further submitted that load factor based tariff is illegal and should be withdrawn.

Shri Atul Kumar Agrawal of Kashi Enterprises and Shri Devendra Kumar Agrawal, Managing Director, M/s Kashi Vishwanath Steels Ltd. and M/s BST Textile Mills Pvt. Ltd. further submitted that as the tariff for industry is being designed on average cost of supply, the load factor based tariff is completely illegal and should be abolished immediately. APTEL has directed UERC to implement voltage wise cost of supply for tariff design of industry but the same has not been implemented by the Commission.

Shri V.K. Aggarwal of Balaji Action Buildwell, Shri R.K. Gupta, General Manager of Gujarat Ambuja Exports Ltd., Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry, Shri Atul Kumar Agrawal of Kashi Enterprises, Shri Suresh Kumar of La Opala RG Ltd., Shri Devendra Kumar Agrawal, Managing Director, M/s Kashi Vishwanath Steels Ltd. and Shri. Nipurn Rastogi, Director, Khatema Fibers Ltd. submitted that Load Factor based tariff is against the provisions of the Act/National Tariff Policy. Further, UERC has devised the following formula for the calculation of the load factor:

$$\text{Load Factor} = \frac{\text{Consumption during the billing period} \times 100}{\text{Max. demand or contracted demand whichever is less} \times \text{No. of hours in the billing period}}$$

In this regard, they suggested that the above formula does not allow consumer for the consumption on the contracted load, if the consumer is running load less than its contracted load and already consuming less power than for the contracted load. On this account, a consumer using less maximum demand than the contracted is subjected to higher energy charges for the load factor based on his actual low maximum demand even without consuming power for the contracted demand. This is a great anomaly and needs to be rectified immediately by revising the formula for calculation of load factor as follows:

$$\text{Load Factor} = \frac{\text{Consumption during the billing period} \times 100}{\text{Contracted demand} \times \text{No. of hours in the billing period}}$$



Shri. N. Ram Mohan, Polyplex Corporation Limited, has submitted that increase in load factor is penalised in Uttarakhand. He further submitted that the concept of Contracted Demand has become meaningless by including the maximum demand as additional factor for consideration for computational purposes.

He further submitted that other states like Maharashtra, Madhya Pradesh and Uttar Pradesh incentivises the increase in load factor of the consumer whereas in Uttarakhand this has been disincentivised by charging higher energy charge for higher load factor. He also submitted that higher load factor leads to better utilisation of the assets and, therefore, requested the Commission to remove the additional energy charge concept for higher load factor within the sanctioned load.

Smt. Vibha Malhotra, Director & Head (Uttarakhand State Office), CII has suggested to the Commission to change the calculation method of Load Factor based Tariff or to consider the Billed Maximum Demand instead of recorded Maximum Demand. She requested the Commission to consider 80% of Contractual Demand or the minimum Maximum Demand charged by Distribution Licensee to consumer to calculate the load factor.

Shri. V. V. Joshi, AGM, Tata Motors Ltd. requested the Commission for revising the calculation of load factor or to consider Billed Maximum Demand instead of Recorded Maximum Demand. For calculation of Load Factor, the Commission should consider 80% of Contractual Demand or the minimum maximum demand charged by Distribution Licensee to Consumer. He further requested the Commission to increase the load factor slab from 33% to 50% for lower slab and 50% to 70% for upper slab.

Further, Shri Vikas Jindal, President, Kumaon Garhwal Chamber of Commerce & Industry and Shri. Pawan Agarwal submitted that the load factor based tariff to HT industries is penalizing them with incremental consumption within their contracted demand being charged in the higher slab of energy charges on whole of their consumption. This approach is most unscientific and illogical.

Shri. V. V. Joshi further submitted that UPCL has not furnished any load shedding data in its Petition. Poor power quality, low voltage and power interruptions with distressed load shedding are the regular features of UPCL power supply. Further, Shri. V. V. Joshi and Shri Atul Kumar Agrawal have requested the Commission to reconsider the availability of 15% power to consumers during power restriction hours.

Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry and Shri. Pawan Agarwal, Vice President, Uttarakhand Steel Manufacturers Association submitted that for consumers with load factor upto 33%, the tariff is charged at the rate of Rs. 2.85/kWh. Whereas, for consumers with load factor above 33% and upto 50%, the tariff is charged at the rate of Rs. 3.10/kWh at total units. For consumers with load factor above 50%, the tariff is charged at the rate of Rs. 3.40/kWh at total units. In this regard, he submitted that in case load factor based tariff is imposed, then telescopic basis should be provided for charging incremental consumption beyond specified load factor limit on higher rates. He further submitted that there should be less tariff rate for the consumers with high load factor.

### **3.7.8.2 Petitioner's Response**

The Petitioner submitted that for tariff determination the Commission is to be guided by the principles of National Tariff Policy and Electricity Act, 2003 as reiterated below:

#### **As per Electricity Act, 2003**

#### ***"Section 62. (Determination of tariff):***

.....

*(3) The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required."*

From the above it can be clearly concluded that the tariff can be differentiated on the basis of load factor of the industries.

The tariff for any consumer category should reflect the cost of supply, which comprises of power purchase cost and all other costs that the licensee incurs. The power purchase consumption of any unit is a function of its contracted load and the extent of its utilization, which in turn get reflected in the demand charges and energy charges. Both these elements of tariff need to increase with consumption beyond a threshold level. The two part tariff suffers from a drawback that it inherently tends to encourage high consumption as the same reduces the effective per unit composite rate. This inevitable distortion is more pronounced with higher consumption level. To

correct this, tariff also needs to increase in a manner so as to achieve a near uniform composite rate. Attempt has been made by UPCL by choosing a uniform rate of demand charge and three rates of energy charges linked to the consumption level represented by the load factor. Thus, although it appears from the tariff structure that the consumers with higher load factor are paying higher tariff, actually their effective tariff is being brought closer to others and not made higher by staggered rates.

In case load factor calculation formula is changed as per suggestion, there will be chances to manipulate the load factor by having contracted load more than the requirement.

For introducing the scheme of availability of 15% power to the consumer during restricted hours, more power will be required during the period of deficit and this power will be available at higher cost. Accordingly consumers will be required to pay more for consumption during restricted hours. Moreover, sometimes it may happen that power is not available at any cost and in that case it will not be possible to supply power to this category of consumers.

Regarding the automatic switching at Rudrapur 220 kVA station to Kashipur feeder, the Petitioner submitted that steps have been taken for the proper maintenance of 33kV substation of sector 9.

### **3.8 Railway Traction Tariff**

#### **3.8.1 Cross Subsidy**

##### **3.8.1.1 Stakeholder's Comments**

Shri R. K. Atoliya, Chief Electrical Distribution Engineer, Northern Railway submitted that the cross subsidy and the average billing rate at the approved tariff for FY 2012-13 is 19.37% and Rs. 4.80/kWh respectively which is highest for railway traction amongst all the consumers of UPCL. He submitted that the consumers like PTW, Domestic and Life Line are being heavily cross subsidized at the cost of railway. The cross subsidy for these PTW, Domestic and Lifeline consumers is more than 20% i.e. (-) 66.98%, (-) 28.15% and (-) 50.09% respectively of the average cost of supply, which is in violation of provisions of National Tariff Policy, which stipulates that for achieving the objective that the tariff progressively reflects the cost of supply of electricity, the tariffs should be within (+/-) 20% of the average cost of supply. He requested the Commission to reduce the cross subsidy for railway traction to bring it at least at par with HT industry.

Shri R. K. Saxena, Chief Electrical Distribution Engineer, Northern Railway submitted that the overall revenue gap estimated by UPCL for FY 2010-11, 2011-12 & 2013-14 is Rs. 1885.12 Crore. This revenue gap should be supported by Government subsidy and tariff of railways should not be increased.

### 3.8.1.2 *Petitioner's Response*

The Petitioner submitted that the Commission while designing the tariffs for FY 2012-13 in its Tariff Order for FY 2012-13, has either reduced or retained the cross subsidies for most of the categories with respect to approved tariffs for FY 2011-12 and has ensured to bring the cross-subsidy levels within the range specified in the National Tariff Policy. As the Private tube wells and domestic consumers were subjected to additional surcharge on account of re-determined tariffs for FY 2009-10, thus any attempt to reduce the cross subsidy further would have lead to tariff shock to these consumers and thus the Commission has attempted to moderately reduce the cross-subsidy for these categories.

The Tariff Policy stipulates the follows as regards the cross-subsidy:

*"For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify roadmap within six months with a target that latest by the end of year 2010-2011 tariffs are within  $\pm 20\%$  of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy. For example if the average cost of service is Rs 3 per unit, at the end of year 2010-2011 the tariff for the cross subsidised categories excluding those referred to in para 1 above should not be lower than Rs 2.40 per unit and that for any of the cross-subsidising categories should not go beyond Rs 3.60 per unit (emphasis added)."*

Thus, the cross-subsidy has to be worked out and brought at the desired levels for all the consumers of the entire category taken together. In this regard UPCL would like to highlight that with the proposed tariffs the average tariff for all the subsidised categories (except railway traction) is within the range of  $+20\%$  of average cost of supply. Once the cross-subsidy level has been reduced to be within  $+20\%$ , there is no mandate under the Act or Tariff Policy to reduce it further. The criteria of  $\pm 20\%$  of the average cost of supply for all the categories including subsidised categories depends upon the consumption mix of the Licensee. Thus, the cross subsidy cannot be abolished on immediate basis.

In case of UPCL, the consumption mix is skewed towards subsidising categories constituting almost two third of total sales, while the consumption by subsidised categories is around one third of the total consumption. Therefore, though the tariff for all the subsidising categories was within 120% of the overall average cost of supply of the Petitioner, the average tariff for some of the subsidised categories was less than 80% of the overall average cost of supply of the Petitioner.

With regard to the contention raised by Shri R. K. Saxena regarding revenue gap, the Petitioner submitted that it is a matter upto State Government to provide the subsidy. UPCL proposed increase in existing tariff to generate as much revenue sufficient to meet the Annual Revenue Requirement for the FY 2013-14 along with the revenue deficit of FY 2010-11 and 2011-12.

### **3.8.2 Financial implication of increase in traction tariff:**

#### **3.8.2.1 Stakeholder's Comments**

Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry and Shri R. K. Saxena, Chief Electrical Distribution Engineer, Northern Railway submitted that the tariff hike proposed by UPCL is very high and unjustified.

Shri R. K. Saxena, Chief Electrical Distribution Engineer, Northern Railway submitted that in the ARR & Tariff Petition for FY 2013-14 to FY 2015-16, UPCL has proposed steep hike for railway traction tariff as under:

	<b>Existing</b>	<b>Proposed</b>	<b>% Hike Proposed</b>
Energy Charge (Rs./kVAh)	3.20	4.80	50%
Demand Charges (Rs./kVA/Month)	180	265	47.23%

In this regard, he further submitted that Northern Railway has been making timely payment, drawing uninterrupted uniform supply day/night, contributing negligible technical & commercial losses, etc. Therefore, Commission should reduce traction tariff suitably so that traction supply can become more economical/suitable for progressing Railway Electrification on Indian Railways.

Shri R. K. Atoliya, Chief Electrical Distribution Engineer, Northern Railway submitted that the hike in traction tariff for FY 2012-13 is sharp which has put extra burden on the resources of Northern Railway. He further submitted that the extra annual financial burden on Northern

Railway due to this hike is to the tune of approx. Rs. 0.28 Crore. Northern Railway submitted that it is going to carry out electrification of Laksar – Haridwar – Raiwala - Dehradun section costing Rs. 50.96 Crore which will benefit the people of Uttarakhand. In view of above, Northern Railway requested the Commission to re-consider the following submissions made during the ARR proceedings for FY 2012-13 and reduce traction tariff accordingly.

- i. Traction tariff for FY 2012-13 should be determined in line with directives of Hon'ble Appellate Tribunal in appeal no. 219 of 2006 and accordingly traction tariff be determined at a level lower than HT Industrial tariff.
- ii. UPCL should work out the category wise/ voltage wise cost of supply and cross subsidy and then link the traction tariff with the cost of supply for railway traction. As per National Tariff Policy, there should be gradual reduction in cross subsidy for railway traction.
- iii. Cost of realization for railway traction should also be brought down by taking into account the NTPC/NHPC i.e. Central Generating Stations' rate of supply of Rs. 2.87/2.64 per unit to UPCL for FY 2012-13.
- iv. For levy of demand charges, the billing demand should be 65% of the Contract Demand or recorded demand during the month whichever is higher for traction load as in Haryana.
- v. Revision of contract demand should be made effective from the date of application without linking it with other issues.
- vi. The instances of maximum demand exceeding contract demand due to feed extension of Roorkee Traction Sub-Station (TSS) in the feeding zone of failed TSS being fed by HVPN/UPPCL and vice versa should be ignored and no load violation charges should be levied for that period.
- vii. Metering for railway traction should be done at the consumer premises i.e. railway traction sub - station instead of the UPCL grid sub- station.
- viii. Metering of simultaneous Maximum Demand at all metering points and making single agreement for all adjacent supply points for future railway traction sub stations in Uttarakhand may be considered.

### **3.8.2.2 Petitioner's Response**

The Petitioner submitted that UPCL is a commercial organization who is required to meet its Annual Revenue Requirement out of the revenue realised from the consumers through electricity tariffs. The revenue deficit for the period upto FY 2013-14 excluding the deficit of FY 2012-13 is expected to be Rs. 1885.12 Crore, which requires 50.30% of increase in tariff. Further, the deficit of Rs. 773.91 Crore for FY 2012-13 shall be claimed in the next year during truing up exercise. Determination of tariff to be charged from a category of consumer is based on average cost of supply maintaining cross subsidy level as per law. Tariff for all the categories including railway traction category have been proposed based on the above principle and provision of law.

### **3.8.3 Demand Charges**

#### **3.8.3.1 Stakeholder's Comments**

Shri R. K. Saxena, Chief Electrical Distribution Engineer, Northern Railway submitted that Demand charges should be Rs. 125 per kVA as in HVPNL in place of proposal of Rs. 265 per kVA per month. Further, the billable demand should be 65% instead of 80% of the contracted demand. Till such time the supply failure from HVPNL/UPPCL persist, the instances of maximum demand exceeding contract demand due to feed extension of Roorkee TSS being fed by UPCL and vice versa should be ignored and no load violation charges should be levied for that period.

Shri R. K. Saxena further submitted that provision of levy of maximum demand charges and demand violation charges by taking into account the simultaneous maximum demand at all metering points and making single agreement for all adjacent supply points for future railway traction substations in Uttarakhand shall be made.

#### **3.8.3.2 Petitioner's Response**

The Petitioner submitted that composite tariff of railway traction comprise demand charges and energy charges. In case demand charges are reduced, the energy charges will be increased in order to have the composite tariff equivalent to cost of supply and the desired level of cross subsidy.

Further, as per the existing rate schedule, in case of consumers where electronic meters with MDI have been installed, if the maximum demand recorded in any month exceeds the contracted load/demand, such excess load/demand shall be levied twice the normal rate of fixed/demand

charge as applicable. The submission of consumer cannot be considered, since the power failure at TSS not falling in the area of distribution licensee is not the responsibility of licensee. The consumer should take up this matter with the concerned licensees.

Further, the Petitioner submitted that currently there is only one metering point for railways in Uttarakhand. Also any new connections shall be treated as separate connections since the physical location of these shall be far off. Thus the provision of simultaneous maximum demand cannot be considered.

### **3.8.4 Billing**

#### **3.8.4.1 Stakeholder's Comments**

Shri R. K. Saxena, Chief Electrical Distribution Engineer, Northern Railway submitted that system of payment at a flat rate based on last year's consumption should be made and reconciliation done later. Further, there should be formulation of time bound schedule for release of new connections/enhancement of load and revision of contract demand for Railways.

#### **3.8.4.2 Petitioner's Response**

The Petitioner submitted that flat rate billing is not allowed as per Electricity Act, 2003. Unless allowed by the Commission, a licensee has to provide supply to every consumer by using a correct meter and carry out billing as per defined cycle on the actual recorded consumption of the consumer at approved rates. Thus this request for flat rate billing cannot be considered. Further, the consumer is hereby informed that the utility is already time bound to carry out the release of new connections/enhancement of load and revision of contract demand for any consumer by the UERC (Standard of Performance) Regulations, 2007 and it is complying to the same.

## **3.9 Separate Category for Military Engineering Services (MES)**

#### **3.9.1.1 Stakeholder's Comments**

Shri. Pradeep Kumar TR, Colonel, CWE, Military Engineer Services submitted that Military Engineer Services (MES) provides Engineering coverage to all three forces (Army, Navy and Air Force) of Defence and Defence Research & Development Organization (DRDO) in India. He submitted that Electric supply (HV/LV) received at bulk receiving point (Main Receiving Station) of MES is further distributed to users by its own HT/LV transmission line by stepping down HV



voltage to LV voltage through different network. By virtue of own distribution of electric supply from bulk receiving point up to domestic use, MES has been considered /approved for license status. He submitted that in addition to the above, MES maintains proper electric supply and achieves power factor between the range of 0.95 to 0.99 by incorporating capacitor bank in almost all the stations and pays its dues to UPCL before time. He further submitted that presently MES is being billed at RTS-8 (Mixed load) and ATS-2 (Govt. Buildings & Hospitals) tariff. Accordingly, the monthly tariff bills paid to UPCL is Rs. 2.80 Crore per month on an average. He further submitted that as MES is not profit earning organization and does not have any business interests, the electric load is purely domestic in nature except for the bulk water pumping installation whose end use is also domestic in nature. The present tariff rates are on the higher side and therefore the Commission should institute a separate reduced tariff structure for MES.

Shri M. G. Trivedi, Shri Pradeep Kumar TR and Shri Suresh Dar of MES submitted that MES and Defence establishments are not a commercial/profit earning organisations. MES system has 8% transmission losses and 20% distribution losses. In case the defence consumers been supplied power directly by Vitran Nigams, these losses would have been borne by Nigams and, therefore, the tariff of MES should be reduced by 20% to account for the losses in the distribution system. Further, MES should be given a reasonable amount of rebate for annual repair & maintenance charges. Therefore, there should be a separate reduced tariff structure/clauses for cantonments and military stations taking into account the cost of distribution, cost of collection of revenue and distribution losses, which are borne by MES.

#### **3.9.1.2 Petitioner's Response**

The Petitioner submitted that while determining the tariff for any particular category of consumer, the Commission is to be guided by the principles of National Tariff Policy and Electricity Act, 2003. The Petitioner submitted that MES is currently categorized in mixed load (RTS-8) which is subsidized category (subsidized by the categories whose average billing rate is above average cost of supply) and, therefore, no further reduction in MES tariff is possible.

### **3.10 Meter Rent**

#### **3.10.1.1 Stakeholder's Comments**

Shri. Sanjay Kumar Agarwal (President, Shri Karuna Jan Kalyan Samiti, Almora) submitted that the proposal of charging cost of meter at the time of release of new connection and meter rent is not acceptable as this is against the tariff rationalization measures. Further, as per provisions of the Electricity Supply Code, UPCL is responsible for providing approved type of meter at consumer's connection at its cost and as such no cost of the meter or its rent can be charged from the consumer. He further submitted that to ensure timely distribution of electricity bills, receipt should be taken from consumers and reading should be taken for another cycle after entry of bill receiving date in consumer card. This will result in proper billing and realising system. No bills should be issued on account of N.R/I.D.F meters and correct meters should be installed on consumer premises. The current electricity distribution supply system and the metering and billing system should be improved.

#### **3.10.1.2 Petitioner's Response**

The Petitioner submitted that meter rent has not been proposed for any category of consumer.

### **3.11 Load Shedding**

#### **3.11.1.1 Stakeholder's Comments**

M/s BST Textile Mills Pvt. Ltd. submitted that the unscheduled rostering any time and throughout the year is the biggest source of loss to the UPCL as well as Industry. Therefore, rostering should be allowed only after getting specific permission by UERC for specific time and period. The power should not be cut from the source and even during rostering, 15% usage should be allowed for lighting load etc as done in the past. The penalty clause should be imposed on the usage above 15% as per earlier practice. This will bring discipline in the working of UPCL and will be beneficial to both industry and UPCL. He further submitted that shortage and non-availability of spares is the main reason of poor maintenance and the spares should be kept ready at all the industrial feeders for immediate restoring of power in case of breakdowns. Only scheduled rostering should be allowed and unscheduled rostering should be stopped.

Smt. Vibha Malhotra, Director & Head (Uttarakhand State Office), CII submitted that the Petitioner has not provided any load shedding data in its Petition. Due to poor power availability, industries are forced to incur huge expenditure for creating adequate generation capacity to meet their power requirement using costlier fuel. This has burdened the industries from both sides i.e. exorbitant tariff of the Petitioner and in-house generation expenditure. She requested the Commission to reconsider the availability of 15% power to the consumers during power restriction hours and minimise the unplanned load shedding. She also requested to make available the schedule of load shedding to the industries so that they can plan their production accordingly or go for the open access power purchase. She also submitted that industries suffer power failures due to break down of over head lines. The compliance of preventive maintenance is required.

Shri Devendra Kumar Agrawal, Managing Director, M/s Kashi Vishwanath Steels Ltd. submitted that schedule roistering should be allowed in proper manner. Also, UERC should define the definition of reason of emergency roistering and method to allow emergency roistering to the industries. He further requested UERC to pass an Order directing UPCL to allow usage of 15% power load to the industries during restricted period/schedule roistering/emergency roistering for different types of emergency services such as street lighting, sanitoring, water, security arrangement, etc.

Shri Pawan Agarwal, Vice President, Uttarakhand Steel Manufacturers Association submitted that in the current year there was the rostering of 8 to 10 hrs per day for the steel industries. In this regard, he suggested that this rostering should not be more than 4 hrs per day.

#### ***3.11.1.2 Petitioner's Response***

The Petitioner submitted that the month wise load shedding data has already been made available to the Commission. The scheduled load shedding is done only after approval from the Commission. The unscheduled load shedding is done to meet the gap in demand and availability and only under emergency conditions. During this emergency rostering, complete care is taken that no category is discriminated against and equitable curtailment is done. The message for the same is sent to registered mobile numbers of the consumers availing this facility.

## **3.12 Energy Sales/Demand**

### **3.12.1.1 Stakeholder's Comments**

Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry, Shri. Nipurn Rastogi, Director, Khatema Fibers Ltd. and Shri. Pramod Singh Tomar, Director, Galwalia Ispat Udyog Ltd. submitted that the growth rate in sales forecast of HT & LT industries appears over estimated. The annual growth rate of these categories on annual basis beyond FY 2012-13 may not be more than 5% as some of the industries have started winding up due to expiry of benefits of industrial package. Further, the growth rate of number of HT & LT industries may not be more than 5% in the present circumstances.

Shri Jai Bhagwan Agrawal of Kashi Vishwanath Steels Ltd. submitted that the assumption of increase in Power consumption in comparison to consumption in 2012-13 is incorrect.

Shri. Nipurn Rastogi, Director, Khatema Fibers Ltd. submitted that the Petitioner has considered higher rate of 11.69% and 8.00% in LT Industry and HT Industry respectively for estimation of electricity sales for the FY 2013-14. Due to the completion of duration of Industrial Package for Uttarakhand as announced by the Central Government and introduction of open access for the industrial consumers, the growth rate under these categories is not likely to be more than the 5.00% for FY 2013-14 and 4.00% for FY 2012-13.

Shri N. Ram Mohan, Vice President, Polyplex Corporation Ltd. submitted that the Petitioner has considered CAGR of last 5 years for estimating the sales in most of the categories for FY 2013-14 to FY 2015-16. Since Uttarakhand is a relatively new State carved out of Uttar Pradesh, it may not be prudent to consider CAGR of 5 years as it may lead to over estimation. The reason has been non extension of special packages for industries by the State Government. CERC's Model Tariff Regulations for Multi Year Distribution Tariff also consider 2-3 year CAGR in such cases.

### **3.12.1.2 Petitioner's Response**

In reply, the Petitioner submitted that accurate sales estimation is very important while estimating the annual revenue requirement. For the same it has tried to estimate the energy sales utilizing three methods

- 1) Estimation of Sales as per draft 18th EPS
- 2) Estimation of Sales based on Econometric Model

### 3) Estimation of Sales based on Adjusted trend Analysis (CAGR).

The sales figures arrived at from each of these models were discussed in detail and based on the existing scenarios, the authenticity of estimation of base variables and as explained in MYT Petition, it was decided that the best method shall be the estimation of sales based on adjusted trend Analysis.

The Petitioner submitted that it understands and agrees with the concern of consumer that the growth of sales to HT industry would not be as high as the 5 Year CAGR of 26.28%, that is why for projection purposes the sales have been estimated at a normative rate of 8%, which is a reasonable estimate based on the proposal for upcoming SIDCUL-2. The utilization of 5 year CAGR of 11.69% for projecting energy sales of LT industry is correct since UPCL has already considered a conservative estimate based on the year on year growth rate of around 15%.

With regard to the Power System Master Plan, the Petitioner submitted that it is in process of developing software for helping it forecast its load requirements on real time basis. This software once developed shall enable UPCL to understand and plan its power needs on real time basis.

## **3.13 Distribution System**

### ***3.13.1 Investment in Distribution***

#### ***3.13.1.1 Stakeholder's Comments***

M/s Asahi India Glass Ltd., Roorkee submitted that in order to recover its revenue gap, UPCL is thrusting consumers and industries directly to meet its targets. Also, UPCL has projected distribution loss level of 18.25% in FY 2013-14. As per Guidelines of Govt. of India, Ministry of Power for Restructured Accelerated Power Development Programme (R-APDRP), Power generating and Transmission bodies must take steps for modernization and strengthening of system rather than burdening their liabilities on consumers.

Shri. Rajeev Gupta of KVS Infratech LLP submitted that UERC had disallowed the capitalization of Rs. 752.83 Crore in Tariff Order for FY 2005-06 to FY 2010-11 due to the lack of clearance certificate by Electrical Inspector. UPCL has still not been able to obtain certificate of Electrical Inspector of the same. Therefore, he has requested UERC for rejecting the UPCL's claim of Depreciation of Rs. 75.16 Crore on Capitalization.

Shri Devendra Kumar Agrawal, Managing Director, M/s Kashi Vishwanath Steels Ltd. submitted that the licensee has claimed that during the period 2001-02 to 2009-10, fixed assets of Rs. 565.42 Crore were created out of grant from the Govt. In the previous Order on ARR & Tariff, the Commission had disallowed the depreciation on such assets and rejected UPCL's claims stating that as per accounting standards as well as, Income Tax Act, no depreciation is allowed on the assets created out of grant received. In such a situation, there is no basis for this claim of Rs. 89.35 Crore in the present Petition and the same is liable to be rejected.

Shri Rakesh Bhatia and Shri Mahesh Sharma of Uttarakhand Industrial Welfare Association submitted that UPCL should be meeting timelines for completion of RAPDRP Part-A scheme.

#### ***3.13.1.2 Petitioner's Response***

As regards the contention raised by Shri. Rajeev Gupta regarding Claim of Depreciation of Rs 75.16 Crore on capitalization, the Petitioner submitted that the Electrical inspector clearance certificates and the actual cost of HT works carried by UPCL, on which depreciation has been disallowed to UPCL, has been already submitted to the Commission. Thus, the Commission has been requested to kindly allow its claim of depreciation on capitalization of these assets.

With regard to meeting timelines for RAPDRP Part-A scheme, the Petitioner submitted that UPCL has a separate cell for RAPDRP which is continuously looking into implementation of this scheme. Any delay in the scheme has been because of unavoidable circumstances like non finalization of tenders etc. However the PART A of the scheme is expected to be completed in FY 2013-14.

### **3.14 Distribution Losses**

#### ***3.14.1.1 Stakeholder's Comments***

Shri Suresh Kumar of La Opala RG Ltd. and Shri Raj Kumar Arora of M/s Kashi Vishwanath Textile Mill Ltd. submitted that the tariff for HT industries in the last Tariff Order was fixed on the basis of assumption of 15% losses in the UPCL's HT system. However, the losses at HT level may not be more than 5% and these can be estimated to a fairly accurate extent with a little exercise and effort by the licensee. Therefore, in this regard the loss level should be re-considered on a realistic basis as per actual losses in the HT system of the licensee supplying power to such consumer.

Shri Suresh Kumar of La Opala RG Ltd. submitted that the HT level losses may not be more than 7.5%.

Shri. H. D. Arora further added that there will be no need of any electricity tariff hike in Uttarakhand if the following suggestions are applied:

- Appropriate steps should be taken for reducing Line Losses by 100%
- Measures should be taken to stop power theft/tapping of power lines.
- Connections should be metered.
- Stop misuse of Street Lights
- Proper storage of electricity equipments

Shri N. Ram Mohan, Vice President, Polyplex Corporation Ltd., Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry, M/s Asahi India Glass Limited, Shri Raj Kumar Arora of Kashi Vishwanath, Shri Atul Kumar Agrawal, Kashi Enterprises, Shri. Nipurn Rastogi, Director, Khatema Fibers Ltd. and Shri Devendra Kumar Agrawal, Managing Director, M/s Kashi Vishwanath Steels Ltd. submitted that the licensee has fixed its own trajectory for reduction of distribution losses to utter disregard to the loss trajectory fixed by the Commission as follows. The trajectory has been fixed on the basis of actual losses of 19.96% for FY 2011-12 as against 18% approved by UERC.

2011-12	19.96% (Actual)	18% (As per UERC Order)
2012-13	19.00%	17%
2013-14	18.25%	16%
2014-15	17.28%	15%
2015-16	16.32%	14%

In this regard, Shri Devendra Kumar Agrawal submitted that the loss reduction trajectory fixed by UERC should be considered in the business plan. The licensee has tried to pass on its inefficiency by considering losses higher than approved by the Commission. Shri. V. V. Joshi, AGM, Tata Motors Ltd. further submitted that the loss reduction trajectories have been projected in increasing trend instead of decreasing trend.

Shri. K.B. Pandey, Sevanivriti Kendriya Karamchari Kalyan Samiti, Almora submitted that for the entire city and village power theft should be calculated by taking meter reading of all the consumers. All the employees of the electricity department should be metered to get the actual

value of the consumption and requirement of electricity. He suggested installing Synthetic Metering Cubical Box (SMC) and connecting all the meters to the SMC in order to compute the difference between actual data on total consumption and metering reading. He further submitted that electricity lines should be converted from overhead to underground to protect them from the theft of electricity due to hooking and bad weather conditions. Further, the employees of the UPCL should not be given power free of cost as they already getting salary for their services. Therefore, the Petitioner should install meter to account the usage of electricity by their employees.

Shri Pradeep Datta submitted that the large scale theft of power especially in Roorkee, Udham Singh Nagar Circles in connivance with UPCL staff should be checked through system of concurrent audit.

Shri. Nipurn Rastogi, Director, Khatema Fibers Ltd. submitted that in the Tariff Order for FY 2011-12, it had been presented that 98.24% of the consumers have been metered. Still the Petitioner was not able to meet the loss reduction targets. Moreover the sales mix of the licensee is dominated by HT consumers which is a great facilitator in reduction of losses for any utility. Further, the subsidizing categories connected to higher voltages namely HT Industrial, LT Industrial, Non Domestic and Railway constitute about 69% of the sales mix, therefore, higher losses of the licensee than the losses approved by the Commission may be attributed to Petitioner's inefficiency.

Shri Pankaj Gupta, President, Industries Association of Uttarakhand suggested UERC to appoint an agency for investigating losses and energy audit. Further, UPCL should convert their sub-stations into Cost-Centres and any sub-station found to be losing money should be subjected to penalties.

Shri Surendra Bhardwaj of Akhil Bhartiya Dharamshala Prabandhak Sabha, Haridwar submitted that steps should be taken to stop theft by UPCL. Further, Shri. V. V. Joshi, AGM, Tata Motors Ltd. requested the Commission for directing UPCL to provide the information regarding the segregation between Commercial & Technical Losses. Also the information like Zone/Circle wise distribution loss levels, distribution loss level for different Rural and Town areas should be provided by UPCL. He further requested the Commission to direct UPCL to install power factor correction equipments at distribution substations. As a step for commercial loss reduction, Energy Meter should be calibrated periodically.. He further submitted that the electricity theft is one of the major parameter for distribution losses. In this regard, he has requested the Commission to direct



UPCL to reduce the losses on account of theft by strict disciplinary actions against delinquent employees, massive theft control drives, formation of vigilance department and speedy disposal of Vigilance cases and strict actions against defaulters. In absence of any information regarding the electricity theft captured, the Commission should not consider loss level as mentioned in its Petition.

Shri Amar Jeet Singh Bhatiya, President, Doon Sikh Welfare Society, Dehradun submitted that the some employees of UPCL are openly misusing the electricity and there is no one to check the same. He further submitted that according to Civil Services Rules 1930 "Recovery from Pay", if the Government has suffered pecuniary loss due to negligence or breach of Order then whole or part of that loss may be recovered from Government employees. Shri S. P. Joshi of Nakroda, Dehradun submitted that action should be taken by UPCL on officers misusing electricity.

Shri R. K. Saxena, Chief Electrical Distribution Engineer, Northern Railway submitted that UPCL should make extra efforts to reduce the losses and improve collection efficiency and its benefit should be passed on to the consumers by way of reduction in tariff.

Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry and Shri. Pramod Singh Tomar, Director, Galwalia Ispat Udyog Ltd. submitted that UPCL in its Petition for business plan has proposed the following revised Collection Efficiency Trajectory based on its actual collection efficiency of 93.06% for FY 2011-12:

2011-12	92.67% (actual)
2012-13	95.25%
2013-14	96.00%
2014-15	96.50%
2015-16	97.00%

However, UERC had fixed target of for collection efficiency of 97% for FY 2011-12 and this should be taken as base for achieving 99% collection efficiency at the end of Control Period.

Shri N. Ram Mohan, Vice President, Polyplex Corporation Ltd. submitted that in its action plan for FY 2013-14 to FY 2015-16, the Petitioner had proposed the following initiatives for efficiency improvement in its operations:

- Installation of Capacitor Bank at 33/11 KV substations
- Implementation of R-APDRP Part A scheme

- Implementation of R-APDRP Part B scheme
- Installation of Double metering in selected 11 KV & 33 KV consumers
- Shifting of 1 Phase & 3 Phase meter outside the premises of the consumers
- Implementation of AMR
- Replacement of Mechanical Meters with Electronic Meters and Installation of Electronic meters in un-metered connections
- Laying of LT ABC
- DT Metering
- Replacement of defective meters
- Procurement of High value consumer management system (HVCMS)

In this regard, the Commission is requested to direct the Petitioner to present an account of efficiency achieved with the help of proposed initiatives in the tariff filing. The Petitioner may also be directed to present a future action plan towards rural electrification.

Smt. Vibha Malhotra, Director & Head (Uttarakhand State Office), CII has requested for following information from the Petitioner:

- Petitioner should provided separate information on Commercial & Technical Losses on zone/circle wise distribution losses, distribution losses for different rural and town areas to evaluate the improvement claimed.
- The Petitioner had projected 18% distribution loss for FY 2012-13 and 18.25% for FY 2013-14. As per CII, the effort should be made to move towards greater efficiency.
- The Petitioner has not submitted any information regarding the theft of electricity. In absence of this information, it is not advisable to consider loss level as mentioned by the Petitioner in its Petition.
- The 220KV level consumers are not contributing to distribution losses, however they do get charged for the same.

CII has made following suggestions to the Petitioner:

- Technical loss depends on the I2 R i.e. load due to excess demand. CII requested the Commission to direct the Petitioner to install Power factor correction equipments at distribution substations.
- CII submitted that energy meter should be calibrated periodically and also E-payment can be adopted to increase the efficiency.
- CII has requested to the Petitioner for taking anti-theft measures to reduce losses:
  - Strict disciplinary actions against delinquent employees
  - Use of theft control drives
  - Formation of Vigilance department and speedy disposal of Vigilance cases.
  - Strict actions against defaulters

#### **3.14.1.2 Petitioner's Response**

The Petitioner submitted that the division wise records of distribution losses and segregation of losses into collection inefficiency and line losses are prepared by UPCL on monthly basis and are readily available in its commercial diary which has been already submitted to the Commission. UPCL has already proposed to carry out installation of capacitor bank as a part of its capital expenditure plan. In this regard, UPCL has requested the Commission to approve the installation of Power factor correction Equipments.

With regard to the distribution loss trajectory, the Petitioner submitted that it proposes to carry out a capital expenditure of Rs. 2355.37 Crore during the Control Period. Out of this around Rs. 1000 Crore is planned toward loss reduction activities. The Petitioner further submitted that it is continuously committed to reduce its distribution losses and has been able to reduce its distribution losses by more than 20% in the last 10 years. The loss reduction trajectory has been defined after duly considering the planned capital expenditure. The following initiatives are proposed to be taken for loss reduction:

- Installation of Capacitor Bank at 33/11 KV substations
- Implementation of R-APDRP Part A scheme
- Implementation of R-APDRP Part B scheme

- Installation of Double metering in selected 11 KV & 33 KV consumers
- Shifting of 1 Phase & 3 Phase meter outside the premises of the consumers
- Implementation of AMR
- Replacement of Mechanical Meters with Electronic Meters and Installation of Electronic meters in un-metered connections
- Laying of LT ABC
- DT Metering
- Replacement of defective meters
- Procurement of High value consumer management system (HVCMS)

The Petitioner also submitted that it is making concerted efforts to improve its performance and efficiency by incurring proposed capital expenditure which has been dealt along with the capital expenditure plan and it aims to achieve the collection efficiency level of 97% by the end of FY 2015-16.

The following initiatives have been taken for commercial loss reduction and improvement of collection efficiency:

- Implementation of R-APDRP, Part-A & Part-B in 31 towns having population above 10,000, SCADA/DMS in towns having population greater than 4 lacs and energy input greater than 350 MU/annum
- Replacement of electromagnetic meters with tamper proof electronic meters
- Double metering, shifting of single phase & three phase meters outside the premises of the consumers
- Regularisation of unauthorised I.P. installation and thereby increasing the sales
- Convenient bill payment options like cash collection counters, online bill payment through credit card, debit card, internet banking, etc.
- More teams to be sent to rural areas for increasing collection.
- Recovery of past arrears

The Petitioner further submitted that, it is more difficult to reduce the losses by more than 1% in a year from a base level of around 23-25% as compared to reduction of losses from a base level of 30% or above. This is also evident from the report of Abraham Commission which has suggested lower norms for yearly reduction in distribution losses as the base figures of losses decreases. Further, the distribution loss reduction trajectory as set by the Commission is very stringent. Based on above submission, UPCL has requested to consider the revised loss reduction trajectory as proposed in the business plan and allow the estimation of power purchase requirement based on the same.

The Petitioner further submitted that as on date the voltage wise segregation of losses is not available. However UPCL would like to bring to light that the High voltage rebate allowed to the consumers is on the account of their contribution to distribution losses.

Further, the Petitioner submitted that the tariff fixation on basis of actual losses can be done only after the details of category-wise losses are available. However such details are not available with UPCL as on date and can be determined after energy audit exercise being carried out in operational areas is complete.

As regards the misuse by employees, the Petitioner submitted that there is a mechanism to take action against the officers misusing electricity. However it is to mention here that the departmental employees are allowed electricity on the normative tariff specified for them according to their category. In order to curb theft of energy, the following measures have been taken up by UPCL:

- (a) Vigilance Raids are being conducted and cases are being registered under Sections 126 and 135 of Electricity Act., 2003. Legal proceedings are being initiated against the person(s) who is found indulging in theft of electricity.
- (b) Mechanical meters are being replaced by electronic meters.
- (c) New connection are being released by installing meters outside the premises of the consumers.
- (d) Meters installed on the connections of existing consumers are being shifted outside the premises of the consumers.

With regard to the metering in railway traction, the Petitioner submitted that in case the meter is shifted from grid substation to the traction substation then the losses on 220kV line have to be borne by UPCL instead of the consumer. This would have an impact on the tariff since it would have to be increased proportionately to account for the technical line losses.

Further, UPCL has developed a detailed metering plan whereby it plans to carry out replacement of defective meters and to ensure 100% meter reading. As per the plan the targets for replacement of meters has been fixed based on availability of meters and workforce. The immediate replacement of all defective meters is not possible. UPCL is committed towards providing supply to consumers from correct meters and thus is continuously carrying out replacement of defective meters.

With regard to the charges for testing of energy meter, the Petitioner submitted that no charges are taken from the consumers for initial testing of meters or any testing which is being carried out by UPCL on its own pretext. The consumer is only charged for testing of meters when the testing is being carried out on the written request of the consumer as per the Schedule of Miscellaneous charges.

The Petitioner submitted that in its MYT & Tariff Petition, it has shown the distribution loss reduction trajectory @ 0.75% in FY 2013-14, 0.97% in FY 2014-15 and 0.96% in FY 2015-16. This loss reduction shall be done with the help of proposed investments. The Petitioner has submitted that UPCL has already taken stock of the pending unmetered connections and the drive has already been initiated for converting them into metered connections. It is expected that by June 2013, 12997 unmetered connections shall be converted to metered connections. The Petitioner further submitted that the suggestion of the consumer regarding installation of SMC and laying of underground wires has been noted and its various aspects shall be studied by UPCL.

The Petitioner in response to free power to employees has submitted that the employees of UPCL are being given the facility of departmental electricity connection since U.P. State Electricity Board was in existence. Under this facility, a fix lump-sum amount is charged from the employees according to their designation towards electricity charges for electricity supplied to them. Erstwhile UPSEB was unbundled under the provisions of Uttar Pradesh Electricity Reforms Act, 1999 and Section-23(7) of the said act provides "terms and conditions of service of the personnel shall not be less favourable to the terms and conditions which were applicable to them before the transfer". The

same spirit has been echoed under first proviso of section 133(2) of the Electricity Act, 2003. The benefits for employees / pensioners as provided in section 12(b)(ii) of the Uttar Pradesh Reform Transfer Scheme, 2000 include "concessional rate of electricity", which means concession in rate of electricity to the extent it is not inferior to what was existing before 14th January, 2000. The rates and charges indicated above for this category are strictly in adherence of above statutory provisions. As UPCL is the successor entity of UPPCL (formed as a result of unbundling of UPSEB), the above legal provisions are also applicable on it (UPCL). UPCL further submitted that the connections of departmental employees have been metered.

### **3.15 Cost of Supply and Cross Subsidy**

#### **3.15.1.1 Stakeholder's Comments**

Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry and Shri. Rajeev Gupta of KVS Infratech LLP submitted that UPCL has not given the category-wise / voltage-wise cost of supply. The cross subsidy has been worked out on the basis of average cost of supply. UPCL should work out the category-wise cost of supply and then link the tariff with the cost of supply as per the provisions of National Tariff Policy.

Shri. Nipurn Rastogi, Director, Khatema Fibers Ltd. and Shri Suresh Kumar of La Opala RG Ltd. has submitted that UPCL should submit the category-wise/ voltage -wise cost to supply for tariff fixation. Shri R. K. Saxena, Chief Electrical Distribution Engineer, Northern Railway submitted that the cross subsidy has been worked out on the basis of average cost of supply. UPCL should work out the category-wise cost of supply and then link the tariff with the cost of supply as per the provisions of National Tariff Policy.

M/s BST Textile Mills Pvt. Ltd. submitted that cross subsidy of more than 20% should not be allowed to private tube wells and above BPL domestic consumers

Shri N. Ram Mohan, Vice President, Polyplex Corporation Ltd. submitted that as per section 61 of the Electricity Act, 2003, the Commission should determine tariff in a manner that the tariff progressively reflects the cost of supply of electricity and also reduces cross subsidies. The Electricity Act, 2003 and the National Tariff Policy issued, there under, thrust upon reducing the subsidy with tariff progressively reflecting the cost of supply of electricity. The National Tariff Policy mandates the SERC to notify roadmap with a target that latest by the end of the year 2010-11

the tariffs are within  $\pm 20\%$  of the average cost of supply. Most of the SERCs have taken initiatives for reducing the cross subsidy and rationalizing the no. of consumer categories / slabs while also creating new consumer categories, as and when required.

Shri V.K. Aggarwal of Balaji Action Buildwell and Shri R.K. Gupta, General Manager of Gujarat Ambuja Exports Ltd. submitted that the Petitioner has failed to comply with the directions of the Commission. The Commission has been directing the Petitioner to workout actual voltage wise, category wise losses and cost of supply for fixation of category wise tariff from its issuance of its first Tariff Order. The Petitioner has again ignored the direction of the Commission. They requested the Commission to take the serious note for such non-compliance and fix the tariff of the consumer fixing HT level losses on a rational basis.

Shri. N. Ram Mohan, Polyplex Corporation Limited submitted that the Commission should reduce cross subsidy and rationalise the category wise tariff for the consumers. He sought clarification on calculation of cost to serve to various categories of consumer in the State. He submitted that the Average cost of supply for the licensee has gone up due to increase in power purchase cost and increase in capital expenditure. As per the ARR filed for FY 2013-14, the power purchase cost is expected to increase by about 11% from Rs. 3284.6 Crore (actual) in FY 2012-13 to Rs. 3646.54 Crore in FY 2013-14. All the other costs including the revenue expenditure (O&M, Salary & wages etc.) and capital expenditure (Interest and depreciation) have gone up by 27%. This increase is disproportionately higher than the increase in power purchase costs alone, resulting in the overall increase in Net Aggregate revenue requirement by 14%. He further submitted that the proposed average tariff of Rs 6.11/unit for HT consumer category shall keep on increasing with the ever rising cost of supply in the future. At this rate of increase in average tariff, it will be very difficult for the industrial consumers to survive in Uttarakhand.

Shri. N. Ram Mohan further submitted that HPERC has conducted an exercise for tariff fixation in the MYT Order for FY 2011-12 to FY 2013-14 keeping in mind the need for progressively moving towards the targeted limits of  $\pm 20\%$  of the average cost of supply.



	EHT ( $\geq 66$ KV)	HT ( $\geq 11$ KV)	LT ( $< 11$ KV)	Total
Cost Allocation (Rs./unit)				
Power Purchase Cost	2.98	2.98	2.98	
EHV distribution Cost ( $\geq 66$ KV)	0.59	0.53	0.53	
Distribution Cost ( $\geq 11$ KV)		0.82	0.73	
Distribution Cost ( $< 11$ KV)			1.39	
Cost of Supply (Rs./unit)	3.57	4.33	5.63	4.59*

\*Rs.4.59 per unit is the average cost of supply

In view of the above table he submitted that average cost of supply is about 28% higher than cost to serve for EHT consumers. He further submitted the comparison of voltage wise tariff of the state of Himachal Pradesh, Andhra Pradesh and Uttar Pradesh according to which higher voltage consumer has lower cost to serve.

In view of the above, he requested the Commission to direct the Petitioner to submit the detailed calculation of Cost to Serve for various categories of consumers.

#### 3.15.1.2 Petitioner's Response

With regard to the category-wise/ voltage -wise cost to supply for tariff fixation, the Petitioner submitted that UPCL has awarded the work of energy audit in its operational area as per the following scope of work:

- Module-1: Analysis of energy injected in the state of Uttarakhand and energy sent out by STU to UPCL.
- Module-2: Energy audit of independent feeders (at least 30% of total 115 feeders), industrial feeders and feeders supplying to industrial estates.
- Module-3: Analysis of energy accounts of 66 and 33 kV substation of UPCL (at least 10% of total 274 sub-stations) and physical verification of energy received and energy sent out data.
- Module-4: Energy audit, voltage profile, feeder survey, feeder profile analysis, DT profile analysis of 11 KV feeders of UPCL and physical verification of energy received and energy sent out data.

Once the above study is completed, UPCL shall be in position to submit the category-wise/voltage -wise cost to supply and link the same to tariff. Further, the Petitioner submitted that The Electricity Act, 2003 clearly mandates that providing subsidy to a particular category of consumers is the prerogative of the State Govt. as detailed in the provision below.

*“Section 65. (Provision of subsidy by State Government):*

*If the State Government requires the grant of any subsidy to any consumer or class of consumers in the tariff determined by the State Commission under section 62, the State Government shall, notwithstanding any direction which may be given under section 108, pay, in advance and in such manner as may be specified, the amount to compensate the person affected by the grant of subsidy in the manner the State Commission may direct, as a condition for the licence or any other person concerned to implement the subsidy provided for by the State Government:*

*Provided that no such direction of the State Government shall be operative if the payment is not made in accordance with the provisions contained in this section and the tariff fixed by State Commission shall be applicable from the date of issue of orders by the Commission in this regard.”*

### **3.16 Rebate for Biomass based Geysers**

#### **3.16.1.1 Stakeholder's Comments**

Shri. Raghuveer Singh, representative of S. K. Enterprises submitted that 70% region on Uttarakhand consists of difficult mountain and forest terrain, where electricity distribution is difficult. Further, as the State is dependent majorly on the hydro power generating stations which does not operate at their full capacity. He submitted that S. K. Enterprises has developed an alternative biomass based automatic geysers in collaboration with University of Petroleum and Energy Studies, Dehradun. He also submitted the copy of letter from Uttarakhand Renewable Energy Development Authority (UREDA) in which UREDA has acknowledged the Biomass Geyser. He submitted that the use of such geysers will reduce the dependency on electricity and help to save the electricity in the State. He requested the Commission to encourage the consumers to use the biomass based geysers by providing subsidy in the electricity bills to the consumers.

### **3.16.1.2 Petitioner's Response**

The Petitioner submitted that since as per the submission of the objector, the Biogas based water heater has the capability of 100% saving of electricity thus its users would themselves be benefitted in terms of reduced Electricity bills and thus would not require any further subsidy.

## **3.17 Continuous Supply**

### **3.17.1.1 Stakeholder's Comments**

Shri Rakesh Bhatia and Shri Mahesh Sharma of Uttarakhand Industrial Welfare Association submitted that there should be additional duty for Continuous Supply to the Industries.

Shri Pradeep Datta submitted that the scheme of allocating 24X7 power for Continuous Power Industries should be withdrawn. The Commission in Tariff Order for FY 2005-06 had introduced this measure only for 2 years to enable industrial units to create their own generation capacity or obtain power through open access. He further submitted that the Commission has forgotten its own recommendations and allowed this scheme year after year, which is a preferential supply and is a violation of Section 62(3) of the Electricity Act, 2003. The scheme of continuous power supply is also in violation of the Constitution of India which guarantees equality before law. He also submitted that preferential class of consumer has been created who continues to get uninterrupted power supply whereas other consumers are subjected to power rostering.

M/s Asahi India Glass Limited further submitted that UPCL in its Petition has proposed to raise the continuous supply surcharge to 25% and even after paying such hefty amount and fulfilling all formalities, dedicated and uninterrupted continuous supply is not provided. All these factors will result in sluggishness of industries.

Shri. Vishnu Dutt Tyagi, AGM, M/s Ultimate Flexipack Limited and Dhuruv Semwal of Montage Enterprises Pvt. Limited submitted that they are connected on industrial feeder and this feeder is supplying power to other consumer also. It is not possible that each and every consumer connected to this feeder will apply for continuous power supply. Therefore, they requested the Commission to make changes in this clause so that they in individual capacity can take continuous power supply.

Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry Electricity Act, 2003 does not allow the Commission to differentiate consumers by the hours of

supply or consumers subjected to load shedding and proposal to increase Continuous supply surcharge from 15% to 20% should be rejected.

Smt. Vibha Malhotra, Director & Head (Uttarakhand State Office), CII, Tata Motors and its Ancillaries in Pantnagar, M/s Asahi India Glass Ltd., Roorkee, Shri. V. V. Joshi, AGM, Tata Motors Ltd. and Shri Raj Kumar Arora of M/s Kashi Vishwanath Textile Mill Ltd. submitted that the Petitioner has requested to increase the continuous power supply surcharge for HT Consumer from 15% to 20% and whereas, for HT consumers who are not connected to independent/express feeders and does not come under continuous process industry, the Petitioner has proposed a surcharge of 25%. In this regard, they requested that considering current market condition this surcharge of 25% shall be restricted to 15% for both continuous and those industries who are willing to opt but not coming under continuous process.

Shri Raj Kumar Arora of M/s Kashi Vishwanath Textile Mill Ltd. submitted that UERC in its earlier Tariff Order determined the revenue requirement of UPCL by assuming that only some of the consumers would require 24 hour supply and therefore such consumers need to pay 15% higher energy charges for continuous supply for whole of the year. The Commission did not follow the provisions laid down in the National Tariff Policy and the Electricity Act 2003, which do not allow the Commission to compute the power purchase cost by denying revenues required for power purchase for 24 hours supply. Further, according to Section 62(3) of the Act 2003, the “nature of supply” cannot be in the form of continuous or non-continuous supply. Therefore, Commission cannot differentiate between consumers subjected to load shedding and consumers exempted from load shedding and thereby charge differential tariff. In this regard, he requested the Commission to define the nature of industries, activity of industries, class of industries who fall in the ambit of continuous industries.

M/s BST Textile Mills Pvt. Ltd. submitted that the continuous power supply should be allowed on all industrial feeders with penalty clause for non continuous consumers on that feeder. In case they use power during declared rostering time and period, the power supply should not be cut from the source in any case. He further submitted that it is not possible to have independent feeder everywhere due to various reasons and genuine consumers are deprived of this facility just because they are not having independent feeder.

Further, Shri. Nipurn Rastogi, Director, Khatema Fibers Ltd. and Shri Raj Kumar Arora of Shri Vikas Jindal, President, Kumaon Garhwal Chamber of Commerce & Industry and M/s Kashi Vishwanath Textile Mill Ltd. submitted that in the last Tariff Order, UERC provided option of continuous supply only to continuous process industries operating 24x7 hours basis connected on either independent feeder or industrial feeders with the condition that all the industries connected on such feeders have to opt for continuous supply and in case any consumer does not wish to opt, the other consumers will also not be able to avail continuous supply. This provision is discriminatory and therefore needs to be reviewed. The industries opting for continuous supply connected on independent/industrial feeder should be provided continuous supply irrespective of their process and option by other industries. The non-opting industries can be restricted to use small percentage of load during restricted hours and in case of exceeding the load, very heavy penalty for excess usage of load and double the continuous supply surcharge can be imposed on them to make them disciplined. This will generate good revenue for UPCL by way of penalties and extra continuous supply surcharge from defaulting and violating consumer.

Shri V.K. Aggarwal of Balaji Action Buildwell Shri R.K. Gupta, General Manager of Gujarat Ambuja Exports Ltd., Shri V.P. Chitturi, Hindusthan National Glass and Industries Limited and Shri Suresh Kumar of La Opala RG Ltd. submitted that UPCL has proposed to increase the additional energy charges for ensuring continuous supply from 15% to 20%. In this regard, they have requested the Commission that these charges should be reduced from 15% to 10%. They further submitted that for continuous supply consumers, continuous supply charges of 15% should not be levied on power purchased through open access and this will help the industries to get power from open access at reasonable rates.

Shri. Devendra Kumar Agrawal, Vice President of Uttarakhand Steel Manufacturers Association submitted that in last one and half year, the steel industry has suffered from the lengthy power cuts more than any other industry. This has singled out and made them suffer more than any other H.T Industry segment in an unjust and discriminatory manner. The industry is not expected to receive its total power requirement at least in the short run and, therefore, it is requested that in such a situation an equitable curtailment in the entire H.T Industry should be made with sufficient advance information of the power supply to the industry. He further, submitted that Appellant Authority has already issued guidelines in the matter of disparity for same category of consumers

and requested the Commission to intervene and issue necessary guidelines to stop such disparity and to make equitable distribution of power to the industry.

Shri. Dinesh Agarwal further submitted that Anchor Electricals Pvt. Ltd. in the past have been expressing its concern to UPCL about frequent power cuts during the day and Peak hours due to which their industry suffered financial losses. The losses are due to idling of manpower, process wastage and loss of production etc, and such losses are irreparable. In view of the same, he requested the Commission to direct UPCL to provide uninterrupted electricity during peak hours. He further submitted that they are ready to bear the extra charges as may be fixed by the Commission which is reasonable as compared to current charges to meet the requirement.

Shri Vidyarthi Bhaiya, Pradesh Adhyaksh, Hind Mazdoor Sabha submitted that the Iron & Steel Industry of Uttarakhand is facing problem of regular power cuts. This may result into the problem of un-employment in the State. Therefore, it is requested to put focused attention on the problems of Iron & Steel Industry of Uttarakhand vis-à-vis other industries in the State.

Shri N. Ram Mohan, Vice President, Polyplex Corporation Ltd. submitted that the industries availing continuous power supply are beneficial for the licensee as the utility may enter into a Long-term PPA with a power producer. This leads to better power purchase planning and reduction in cost of power purchased for such consumers. He further submitted that the Petitioner is asking for higher premium (15% current to 20% proposed). According to him, charging premium for continuous power is unjustifiable on account of poor power purchase planning by the utility. It is the obligation of the Petitioner to provide continuous, quality and reliable power supply to all the consumers, and as such is not justified to levy premium for continuous power supply, even if such premium has to be paid, it must be brought down to reasonable level by the Commission. A more reasonable move which shall be appreciated by the industrial consumers would be to charge continuous power premium only during the rostering period and not for the entire duration. He requested the Commission to take a view on the suggestion and if this is implemented, industrial consumers are ready to pay a marginally higher surcharge during the duration of outage. Also, the Petitioner in the past has followed the practice of levying continuous power premium with effect from the new tariff order date and not w.e.f. the date of continuous power sanction approval. This is unfair since the consumers do get the benefit of continuous power only when the same is approved. Therefore, he requested the Commission to direct the Petitioner to ensure that the continuous

power premium is levied w.e.f. the new Tariff Order date or approval date whichever is later. Thus these charges should not be levied for the full year but only during the period when continuous power application is approved and is provided for, as well as charged only during periods of rostering.

Shri N. Ram Mohan further submitted that it has also been the policy of the Petitioner to give continuous power facility to units on a common feeder only when all the consuming units of the feeder opt for continuous power. He requested the Commission to look into this and ensure that any individual unit can opt for continuous power. The units which have not opted for continuous power may be suitably fined if they draw power during rostering period.

Smt Jaya Sahu, Asst General Manager, Prince Industries submitted that they have a plant in Haridwar which manufactures PVC Agri Pipes and its fittings. For the production of proper pipes plants require continuous supply. The unstable power halts production and also results into huge wastage. She also submitted that it takes 4 hours to restart the heating process and once heater get heated up it takes 2 hours for the production of proper shaped pipes. During the heating process plant utilize high voltage which results into large consumption of electricity. The continuous supply of power can help plant to reduce electricity consumption and wastage of pipes due to rejections. She requested the Commission to direct the Petitioner to provide her plant continuous power without charging any extra cost.

#### **3.17.1.2 Petitioner's Response**

The Petitioner submitted that UPCL in its MYT Petition for Control Period from FY 2013-14 to FY 2015-16 proposes to provide 24x7 uninterrupted supply to its high value HT industrial consumers and, therefore, it has proposed to introduce the scheme of express/independent feeders. Currently only continuous process industries are provided 24x7 uninterrupted supply. UPCL based on similar queries from other industries intends to give the option of uninterrupted supply to those other consumers who are willing to take round the clock uninterrupted power supply. The basic conditions of giving uninterrupted supply to such HT industrial consumers are as follows:

- HT industrial consumers who wish to participate in this scheme should approach the Petitioner with a written request.
- These types of consumer should be connected on express/independent feeders.

- If the consumer is currently not connected on the express/independent feeder but now wishes to connect to the same, then all the capital expenditure involved in getting connected on the express/independent feeder will be borne by the consumers.
- If one or more consumers are connected on the same feeder then consent of all those connected consumers will be needed for conversion to express feeder.
- The surcharge for such consumers is proposed to be 25% on energy charges.

Thus, the Petitioner has requested the Commission to consider the aforesaid scheme and provide 24X7 supply to industrial consumers (other than existing continuous process industries) as well.

Regarding Load Shedding, the Petitioner submitted that the scheduled load shedding is done only after approval from the Commission and it is ensured that none of the category of consumers is discriminated against. The unscheduled load shedding is done to meet the gap in demand and availability and only under emergency conditions. During this emergency rostering complete care is taken so that no category is discriminated against and equitable curtailment is done.

With regard to the proposal to increase Continuous supply surcharge from 15% to 20%, the Petitioner submitted that the projected availability of electricity vis-à-vis projected demand of electricity in FY 2013-14 is short by 2201.06 MU. This deficit is about 18% of the demand and has been proposed to be procured at a rate of Rs. 4.23 per unit from the open market / overdrawal from the grid through unscheduled interchanges. The average power purchase cost of UPCL excluding this power of 2201.06 MU is Rs. 2.72 per unit, which is very near to the average power purchase cost of Rs. 2.66 per unit approved by the Commission for FY 2012-13. Further, purchase of power over and above the availability from firm sources is inter-alia required to give continuous supply to the desired industries and therefore keeping in view the rates of electricity in the open market and increase in rates of UI overdrawal, the rates of continuous supply surcharge needs to be revised to 20% of energy charges.

The Petitioner further submitted that it shall not be possible for UPCL to allow continuous supply on individual capacity to the consumers connected on industrial feeders. This is because the feeder shall have to be kept open all the time and monitoring of such consumers who do not avail



continuous supply on the same shall not be possible. If Continuous Power Supply is given on industrial feeder with penalty clause for non-continuous consumers, then the quality of supply to the continuous industries could not be ensured due to the reason that at the time of shortage of power, non-continuous industries may also consume power and the demand of continuous industries may remain unmet.

Further, the Petitioner submitted that the following provisions prove that levy of higher energy charges is absolutely in accordance with the provisions of the law:

Para-5.5.1 of National Electricity Policy –

*“There is an urgent need for ensuring recovery of cost of service from consumers to make the power sector sustainable.”*

Para-8.2.1(1) of Tariff Policy –

*“.....Consumers, particularly those who are ready to pay a tariff which reflects efficient costs have the right to get uninterrupted 24 hours supply of quality power.....”*

The Petitioner has further submitted that the extra energy charge for continuous supply is charged from the consumers who have opted for continuous supply. These consumers are exempted from load shedding during scheduled/unscheduled power cuts and during restricted hours of the period of restriction of usages approved by the Commission from time to time. However, load shedding required due to emergency break-down/ shut-down is imposed on these consumers as and when the situation arise.

The Petitioner submitted that the purchase of power over and above the availability from firm sources is inter-alia required to give continuous supply to the desired industries and therefore keeping in view the rates of electricity in the open market and increase in rates of UI over-drawl, continuous supply surcharge cannot be kept below 20% of energy charges throughout the year.

The Petitioner further submitted that the provision of continuous supply to continuous process industries for payment of excess charges is not in violation of Electricity Act, 2003 since no undue preference is shown towards these set of consumers. Also this practice is perfectly legal as per the following provisions:

*Provision 8.2.1 of National Tariff Policy 2006 –*

*“The reduction of Aggregate Technical & Commercial (ATC) losses needs to be brought about but not by denying revenues required for power purchase for 24 hours supply and necessary and reasonable O&M and investment for system upgradation. Consumers, particularly those who are ready to pay a tariff which reflects efficient costs have the right to get uninterrupted 24 hours supply of quality power.”*

The Petitioner further submitted that the continuous supply charges levied at the rate of 15% on power purchased through open access is justified since this charge commensurate with the stranded fixed cost on the account of power purchase committed by UPCL. The Commission in its Order dated 18th August 2011 has held these charges as justified. The relevant extract is reiterated below:

*“11.Further, as stipulated in the Tariff Policy and Open Access Regulations that the additional surcharge should commensurate with the stranded fixed cost on account of power purchase committed by the licensee, therefore, it is justifiable to apply this additional surcharge on consumers availing continuous supply option and still wanting to draw power through open access in various time periods.*

*12. Based on the above and considering the uncertain scenario of power purchase cost on a day to day basis, it has been considered that, since, embedded consumers of licensee, availing continuous supply option, are liable to pay the open access charges namely wheeling charges, transmission charges, cross-subsidy charges etc. except continuous supply surcharge of 15% while availing open access, a normative additional surcharge of 15% on prevalent energy charges as per Tariff Order, may be levied on energy drawn through open access by these embedded consumers availing continuous supply option and seeking to draw part or full of its demand through open access.”*

### **3.18 Components of ARR and Revenue**

#### **3.18.1 Power Purchase Cost**

##### **3.18.1.1 Stakeholder's Comments**

Shri. Pramod Singh Tomar, Director, Galwalia Ispat Udyog Ltd. submitted that UPCL has worked out its power purchase requirement on the basis of distribution loss trajectory proposed by them. In this regard, he submitted that the power purchase should be considered as per loss trajectory approved by UERC in the previous Tariff Order.

Shri Jai Bhagwan Agrawal of Kashi Vishwanath Steels Ltd. submitted that UPCL is proposing a high rate of power purchased by estimating huge purchase of power from outside to meet the requirement of power consumption. In this regard he suggested UERC that a maximum power purchase cost of Rs. 2/- per unit should be given to meet out the requirement of power consumption for any sources. He further submitted that excess amount which is estimated to be purchased at higher rates to meet excess power consumption should not be approved.

Shri. Pankaj Gupta, President, Industries Association of Uttarakhand submitted that UERC in its Petition for FY 2013-14 is envisaging maximum increase in demand for industries due to upcoming industries in Uttarakhand. Industries consumers involve the minimum losses and therefore loss target for FY 2013-14 should be much lower than the earlier years. If this is factored, there will be much lower power purchase cost than that projected by UPCL. Shri. Pankaj Gupta, President, Industries Association of Uttarakhand further submitted that the power purchase cost is exorbitantly high in case of Dhauliganga, Dulhasti and Koteswar and this is coming to Rs. 9.09, Rs. 10.20 and Rs. 12.50 per unit, respectively. This shows the irresponsibility on account of officers while working on ARR Petition.

Shri. V. V. Joshi, AGM, Tata Motors Ltd. submitted that total Availability of Power from UJVNL station to UPCL for FY 2013-14 is 4285 MUs vis-à-vis 4339 MUs considered by UPCL in their Petition. Further, UPCL has considered very low purchase from NTPC and NHPC stations. This may be the main reason for power deficit for FY 2013-14. Therefore he has requested UERC to examine the reasons for such a low power purchase consideration from NHPC and NTPC stations. He further requested to minimize power purchases from costly power sources (i.e. through traders) and utilize the full available allocation of NTPC & NHPC (less costly power sources). The net energy available for sales after deducting transmission losses is 8273.35 MU as per UPCL projections. However, Tata Motors Ltd. (TML) has projected it to be 8617.76 MU.

Shri R. K. Saxena, Chief Electrical Distribution Engineer, Northern Railway submitted that UPCL purchases cheaper power in the exchange @ 3.67-3.70/kWh and sells the same to consumers at higher prices. He further submitted that there is difference between average power purchase cost and average revenue realization.

Shri N. Ram Mohan, Vice President, Polyplex Corporation Ltd. submitted that the overall consumption is projected to grow by 15% CAGR over the period FY 12 to FY 16 which is projected

to be supplied by committed sources (Current and New) with a CAGR of 12%, leaving a gap to be bridged through UI and Open market purchases which is expected to grow by 40% CAGR over the same period. Based on past performance these projections are highly optimistic and any tariff fixation based on these optimistic levels will lead to much higher tariff levels than what is required. Since the incentives for new Industries no longer exist in Uttarakhand these projections seem to be highly far-fetched.

Smt. Vibha Malhotra, Director & Head (Uttarakhand State Office), Confederation of Indian Industry (CII) submitted that the Petitioner has purchased expensive power to meet the projected power deficit which has resulted in the higher proposed power tariff. She further submitted that as per their assessment, the Petitioner had power deficit of 460 MUs for the FY 2012-13.

Shri Pradeep Datta submitted that if expensive power is purchased by the Petitioner for Industrial Consumers. Such expensive power cost should be directly realised from the industrial Consumers and should not be pooled directly for working out actual tariff cost.

#### ***3.18.1.2 Petitioner's Response***

The Petitioner submitted that power purchase expenses comprise of about 80% of the total expenses of UPCL and are dependent on the availability of power from different firm and infirm sources of power. Any disallowance of these expenses would affect UPCL's ability to supply quality and reliable power. Further, the details of estimation of power purchase expenses have been provided in detail in MYT petition in section A7.

With regard to the contention raised by Shri. Nipurn Rastogi regarding the variation in claim of Power Purchase Expenses for FY 2011-12, UPCL agrees with the consumer that there is a huge variation in the power purchase expenses from those approved by the commission in its Tariff Order for FY 2011-12. Such heavy variation is on the account of increase in power purchase from the firm sources of power whereby there has been an upward revision in tariff rates of central generating stations. This revision was from April 2009 and arrears were also paid in FY 2011-12. These costs have been taken from the actual bills of the generating companies. The contention of the consumer that UPCL has procured excess power at higher UI charges or on short term basis at higher rates is also incorrect since UPCL has tried to keep itself aligned within the additional power purchase allowed by the Commission in its Tariff Order for FY 2011-12 to meet its deficit.

Further, with regard to the issue of buying cheaper power and selling power at high rates by UPCL, the Petitioner submitted that the per unit open market purchase rate of UPCL for FY 2012-13 stood at Rs 4.22/kWh. Alongside with power purchase costs, UPCL has to incur fixed costs for carrying out smooth operations of the entity. These include R&M cost, employee costs, A&G cost, Interest cost etc., which need to be apportioned as well on all categories of consumers for recovery. Thus, per unit cost of supply of UPCL is quite high and it is not indulging in any practice of buying cheaper power and selling to consumers at higher rates.

With regard to the difference between average power purchase cost and average revenue realization, the Petitioner further submitted that the tariff is determined on the basis of Average cost of Supply, which comprises of Power Purchase Cost, Employee cost, R&M cost, A&G cost, Interest Cost etc.

With regard to availability of power from UJVNL, the Petitioner submitted that UPCL appreciated the effort of the consumer to estimate the energy availability from the UJVNL based on the actual generation reports for FY 2012-13. However UJVNL is undertaking RMU exercises at all its stations and thus it is expected that the power availability would be higher. The monthly availability from UJVNL stations has been estimated based on 10 year projections made available by UJVNL dated 08 August, 2012. The annual generation from UJVNL stations has been apportioned in each month of the year based on the 4 year average of monthly generation in a particular month to the total generation during the year.

For power purchase from NHPC stations, the Petitioner submitted that the monthly availability from NHPC stations has been estimated based on the monthly design energy for each station reduced by normative auxiliary consumption specified by Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. The approach to utilize design energy has been followed since per unit energy and fixed charges is calculated in such a manner so that the generator is able to recover the complete Annual fixed cost if it is able to achieve the specified level of design energy and NAPA. Thus based on this design energy estimate is the most appropriate estimate of the energy which shall be made available by the generator. The Petitioner also submitted that at the time of preparation of MYT Petition full year data for FY 2012-13 was not available.

With regard to NTPC stations, UPCL has estimated the monthly availability from NTPC stations based on the average of three year monthly PLF for NTPC stations. The auxiliary consumption has been considered based on the rates specified by Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009. This methodology of projection is very similar to that followed by the CGS for estimating their energy availability. Thus UPCL denies any allegation regarding downsizing the estimates since the availability from thermal CGS is a function of their PLF which may vary in the future years owing to factors which are uncontrollable on the part of UPCL and thereby keeping the power projection for FY 2013-14 same as FY 2012-13 would not be wise.

With regard to the power projected from Other Major Stations -THDC, SJVNL and NPCIL, UPCL would like to ensure the consumer that all the projections for energy availability have been based on the past year plant availabilities, design energy and the Norms as per CERC regulations, 2009.

The Petitioner further submitted that the details of the power purchase projections are available Para 6.54 to 6.81 of MYT Petition. UPCL realizes that around 300 MW of power needs to be procured from other sources. In this regard, Petitioner has already initiated the process to procure the power from Case -1 competitive bidding.

### ***3.18.2 Return on Equity***

#### ***3.18.2.1 Stakeholder's Comments***

Shri. Rajeev Gupta of KVS Infraatech LLP and Shri N. Ram Mohan, Vice President, Polyplex Corporation Ltd. submitted that UPCL has claimed 16% RoE on average equity base for FY 2013-14. Instead of considering the opening equity for FY 2012-13 as the closing equity base of Rs. 76.76 Crore as per Commission's Order dated April 4, 2012, it has considered the opening equity of Rs. 645.15 Crore in its claims and added further Rs. 180.19 Crore, thus making closing equity base of Rs. 825.35 Crore and claimed RoE of Rs. 117.64 Crore @ 16% on average equity of Rs. 735.26 Crore for FY 2013-14. Thus, UPCL has claimed excess and unwarranted RoE of Rs. 90.95 Crore, which is highly objectionable.

Shri. Pankaj Gupta, President, Industries Association of Uttarakhand submitted that UERC in its Order of April 11, 2012, has commented on return on equity as follows:

*“In this regard, the Commission has already given its view in its Tariff Order dated April 10, 2010 that though conversion of power bonds into share capital has resulted in an increase in the equity base of the Petitioner, however, as per Tariff Regulations, only that equity which is invested in creation of fixed assets is entitled for Return. Merely having share capital in the Balance Sheet does not qualify it to be eligible for return. Share capital lying unutilised, or utilized to finance the current assets or to cover the losses of the Petitioner Company will not be eligible for return purpose.”*

As against the Order of UERC in its previous Order, UPCL has again asked for return on equity on full capital. In this regard, he requested the Commission to maintain its previous stand on this.

Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry, Shri. Rajeev Gupta of KVS Infraatech LLP and Shri. Nipurn Rastogi, Director, Khatema Fibers Ltd., submitted that there is a variation in Return on Equity claimed in True Up for FY 2010-11 and FY 2011-12. Shri. Nipurn Rastogi further submitted that in present Petition return on equity of Rs. 113.62 Crore has been calculated for the period starting from November 09, 2001 to May 31, 2004. While for the period starting from June 06, 2004 to March 31, 2010, return has been computed on equity base of Rs. 572.00 Crore. He submitted that Uttarakhand Government has issued the power bonds against Rs. 572.00 Crore of electricity charges payable to Uttar Pradesh Government. Later Uttarakhand Government has incorporated Rs. 572.00 Crore in the Petitioner equity for which no asset had been formed. He further submitted that, in the previous Tariff Order the Commission has disallowed the Return on Equity corresponding to Rs. 572.00 Crore and it should be disallowed in this year ARR also.

#### **3.18.2.2 Petitioner's Response**

As regards the contention raised by Shri. Nipurn Rastogi regarding the variation in claim of Return on Equity for FY 2010-11, the Petitioner submitted that Return on equity has been calculated based on opening equity of Rs. 42.2 Crore approved by the Commission for FY 2010-11 in the Tariff Order of FY 2012-13 and also on the liability for CPSU dues, part of which has been converted to Equity of Rs. 481.03 Crore less opening GFA of Rs. 108.26 Crore which were transferred to PTCUL. Thus, the opening equity for FY 2010-11 has been worked out as Rs. 414.97 Crore. The addition in equity has been calculated taking normative equity of 30% on the capitalisation during the year. As

per the MYT regulations for the ARR of Petitioner is to include the return on equity capital and thus the contention of the consumer that claim of RoE is against the Commission's order is incorrect.

As per UERC MYT Regulations, 2011, equity has to be calculated on post tax basis at 16%. Accordingly, UPCL has computed RoE at 16% on the average equity. The opening equity for FY 2012-13 has been considered based on the closing equity for FY 2011-12 as per the provisional accounts of FY 2011-12 and no addition in equity has been considered FY 2012-13. The addition in equity in each year is based on the funding pattern projected for investing in the capital expenditure plan. As regards return on equity of Rs. 572 Crore, justification in detail has been given in MYT Petition at Para 2.45 to 2.53.

### ***3.18.3 Provision for bad and doubtful debts***

#### ***3.18.3.1 Stakeholder's Comments***

Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry, Shri. Rajeev Gupta of KVS Infraatech LLP and Shri. Nipurn Rastogi, Director, Khatema Fibers Ltd. submitted that there is a variation in provision for bad and doubtful debts claimed in True Up for FY 2010-11 and FY 2011-12. He further submitted that the Petitioner in ARR has made the provision for Bad & Doubtful debt of Rs. 67.77 Crore for FY 2010-11 and Rs. 76.04 Crore for FY 2011-12. However, in previous Tariff Order the Commission has disallowed the provision because licensee had not utilized the available previous provisions. They further submitted that in the FY 2010-11 licensee had unutilized provision of Rs. 520.00 Crore and beyond FY 2010-11 the Commission does not have the record of utilization of the provisions. As it is evident that licensee has not utilized the previous provisions till date and therefore the Commission should not allow the provision on Bad & Doubtful Debt in the ARR.

M/s Asahi India Glass Ltd., Roorkee further submitted that provision of bad and doubtful debts has been projected to the tune of approx. Rs. 76.04 Crore which is very high.

Shri. Pankaj Gupta, President, Industries Association of Uttarakhand, referring to the relevant sections of the UPCL Petition, submitted that UPCL is trying to move in its own direction without taking in consideration the observations of the Commission on bad and doubtful debts. It is common practice to take utmost care to realise the money due from its consumers and nowhere a



provision as a percentage is allowed for bad debts. Therefore, the earlier stand taken by the Commission should hold good for this year also.

Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry, Shri Devendra Kumar Agrawal, Managing Director, M/s Kashi Vishwanath Steels Ltd. submitted that in the current ARR, the licensee has sought provision for bad debts of Rs. 84.33 Crore for the FY 2012-13, Rs. 96.98 Crore for FY 2013-14, Rs. 108.09 Crore for FY 2014-15 and Rs. 121.06 Crore for FY 2015-16 @ 2% of projected revenue assessment (billing) for these years. However, in the last Tariff Order for FY 2012-13 and FY 2011-12, the Commission has expressly disallowed any provision for bad and doubtful debts and rejected the licensees claims stating that the licensee had not utilized the provisions of bad debts already provided in the previous Tariff Order and, therefore, further provision of bad and doubtful debts is not warranted either by normal standards of prudence or by the Regulations framed under Electricity Act 2003 and the Income Tax Act. In this regard, Shri Devendra Kumar Agrawal requested the Commission that it should not allow any provision in the ARR for FY 2012-13 and subsequent years until the already provision is utilized, exhausted and reported by the licensee in a transparent manner.

Shri Atul Kumar Agrawal of Kashi Enterprises requested the Commission to consider the following issues in respect of bad and doubtful debts:

1. Consideration of Bad and Doubtful Debts and whether the Hon'ble Commission has fixed any norm for Bad and doubtful debts
2. Progress on Write off of Previous Bad Debts
3. Progress in carrying out audit of receivables

#### **3.18.3.2 Petitioner's Response**

With regard to the variation in claim of Provision for Bad and Doubtful debts for FY 2010-11, the Petitioner submitted that the actual collection efficiency for FY 2010-11 comes out to 92.56%, accordingly the collection inefficiency comes to 7.44%. In the service business like electricity sector where the consumer base is large, lot of consumers default on payment and these amounts remain outstanding in the books of accounts. As per the actual practice also, the Petitioner makes a provision of 5% in the accounts. The Petitioner also requests the Commission to allow provision for bad debts on actual basis. However, the Petitioner in its present Petition has calculated provision for

bad debts at 2.50% on the actual revenue of Rs. 2509.20 Crore for FY 2010-11 which translates to Rs. 67.77 Crore. Accordingly, for FY 2011-12, the Petitioner in its present Petition has calculated provision for bad debts at 2.50% on the actual revenue of Rs. 2830.57 Crore for FY 2011-12 which translates to Rs. 76.04 Crore.

As regards the concern raised by Shri Atul Kumar Agrawal, the Petitioner submitted that as per fundamentals of accounting and costing (matching principle and principle of conservatism) every business should provide that portion of debtors which is likely to be bad and not recoverable. This should be provided as an expense in the same year in which sales revenue is recognized. UPCL would like to submit that the Collection efficiency for the FY 2011-12 is 92.67%. Although UPCL shall make all the efforts to achieve 100% collection efficiency but bringing it down from the current level of 92.67% to 99% within in a span of one year seems impossible. The Petitioner requested the Commission to approve bad debts @ 2% of estimated revenue, which is also lower than 2.50% allowed by the Commission in its previous Tariff Orders. Further, the Petitioner submitted that UPCL is in the process of writing off bad and doubtful debts as per the directions of the Commission. Also, UPCL has already appointed CAs for the audit of receivables as per the scope of work defined and approved by the Commission. The report once finalized shall be submitted to the Commission for necessary consideration.

### ***3.18.4 Capital Cost of Original Assets and Depreciation***

#### ***3.18.4.1 Stakeholder's Comment***

Shri. Pankaj Gupta, President, Industries Association of Uttarakhand suggested that the Commission should approve the capital cost of original assets based on the approval made in earlier Orders as no change has taken place in the present ARR. Merely accepting any provisional transfer scheme does not give any asset its actual/historical cost. In this regard, he suggested that the asset transfer still remains provisional despite the letter of principal secretary and therefore in absence of any concrete fact, UERC should consider the value of GFA as Rs. 508 Crore only as on November 9, 2011. In this connection, he requested the Commission to allow depreciation accordingly on the value of final Gross Fixed Assets based on the approval made in earlier Orders as there seems to be no change in position in this regard. Further, UERC in the past had not allowed capitalization of assets pending Electrical Inspector Certificate. In this regard, he requested the Commission to not allow capitalization till such certificates are received.

Shri Pankaj Gupta further submitted that UPCL is claiming carrying cost on depreciation on GFA and this shows the apathy of distributing company towards the general public. Whenever the GFA is finally finalized by UERC, no carrying cost of this should be allowed as that is due to the delay on the part of UPCL.

Shri. Pankaj Gupta further submitted that UPCL in its Petition has claimed a total amount of Rs. 1581.24 Crore as under recovery including depreciation and carrying cost as shown in table below:

**Claim upto FY 2013**

Particulars		Amount in Rs. Crore
A	Depreciation	404.91
A1	Impact of Transfer Scheme	240.40
A2	Non-Consideration of Capitalization by UERC	75.16
A3	Asset created out of grant	89.35
B	Return on Capital Base (Nov 9, 2001 to May 31, 2004)	113.62
C	Return on Equity/Capital (Jun 01, 2004 to Mar 31, 2011)	188.25
D	Carrying Cost of Deficit upto FY 2010-11	512.64
	Sub-Total	1219.42
E	Impact of claim up till FY 2010-11	1219.42
E1	Carrying Cost for FY 2011-12 & FY 2012-13	361.82
	<b>Total</b>	<b>1581.24</b>

In this regard, he submitted that this is an excellent example of public utilities acting against the interest of the general public.

Shri N. Ram Mohan, Polyplex Corporation Limited and Shri Vikas Jindal, President, Kumaon Garhwal Chamber of Commerce & Industry, Shri. Pramod Singh Tomar, Director, Galwalia Ispat Udyog Ltd. and Shri. Nipurn Rastogi submitted that UPCL has claimed an Additional Depreciation of Rs. 240 Crore for period of 2001-02 & 2010-11 due to change in opening value of GFA from Rs. 508.00 Crore to Rs. 1058.18 Crore as per transfer scheme approved by GOU. This claim is illogical as it is against the directions of UERC. Shri N. Ram Mohan, Polyplex Corporation Limited submitted that the Depreciation claim for the period 09.11.2001 to FY 2010-11 considering GFA of Rs. 1058.10 Crore as per transfer scheme at this stage is not only illogical but appears to be an attempt to increase ARR and Tariff hike for FY. 2013-14. He requested the Commission to give a serious thought on such a claim.

### 3.18.4.2 Petitioner's Response

The Petitioner submitted that the Commission in its Order dated March 18, 2008 at para 6.2.9 has mentioned that this issue will be dealt once the transfer scheme is notified by GoU. The relevant extracts of the same are reproduced hereunder:

*"The Commission accepts the claims of GFA and depreciation based on opening of GFA of Rs. 508 Cr. as the same are as per the approach adopted by Commission in previous Tariff Orders but with the correction stated above. The Commission shall consider the claims of UPCL on opening GFA value as and when the Final Transfer Scheme is notified....."*

Government of Uttarakhand vide its order No.-117/I(2)/2011 05/19/2002, dated 27-04-2012 approved the Transfer Scheme of assets and liabilities executed between UPPCL and UPCL on October 10, 2003. Accordingly, the Petitioner has now requested the Commission to approve the affect of past adjustments along with the MYT Petition so that the impact of the same is allowed along with the tariff of FY 2013-14.

Further, UPCL in its MYT Petition vide Table No. 4 has given complete details and justification of the differential depreciation of Rs. 240.40 Crore and thus does not agree with the contention of the consumer that the claim is illogical.

The Petitioner has further submitted that the Electrical inspector clearance certificates and the actual cost of HT works carried by UPCL on which depreciation of Rs. 75.16 Crore has been disallowed to UPCL has been already submitted to the Commission. The Petitioner has requested the Commission to consider the same and allow its claim of depreciation on capitalization of the assets.

The Petitioner also submitted that the previous basis of rejection of the claim of Rs. 89.35 Crore by the Commission was studied in detail by UPCL and proper justification has been given in the Petition in support of claim in the matter by UPCL.

Further, special care is being taken by UPCL to cut down on its expenses. The consumer is hereby assured that UPCL has not provided any vehicle to the officers who are not working in the field operations except for those in senior management who need to travel continuously to monitor the progress of the filed activities. Also to cut down on the costs UPCL has outsourced the car facility completely.

UPCL does not agree with the contention of the stakeholder that the transfer scheme is still provisional and as the transfer scheme has been approved by the Govt. of Uttarakhand, it has become final and no further action is required towards finalization of the same.

The Petitioner also submitted that in case the expenditure of the utility is not recovered, its financial health will deteriorate and the company will not be in position to supply quality and reliable power to consumers. Thus UPCL has requested the Commission to consider the same and allow its claim of depreciation on capitalization of these assets.

Further, the Petitioner submitted that the finalization of GFA as per transfer scheme has been delayed owing to various intricate Govt. procedures involved in finalization of the transfer scheme. The various factors affecting the finalization of scheme were not controllable by UPCL. It has already justified the claim of carrying cost to the Commission by quoting a judgment of the APTEL in the matter of Appeal No. 265 of 2006 where it has adjudicated that a distribution utility (NDPL in this case) is entitled to a carrying cost on depreciation, if depreciation is denied at appropriate time. Thus UPCL is also justified on claiming carrying cost on the amount of transfer scheme.

### ***3.18.5 Additional Regulatory Surcharge***

#### ***3.18.5.1 Stakeholder's Comments***

Shri Pratap Singh of Vasant Vihar Members Welfare Association submitted that UPCL has proposed for the additional regulatory surcharge of 11.37% as it has become necessary due to continuous increase in the capital expenditure after the formation of Uttarakhand in 2000. Further, it is also being said that the capital expenditure was Rs. 478 Crore when Uttarakhand was created as a new State out of UP but this too has now increased to Rs. 1581 Crore due to delay in the finalization of distribution of assets and liabilities between the two States. In this regard he requested the Commission to examine the exact quantum of the capital expenditure whether it really exists or not. Shri S. P. Joshi submitted that 11.37% additional regulatory surcharge is unjustified and Commission should scrutinize the capital expenditure.

### 3.18.5.2 Petitioner's Response

UPCL is a commercial organization and is required to meet its Annual Revenue Requirement out of the revenue realised from the consumers through electricity tariffs. The deficit for FY 2012-13 based on accounts shall be claimed in the next year during truing up exercise.

### 3.18.6 Truing-up for Past Years

#### 3.18.6.1 Stakeholder's Comment

Shri. Pankaj Gupta, President, Industries Association of Uttarakhand submitted that UPCL has not provided clear explanation for variance of its expenses as against approved by the Commission. He submitted that in this time of transparency, it is important that the government utilities must also be transparent. If the actual expenses are more than that approved by the Commission then the same needs to be clearly explained otherwise licensee will be running its operation in losses and this will not be good for anyone in the long run. UPCL must therefore give better explanations for such variance. He further submitted that UI overdrawal and open market purchase are being resorted to without proper sanction from the Commission and such extra expenses are being claimed without any clear explanation of resorting to such high cost power.

Shri. Rajeev Gupta of KVS Infraatech LLP submitted that there were major variations in true up for FY 2010-11 as given in the tables below:

**Major Variations in True up for FY 2010-11 (Rs. Crore)**

S.No.	Particulars	Approved by UERC	Claimed by UPCL	Variation)
	Expenses:			
1	Interest on Working Capital	14.06	21.44	(7.38)
2	Return on Equity	5.91	67.13	(61.22)
3	Provision for Bad debts	0	67.77	(67.77)
	Revenue:			
1	Tariff Income	2718.44	2592.60	125.84
2	Non Tariff Income	59.25	182.02	(122.77)

Further, Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry, M/s Asahi India Glass Limited and Shri. Rajeev Gupta of KVS Infraatech LLP submitted the major variation in expenses as approved by the Commission and that claimed by UPCL for FY 2011-12 is given below:

**Major Variations in True up for FY 2011-12 (Rs. Crore)**

S.No.	Particulars	Approved by UERC	Claimed by UPCL	Variation
	Expenses:			
1	Power Purchase	2441.08	3124.44	683.36
2	O&M	272.53	296.83	(24.30)
3	Interest and Finance Charges	71.08	88.49	(17.41)
4	Depreciation	27.95	112.66	(84.71)
5	Bad Debts	0	76.04	(76.04)
6	Interest on Working Capital	8.02	13.21	(5.19)
7	Return on Equity	7.47	83.24	(75.78)
	Revenue:			
1	Tariff Income	2804.70	2809.88	(95.18)
2	Non Tariff Income	35.20	335.91	(300.31)

In this regard, the increase in depreciation, bad debts and return on equity in true up exercise have been opposed because the revised claims have been based against UERC observations/reasoning in the last Tariff Order. The revised claims should be strictly in accordance with the Order.

**3.18.6.2 Petitioner's Response**

The Petitioner submitted that all details of actual expenses and revenues for the FY 2010-10 & FY 2011-12 including justifications of the same have been provided in the MYT & Tariff Petition of UPCL. All other information/ justifications are also being provided in the matter to the Commission as and when required by them.

The deficit of FY 2011-12 is mainly due to increase in power purchase cost and depreciation considered based on the finalization of transfer scheme. Variance analysis of power purchase cost for FY 2011-12 (approved vs. actuals) has been shown at table 31 (page-38) of the MYT Petition. It is clear from the above analysis that the actual power purchases during the year were Rs. 3124.44 Crore as against Rs. 2441.08 Crore approved by the Commission.

The actual rate of power purchase cost from open market and UI overdrawal remained Rs. 4.05 per unit as against approved rate of Rs. 4.20 per unit. Thus UPCL has tried its best to control the open market purchase and kept it less than the rate as approved by the Commission. To bring

stability to the price of open market purchase, UPCL proposes to undertake procurement of 300 MW of electricity under case –1 competitive bidding regime.

### ***3.18.7 Non Tariff Income***

#### ***3.18.7.1 Stakeholder's Comment***

Shri. Pankaj Gupta, President, Industries Association of Uttarakhand submitted that every year UPCL has shown receipt of very high amount in respect of non tariff income in True ups. Similarly, in FY 2011-12, UPCL has shown this income as Rs. 335.91 Crore. In this regard, the details of this income need to be provided.

#### ***3.18.7.2 Petitioner's Response***

The Petitioner submitted that the details of the Non - Tariff Income has already been provided by UPCL to the Commission. It is also submitted that out of Rs. 335.91 Crore claimed as Non Tariff Income, Rs. 164.89 Crore is the revenue from sale of power which has been wrongly booked under this head. Corrected figures have been submitted to the Commission.

### ***3.18.8 Rate of Free Power***

#### ***3.18.8.1 Stakeholder's Comments***

Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry and Shri. Pramod Singh Tomar further submitted that UPCL has considered higher rate of free power than projected for calculation of power purchase cost.

Shri Ajay Bhargava of Hotel Surya Kiran, The Mail Mussoorie submitted that there is 12% free power available to UPCL. The benefit of this free electricity should be passed to the consumers.

Shri Atul Kumar Agrawal of Kashi Enterprises and Shri Devendra Kumar Agrawal, Managing Director, M/s Kashi Vishwanath Steels Ltd. submitted that in the Tariff Order dated October 23, 2009, the Commission had adopted approach for pricing of 12% free power available to Govt. of Uttarakhand from Dhauliganja and Tanakpur Hydro Power Plants of NTPC, Tehri-I and Koteswar of THDC and Vishnu Prayag and being sold to the licensee and considered its rate equivalent to average power purchase rate of power from all other firm sources except free energy. Similar approach has been considered in the current ARR. In this regard, he further submitted that with the current approach being adopted for pricing of free power, the power cost gets artificially



inflated to the disadvantage of the consumers in the State. To determine the price of free power available from hydro sources, it is not reasonable to benchmark it with the cost of power from the firm sources including thermal stations. If at all such a benchmarking is to be made, it should be done with reference to power purchase from the hydro stations of CPSU's/UJVNL.

#### **3.18.8.2 Petitioner's Response**

With regard to free power, UPCL has already submitted the detailed methodology of estimation of free power in its MYT Petition and it can be clearly seen that the estimation has been done based on the norms of operations of the respective plants.

With regard to the benchmarking of power purchase cost, the Petitioner submitted that there is a typographical error in Table No. 39 of Business plan and the revised cost of free power is as follows

F.Y.2013-14 – Rs 2.72/kWh

F.Y.2014-15 – Rs. 2.75/kWh

F.Y. 2015-16 – Rs 2.87/kWh

The Petitioner further submitted that the suggestion for revision of consideration of rate of free power cannot be considered, as the Commission in its Tariff Order for FY 2009-10 has already clarified that based on the existing statutory provision, the rate of free power comes out to be minimum as per the adopted approach.

#### **3.18.9 O&M Expenses**

##### **3.18.9.1 Stakeholder's Comments**

Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry and Shri Atul Kumar Agrawal and Shri Devendra Kumar Agrawal, Managing Director, M/s Kashi Vishwanath Steels Ltd. submitted that the

O&M expenses projected appear to be overestimated on year to year basis and needs to be allowed by the Commission on a rational basis.

Shri Jai Bhagwan Agrawal of Kashi Vishwanath Steels Ltd. submitted that UPCL has demanded an increase of 30% on account of O&M expenses. In this regard he suggested that it should not be increased more than 5%.

Shri N. Ram Mohan, Vice President, Polyplex Corporation Ltd. submitted that the Petitioner has projected the overall O&M expenses to grow at a CAGR of 13% between the period FY 2013 to FY 2016. Within O&M expenses the cost sub-head of A&G expense itself has been projected to grow at a CAGR of 27% between the same period. He requested the Commission to prudently check the projections of O&M expenses.

### ***3.18.9.2 Petitioner's Response***

The Petitioner submitted that UPCL keeping the base year of 2011-12 has estimated the operation and maintenance expenses strictly as per the provision of MYT regulations, 2011. The Petitioner further submitted that the UPCL has tried to keep the estimates as conservative as possible considering the existing rates of inflation.

### ***3.18.10 Capital Expenditure Plan***

#### ***3.18.10.1 Stakeholder's Comments***

Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry, Shri Vikas Jindal, President , Kumaon Garhwal Chamber of Commerce & Industry and Shri. Pramod Singh Tomar, Director, Galwalia Ispat Udyog Ltd. submitted that UPCL has proposed very ambitious Capital Expenditure Plan. Such ambitious heavy expenditure plans on yearly basis seems to be impossible to achieve for the licensee. Therefore, they requested the Commission to scrap the projects not generating adequate revenue returns to the licensee.

#### ***3.18.10.2 Petitioner's Response***

With regard to the Capital Expenditure Plan, the Petitioner submitted that it agrees that the capital expenditure plan is ambitious; however, it has been prepared keeping in mind the proposed distribution loss reduction trajectory and collection efficiency trajectory.

UPCL intends to achieve a turnaround and for the same it has developed turnaround activities as per the proposed capital expenditure plan which is being implemented and monitoring. Some of the turnaround activities currently being carried out are:

1. Installation of AB cables in theft prone areas
2. Combing operations in identified theft prone distribution divisions
3. Double Metering of High value consumers

4. Shifting of meters to outside consumer premises
5. Replacement of Defective and electro mechanical meters.

Thus UPCL has requested the Commission to consider the proposed capital expenditure plan.

### ***3.18.11 Collection of Arrears***

#### ***3.18.11.1 Stakeholder's Comments***

Shri Kuldeep Singh Cheema of Bhartiya Kisan Union submitted that UPCL should concentrate on collection of arrears from State Govt. entities.

#### ***3.18.11.2 Petitioner's Response***

The Petitioner submitted that UPCL has taken up this matter with Govt. of Uttarakhand and collected Rs. 167 Crore in FY 2012-13.

## **3.19 KCC Data**

#### ***3.19.1.1 Stakeholder's Comment***

Shri Pankaj Gupta, President, Industries Association of Uttarakhand submitted that UPCL has done a good job by compiling data in KCC cell. Though the compilation is excellent, it seems that enough benefit is not being derived from scrutiny of this data. Industries Association of Uttarakhand suggested that the Commission should set up one cell either in its own office or in UPCL's office for scrutiny of this data. Further, such cell should be independent and should not be reporting to UPCL. The formation of this cell would help in proper diagnostics of ills and malafides prevailing in UPCL at division level and would highlight the vital areas to be settled.

Shri Rakesh Bhatia and Shri Mahesh Sharma of Uttarakhand Industrial Welfare Association submitted that average revenue return from NON KCC consumers in areas of Haridwar and Udham Singh Nagar are very less as compared to KCC consumers

#### ***3.19.1.2 Petitioner's Response***

The Petitioner submitted that UPCL has covered all the industrial consumers having load above 5kW and non-domestic consumers having load above 10 KW under KCC billing. The MRI report and billing of the HT consumers are being checked at Corporate Office on regular basis.

Corrective action are being taken on the irregularities found in the checking of the metering system and billing of these consumers.

UPCL would like to assure the consumer that it has already taken note of this all the steps to improve upon its billing and collection efficiency in areas of Haridwar and Udham Singh Nagar. The instructions have already been issued. The various steps being undertaken to improve collection efficiency include

- Implementation of R-APDRP, Part-A & Part-B in 31 towns having population above 10,000, SCADA/DMS in towns having population greater than 4 lacs and energy input greater than 350 MU/ annum
- Replacement of electromagnetic meters with tamper proof electronic meters
- Double metering, shifting of single phase & three phase meters outside the premises of the consumers
- Regularisation of unauthorised I.P. installation and thereby increasing the sales
- Convenient bill payment options like cash collection counters, online bill payment through credit card, debit card, internet banking, etc.
- More teams to be sent to rural areas for increasing collection.
- Recovery of past arrears

### **3.20 Quality of Power**

#### **3.20.1.1 Stakeholder's Comment**

Shri Pankaj Gupta, President, Industries Association of Uttarakhand submitted that quality of power is reducing with the passage of time. Issues like voltage variations amongst different phases, low voltage, high voltage, frequent breakdowns, etc. has become a common practice. Therefore, he requested the Commission to give clear directions to UPCL for improvement of quality of power.

#### **3.20.1.2 Petitioner's Response**

The Petitioner submitted that efforts are regularly made by UPCL for improvement in quality of power. In this regard, it is worthwhile to mention here that the demand of electricity has

become about four times from the date of creation of State and UPCL is meeting the demand of electricity to the satisfaction of the consumers.

### **3.21 Open Access**

#### **3.21.1.1 Stakeholder's Comments**

Shri. Pramod Singh Tomar, Director, Galwalia Ispat Udyog Ltd. and Shri Jai Bhagwan Agrawal of Kashi Vishwanath Steels Ltd. requested the Commission to encourage open access consumers to purchase power through open access to reduce the burden of UPCL. This will only happen when distribution losses and charges are reasonably reduced.

Ms. Vibha Malhotra, Director & Head (Uttarakhand State Office) and Shri. V. V. Joshi, AGM, Tata Motors Ltd. submitted that consumers are not benefited from open access power due to following reasons:

- (a) They have to pay the maximum demand charges even though the Maximum Demand has occurred during open access time.
- (b) Presence of MCG in tariff structure restricts the utilization of open access power as consumers are liable to pay fix amount towards energy charges even though actual energy is utilized or not.
- (c) Losses due to not availing the open access power due to low system voltage.
- (d) Losses due to unavailability of MRI/Load survey data for the period the consumer has bidden for open access power
- (e) UPCL does not refund the amount to the consumers if they have bidden power from open access and the distribution network breaks down during the same period
- (f) Several follow ups required for adjusting the additional open access amount in the monthly electricity bill.
- (g) All open access consumers operating at voltage level of more than 33 kV are also charged with the distribution losses.

Therefore, UPCL is requested to consider the above issues and encourage the consumer to opt for open access. Consequently, the cost of power purchase by distribution licensee during peak hours will come down and this will have a positive effect on the ARR.

Shri V.K. Aggarwal of Balaji Action Buildwell and Shri R.K. Gupta, General Manager of Gujarat Ambuja Exports Ltd. have submitted that the power is purchased from open access because the Petitioner is not able to supply power. They further submitted that continuous supply charges of 15% should not be charged by the Petitioner on power purchased from open access.

### **3.21.1.2 Petitioner's Response**

The Petitioner submitted that open access is being provided to the consumers by UPCL as per the provisions of Regulations issued by the Commission.

With regard to providing refund for break downs during open access purchased hours, UPCL is committed to take action as per the Regulation issued by the Commission in the matter.

Further, the Petitioner submitted that the suggestion of renewal of open access on yearly basis have been noted down and the same shall be discussed upon further. The Petitioner has submitted that the maximum demand charges need to be collected from the consumers even when the maximum demand is occurring at open access bidding time, since these charges account for the loading of the system by the consumer. Petitioner further submitted that the UPCL is committed to take action as per the Regulations issued by the Commission in the matter.

The Petitioner has submitted that the continuous supply charges are levied at the rate of 15% on power purchased through open access is justified since this charge commensurate with the stranded fixed cost on the account of power purchase committed by UPCL.

The Petitioner further submitted that the Commission in its order dated 18th August 2011 has held these charges as justified. The relevant extract is reiterated below

*"11.Further, as stipulated in the Tariff Policy and Open Access Regulations that the additional surcharge should commensurate with the stranded fixed cost on account of power purchase committed by the licensee, therefore, it is justifiable to apply this additional surcharge on consumers availing continuous supply option and still wanting to draw power through open access in various time periods.*

12. Based on the above and considering the uncertain scenario of power purchase cost on a day to day basis, it has been considered that, since, embedded consumers of licensee, availing continuous supply option, are liable to pay the open access charges namely wheeling charges, transmission charges, cross-subsidy charges etc. except continuous supply surcharge of 15% while availing open access, a normative additional surcharge of 15% on prevalent energy charges as per Tariff Order, may be levied on energy drawn through open access by these embedded consumers availing continuous supply option and seeking to draw part or full of its demand through open access."

### **3.22 Views of Advisory Committee Meeting**

During the advisory Committee meeting held on April 03, 2013, the Members made the following suggestions on the Petitioner's Business Plan and MYT Tariff Proposal for the Control Period FY 2013-14 to FY 2015-16.

- Members opined that UPCL is raising same issues again in its subsequent ARR and Tariff Petitions on which the Commission have already taken the decision and given in its ruling in the previous Tariff Orders. Members requested the Commission to issue the suitable directions to UPCL for not raising the issues again which have been settled by the Commission and in case UPCL still raises those issues in its Petition, the Petition should be rejected.
- Members opined that the tariff increase of approx. 50% proposed by UPCL is too high and if it is absolutely essential to increase the tariff, it should be limited to reasonable level of around 5-7%. Members were of the view that tariff increase should be on proportionate basis and not uniform across all consumer categories, as proposed by UPCL, as poor consumers will not be able to bear the burden of increased tariff.
- Members objected to additional surcharge to be paid by consumers opting for Continuous supply as supplying continuous power is the primary duty of any distribution licensee.
- Members expressed their serious objections in respect of UPCL's claim on account of Provision for Bad and Doubtful Debts. Members were of the view that the logic provided by UPCL for provisioning of bad debts is beyond comprehension and should not be allowed. It was opined that collection of electricity dues is the responsibility of UPCL,

and if UPCL would have been efficient in collecting its dues, such heavy amount of arrears wouldn't have arisen. Hence, the consumers should not be asked to bear the burden of provisioning of bad and doubtful debts. Further, members suggested that the genesis of bad debts should be analysed and measures should be taken so that the same can be corrected.

- Members opined that UPCL is incurring expenses every year in excess of the expenses allowed by the Commission in its Tariff Orders and claiming the increase in expenses during truing up of expenses and revenue based on actual figures, without giving appropriate justification for increase in the expenses.
- Members were of the view that growth rate considered by UPCL to project sales of HT and LT industry is over optimistic and is not a realistic estimate as the industrial package have now been discontinued and therefore the growth rate should be around 5%.
- Members opined that any scheduled load shedding should be carried out with prior approval of the Commission and consumers should be informed well in advance before carrying out such load shedding.
- Members were of the view that high tariff charged during morning & evening peak hours are detrimental to industrial growth, particularly in hilly areas where, industries do not operate during evening hours, and therefore, requested that special consideration may be considered by the Commission to industries in hilly areas.
- Members objected to UPCL's claim that the Transfer Scheme has been finalized by Government of Uttarakhand. The said that the reference provided by UPCL is only a letter by Government of Uttarakhand to UPCL and not an Order of Government of Uttarakhand and hence the Gross Fixed Asset base should not be revised as requested by UPCL. Further, they suggested that the Utilities should expedite the finalisation of Transfer Scheme.
- Members opined that UPCL should induct appropriate manpower with requisite skills for better consumer services.
- Members opined that the minimum consumption guarantee charges should be abolished.



- Members objected to the distribution loss reduction trajectory proposed by UPCL and suggested that the loss level should be approved as stipulated in the UERC MYT Regulations, 2011.

### **3.23 Commission's Views**

The Commission has taken note of various suggestions/objections raised by Stakeholders and appreciates the keen interest and participation of various stakeholders and for their feedback provided to the Commission on various issues. The Commission is of the view that the foundation stone of any meaningful regulation of utilities is to have an effective platform for exchange of operational and performance related information. The information exchange with the Utilities should be on a regular basis and throughout the year, rather than the interactions being limited to year-end, i.e. at the time of filing of the Petition. The Commission has, therefore, given its suggestions for improvement to overcome the shortcomings in their information systems and in various processes.

The Commission has addressed the issues raised by the stakeholders on the aspects of tariff rationalization and category-wise tariffs such as increase in tariffs, fixed charges, Minimum Consumption Guarantee charges, ToD Tariffs, Continuous Supply Surcharge, Reduction in Cross Subsidy etc. in Chapter 7 (Tariff Rationalisation and Design) of the Order. Several respondents from different consumer categories have opposed the increase in tariff proposed by the Petitioner and submitted that the tariff increase should be reasonable. The Commission, while designing the category-wise tariffs has considered the issues raised and attempted to strike a balance between the interests of the consumers and the Licensee.

As regards the concerns raised, by the respondents, relating to the truing up of expenses and revenue for FY 2010-11 and FY 2011-12 and projections of expenses and ARR of the Petitioner for the Control Period from FY 2013-14 to FY 2015-16 such as Power Purchase Cost, O&M expenses, capital related expenditure, Non-Tariff Income, provision for bad debts, Interest on Working Capital, etc, the Commission has carried out the detailed analysis of each element of projections, expenses and Revenue as elaborated in Chapter 4 (Commission's Approach), Chapter 5 (Analysis of Business Plan Petition) and Chapter 6 (Truing Up for FY 2010-11 and FY 2011-12 and ARR determination for the MYT Control Period from FY 2013-14 to FY 2015-16) of the Order.

### **3.23.1 Tariff Hike**

With respect to the issue of abnormal tariff hike proposed by UPCL, the Commission would like to clarify that the Commission has notified UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011 which provides for procedures and norms to be followed while carrying out tariff determination for the Control Period from FY 2013-14 to FY 2015-16. The Commission has followed the above mentioned Regulations while determining the ARR excluding power purchase cost for the said Control Period and Tariffs for FY 2013-14.

### **3.23.2 Load Shedding**

With regards to concerns raised on account of frequent load shedding done by Petitioner without intimating the consumers, the Commission observed that the Petitioner is resorting to regular load shedding under the garb of unscheduled/emergency outages. With regards to unscheduled/emergency outages, the Commission would like to clarify that any such outage continuously been affected by the Petitioner for certain number of hours in a day for 15 or more days shall not be considered as unscheduled/emergency outage. The Commission directs the Petitioner to obtain the prior approval for load shedding to be carried out continuously for certain number of hours in a day for 15 or more days.

Further, in case, during any month if the average supply hours are less than 18 hours per day, the demand charges for HT Industrial consumers for that month shall be reduced to 80% of the applicable demand charges for the affected consumers.

### **3.23.3 Implementation of MYT Framework**

Regarding the issue of implementation of Multi-year tariff (MYT) framework, the Commission, after a detailed deliberation with all the stakeholders notified the UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011 on December 19, 2011. These Regulations are applicable for determination of tariff under Multi Year Tariff Framework in all cases covered under the Regulations for the first Control Period of three years from FY 2013-14, i.e. April 1, 2013 to March 31, 2016. Accordingly, this Order includes the approval of Business Plan for the first Control Period of three years and approval of ARR and Tariff in accordance with the Multi Year Tariff Framework.

#### ***3.23.4 Information on Technical and Commercial Parameters***

Regarding the issue of making available detailed information on Technical and Commercial Parameters of the Utilities in the Petition, it may be noted that the Commission along with the recently issued UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011, has also specified formats and data/information is required to be submitted as per these formats by the Utilities along with their Petitions to the Commission. The Utilities have, accordingly, filed their Business Plan and MYT Petition along with the data/information in the formats prescribed by the Commission. These formats comprehensively cover important technical, commercial and financial information to be submitted by the Petitioner.

#### ***3.23.5 Distribution Losses/Line Losses***

As regards the concerns raised by the respondents relating to high distribution losses projected by the Petitioner for the Control Period, the Commission has specified the loss reduction target as elaborated in Chapter 4 and Chapter 5 of the Order.

#### ***3.23.6 Compliance to the Directives of the Commission***

As regards the contention raised by the objectors regarding the action taken by the Petitioner on the directives of the Commission, it may be noted that the Commission obtained the details on the same during the proceedings of tariff determination for the Control Period. Moreover, the Commission has included the submission of the Petitioner on the action taken by it with regard to various directives and the Commission's views on the same in Chapter 8 of the Order.

#### ***3.23.7 Sales Forecast***

The Commission has duly scrutinised and analysed the sales projected by the Petitioner for the Control Period and has approved the category-wise sales based on past trends including recent trends and considering the other factors submitted by the Petitioner and other stakeholders as elaborated in Chapter 5 of the Order.

#### ***3.23.8 Minimum Load to Furnace***

As regards the concern raised by the respondents to remove the condition of minimum required load of 600 kVA per ton capacity of furnace considering the advent of new technology, the

manufacturers now supply the furnaces with power load requirement of only 400-425 kVA/ton capacity, the Commission has dealt this matter in Chapter 7 of this Order.

### ***3.23.9 Tariff for Charitable Institution***

With regards to request for change of tariff category for Charitable Institution from the current commercial category to domestic category the Commission has dealt the matter in detail in Chapter 7 of the Order.

### ***3.23.10 KCC Data***

As regards the suggestion for detailed scrutiny of KCC data, the Commission would like to clarify that the detailed analysis of KCC data is being done at Commission's office on regular basis and monthly report on low load factor consumer is submitted by the Petitioner on regular basis.

### ***3.23.11 Billable Demand***

The Commission is of the view that the concept of billable demand was suitable when the sanctioned/contracted load was linked to the connected load (i.e. the sum of name plate capacities of all machinery, plants and appliances connected to the consumer installations). Now, as per the Commission's Regulations for release of New HT/EHT Connection, the consumer is free to take any contract load/demand as per his usage/requirement irrespective of his connected load. With the MDI meters installed, the Petitioner is also able to record the actual maximum demand. Further, for all other consumer categories, the fixed/demand charges are levied on entire sanctioned/contracted load without any cushion. Therefore, the Commission is of the view that billable demand should be close to the contracted load as this will help in proper planning of the system demand. Further, the option is always available with industrial consumers to reduce their sanctioned/contracted demand in accordance with the Regulations of the Commission in this regard. As such Commission is continuing with the same provision in this regard and has kept the billable demand as 80% of the contracted load or the actual maximum demand whichever is higher.

### ***3.23.12 Incentive for Reactive Power Management and Higher Power Factor***

The Commission has already been providing for kVAh based tariff for industries in its Tariff Orders which covers the benefit of incentive as suggested by the respondents.

**3.23.13 Recoveries of Electricity dues**

The Commission agrees with the concern raised by the stakeholders /objectors regarding electricity dues on various Government departments and private consumers. Various stakeholders suggested that these dues should be recovered. The Commission has been consistently directing the Petitioner to make concerted efforts for recovering its dues and improve its financial position by identifying such consumers and writing off dubious/non-existent or ghost consumers from its records through a policy of writing off bad debts and initiating recovery of its dues from other consumers. Further, as elaborated in Chapter 6 of the Order, the Commission in this Tariff Order is not allowing any provision for bad and doubtful debts for FY 2013-14 as proposed by the Petitioner.

**3.23.14 Meter Rent**

As regards the meter rent, the Commission would like to clarify that the meter rent has been abolished as a part of Tariff Rationalisation Measures in its Tariff Order for FY 2005-06 dated April 25, 2005 since FY 2005-06, meter rent is not applicable.

**3.23.15 Separate Category for MES**

The Commission would like to clarify that as per the Ministry of Power, Government of India Notification No. 25/19/2004-R&R dated July 26, 2004, MES qualifies to be a deemed licensee under the provisions of Electricity Act, 2003.

In order to facilitate the supply of electricity by existing Distribution Licensee UPCL to MES, MES has been categorised under Category of Mixed Load, the tariff of which is already cross-subsidised. However, in case MES wishes to get its tariff determined as a Deemed Licensee, it should file a Petition in accordance with the provisions of Electricity Act, 2003 and Regulations of the Commission.

**3.23.16 Misuse of Electricity by Staff**

Regarding the issue of misuse of electricity by the employee of the Petitioner, the Commission in its previous Tariff Orders had directed the Petitioner to take appropriate steps on the issues raised by the respondents to avoid the misuse of electricity by UPCL's employee. Further, the Commission clarifies that while approving the cost of electricity consumed by employees, average consumption of metered domestic category for the whole State at normal tariff has been considered. The cost of energy consumed to the extent is not recovered from the

employees is to be borne by the Petitioner, i.e. it is not being passed on to other consumers of the State.

### **3.23.17 Billing and Payment related issues**

As regards the suggestion for incentive for timely payment, the Commission has already dealt with the matter in its Tariff Order for FY 2003-04 which is being reproduced as under:

*“The Commission finds that consumers already enjoy sufficiently long credit for the supplies made to them. Petitioner has intimated the Commission that even for consumers being billed on monthly basis the time lag between the first day of supply and actual payment is about two months, resulting in interest free credit for an average period of 45 days for the entire billed amount. For consumers being billed once in two months the interest free credit period works out to around two months. This existing arrangement itself is quite generous and no further concessions seem called for. Allowing consumers rebate for timely payment and booking the cost of it on tariff through expenses incurred, gives no real advantage to consumers and is only an exercise of smart packaging. The Commission has therefore decided to do away with the system of rebate for timely payment of the bills by consumers.”*

Further, the Stakeholders at various Public Hearings submitted that they were not receiving bills on time and very short time was made available to them for payment of bills within due date. In this regard, the Commission would like to clarify that considering the delay in receipt of bills, 15 days grace period has been allowed to consumers for making the payments and delayed payment surcharge is applicable only after completion of 15 days grace period from the due date.

### **3.23.18 Issues raised by the Petitioner again despite Commission's ruling in previous Tariff Orders**

The Commission agrees with the views of State Advisory Committee members that that UPCL is raising same issues again in its subsequent ARR and Tariff Petitions on which the Commission have already taken the decision and given in its ruling in the previous Tariff Orders. **In this regard, the Commission directs the Petitioner to not raise such issues again in the subsequent ARR and Tariff Petitions on which the Commission have already taken the decision and given in its ruling in the previous Tariff Orders, failing which, the Commission may reject the Petition upfront.**

Issues not covered by the Commission in this Chapter have been dealt adequately in the subsequent Chapters of this Tariff Order.

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

### **4.1 General**

It had been the approach of the Commission to detail the principles and practices adopted by it in determining the various elements of the ARR of UPCL in the previous Tariff Orders. Accordingly, continuing with the past practice, the Commission has tried to explain its approach under the present Chapter for this Order on Approval of Business Plan and MYT Petition of UPCL for the first Control Period from FY 2013-14 to FY 2015-16.

### **4.2 Statutory Requirements**

Section 64 of the Electricity Act, 2003, requires the licensees to file an application for determination of tariff under Section 62 in such manner and accompanied by such fee as may be specified through regulations by the appropriate Commission. Section 61 of the Act further requires the appropriate Commission to specify the terms and conditions for determination of tariff in accordance with the provisions of the Act. The Act also provides that while framing regulations, the Commission shall be guided by, among other things, the National Electricity Policy and the Tariff Policy.

In light of the above provisions of the Act, the Commission specified the Uttarakhand Electricity Regulatory Commission (Terms & Conditions for Determination of Distribution Tariff) Regulations, 2004 (hereinafter referred as Tariff Regulations, 2004), on May 14, 2004. Thereafter, the Commission notified the Uttarakhand Electricity Regulatory Commission (Terms and conditions for Determination of Tariff) Regulations, 2011 (hereinafter referred as UERC Tariff Regulations, 2011) in December 2011 applicable for the first Control Period from FY 2013-14 to FY 2015-16. For the purpose of this Tariff Order, therefore, the Commission shall be guided by both the above regulations. The different expense items of the ARR as filed by the Petitioner for Truing Up for FY 2010-11 and FY 2011-12, and for the first Control Period from FY 2013-14 to FY 2015-16 shall, accordingly, be analyzed in the light of above Tariff Regulations under Chapter-6.

UERC Tariff Regulations, 2011 stipulates the cost plus approach with sharing of gains and losses on account of controllable and uncontrollable factors for determination of tariff. The Commission, in accordance with UERC Tariff Regulations, 2011 has broadly followed the approach stipulated in UERC Tariff Regulations, 2011 for this Order on Business Plan and MYT Petition filed



by UPCL for the first Control Period from FY 2013-14 to FY 2015-16.

### **4.3 Multi Year Tariff Framework principles**

UERC Tariff Regulations, 2011 specifies that

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

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

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

.....

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

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

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

In accordance with the above provisions of the Regulations, the Commission has approved the entire Aggregate Revenue Requirement of the Petitioner for the first year of the first Control Period i.e. FY 2013-14 and Aggregate Revenue Requirement excluding power purchase cost for FY 2014-15 and FY 2015-16.

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

Regulation 9 and Regulation 10 of UERC Tariff Regulations, 2011 specifies that

##### ***"9. Business Plan***

*(1) An Applicant shall submit, under affidavit and as per the UERC (Conduct of Business) Regulations, 2004, a Business Plan by May 31, 2012, for the Control Period of three (3) financial years from April 1, 2013 to March 31, 2016,*

*.....*

*c) The Business Plan for the Distribution Licenses shall be for the entire control period and shall, interalia, contain-*

*(i) Sales/demand forecast for each customer category and sub-categories for each year of the control period;*

*(ii) Distribution loss reduction trajectory for each year of the control period; including details of the measures proposed to be taken for achieving the target loss*

(iii) Power procurement plan based on the sales forecast and distribution loss trajectory for each year of the business plan period; the power procurement plan may also include energy efficiency and demand side management measures;

(iv) Collection efficiency improvement trajectory for each year of the control period;

(v) Capital investment plan considering the sales/demand forecast, power procurement plan, distribution loss trajectory, targets for quality of supply, etc. The capital investment plan shall be consistent with the perspective plan drawn by the State Transmission Utility (STU), and the investment plan should also include yearly phasing of capital expenditure alongwith the source of funding, financing plan and corresponding capitalisation schedule.

(vi) The appropriate capital structure of each scheme proposed and cost of financing (interest on debt and return on equity), terms of the existing loan agreements, etc;

(vii) Details related to availability of power from renewable energy sources and likelihood of complying with the RPO specified by the Commission.

.....

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

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

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

.....

c) In case of Distribution Licensee:

Supply availability, wires availability, distribution losses, collection efficiency, etc.

.....

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

*Provided further that the Commission shall review the trajectory at the beginning of each Control Period and consider the performance achieved by the licensee/Generating Company during the last Control Period*

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

In accordance with the above provisions of the Regulations and the submissions of the Petitioner, the Commission has approved the Sales Forecast, Distribution Loss Reduction Trajectory, Power Procurement Plan, Capital Expenditure Plan and Capitalisation Plan for the first Control Period while approving the Business Plan of the Petitioner. The Commission's analysis on the approval of the Business Plan of the Petitioner for the first Control Period has been detailed in Chapter 5 of this Order.

#### **4.4.1 Sales Forecast**

Regulation 76 of UERC (Terms & Conditions for Determination of Tariff) Regulations, 2011, specifies as under:

*“(1) Considering the importance of capturing seasonal variation, Monthly Sales Forecast for the Control Period shall be done in respect of each consumer category/sub-category and to each tariff slab within such consumer category/sub-category, based on the past trends, as far as possible and shall be submitted to the Commission for approval along with the Business Plan. Suitable adjustments shall be made to reflect the effect of known and measurable changes with respect to number of consumers, the connected load and the energy consumption, thereby removing any abnormality in the past data.*

*Provided that where the Commission has stipulated a methodology for forecasting sales to any particular tariff category, the Distribution Licensee shall incorporate such methodology in developing the sales forecast for such tariff category.*

*(2) Sales forecast for un-metered consumers shall be validated with norms as may be approved by the Commission from time to time.*

*(3) The sales forecast shall be consistent with the load forecast prepared as part of the long-term power procurement plan submitted as a part of Business Plan under these Regulations and shall be based on past data and reasonable assumptions regarding the future.*

- (4) The Commission shall examine the forecasts for reasonableness based on growth in number of consumers, the connected load and the energy consumption in previous years and anticipated growth in the next year and any other factor, which the Commission may consider relevant and approve sale of electricity to consumers with such modifications as deemed fit."*

Accordingly, for estimating and projecting the category-wise sales for the first Control Period from FY 2013-14 to FY 2015-16, the Commission has analyzed the past trends of consumption for different category of consumers. For identifying the growth trend for different category of consumers, the Commission first considered the actual re-casted sales data for different category of consumers up to FY 2011-12. In doing so, the Commission has considered the category-wise sales reported by UPCL for FY 2011-12, and then re-casted the sales of unmetered consumer categories based on normative consumption and added to it the sales lost due to load shedding during FY 2011-12.

For projecting the category wise sales for the first Control Period from FY 2013-14 to FY 2015-16, the Commission further considered the submissions made by the Petitioner in this regard and the growth rates derived based on actual sales data for the past years. Wherever considered appropriate based on ground reality, the Commission has normalized the growth rate to realistically estimate the sales figures for a particular category of consumers for each year of the Control Period . The Commission has first applied the growth rates so derived on the actual re-casted sales figures for the FY 2011-12 to estimate the category wise sales for FY 2012-13 and thereafter, applying the same growth rates on the estimated sales figures for FY 2012-13, category wise sales figures has been derived from FY 2013-14 onwards for the first Control Period. However, for estimating the HT Industry sales figures, the Commission has assumed the growth rate of 5%, in light of the fact that industrial package in the State has already concluded on 31<sup>st</sup> March 2010 and hence, the future growth of HT Industrial consumption will happen pre-dominantly from the existing set of HT consumers only. A similar view has also been expressed during the State Advisory Committee Meeting that the industrial growth rate would be around 5%. The Commission has consciously not considered unrestricted sales for FY 2011-12, for projecting the sales for ensuing years, as UPCL during the last few years has been unable to meet the demand of the State from the various available sources of power including trading & short-term arrangements. The Commission has analysed the actual sales and power supply position till December 2012 and observed the Petitioner has undertaken load shedding of 518.66 MUs till December 2012. The

Commission does not expect the supply position to improve as there hasn't been capacity additions commensurate with the load growth. Under these circumstances it would have been of no use to add the quantum of load shedding in the actual sales figures, to assess the unrestricted demand, as UPCL has not made any arrangements to procure the power to meet the unrestricted energy requirement. Further, as the Commission normally considers the actual power purchases of UPCL at the time of truing up, there is no adverse impact on the utility. The detailed approach adopted by the Commission for projecting category-wise sales is further discussed in detail under Chapter 5 & 6 of this Order.

#### **4.4.2 Distribution Losses**

In its Petition, the Petitioner has submitted actual loss level of 19.96% in FY 2011-12 and has estimated the loss target for FY 2012-13 at 19.00% and requested the Commission to fix the loss target for FY 2015-16 at 16.32%.

In this regard, the Commission would like to refer to the MoU signed between the Ministry of Power, Government of India and the Government of Uttaranchal on March 30, 2001. The purpose of the MoU was to affirm the commitment of Uttaranchal towards upgrading the services in the power sector with a view to providing commercial viability and quality 24-hour supply at affordable rates to all its residents. It was, further, agreed that Uttaranchal will undertake Energy Audit at all levels in order to reduce system losses to bring them progressively to the level of 20% by March 2004. This was required to be done in a time bound manner, and in following steps:

- a) Joint verification and sealing of interface points with power suppliers.
- b) To meter all 11 kV feeders by 31.03.2001 & in no case later than 30.09.2001.
- c) 100% metering of all consumers to be done by 31.12.2001.
- d) Number of billing and collection centers including computerized billing centers to be increased by 31.12.2001.
- e) Identify and develop distribution circles as profit centers. Separate commercial accounts/shadow Balance Sheets for such centers to be prepared from 31.03.2001.
- f) In case commercial viability in distribution is not attained by 31.03.2003, corporatization/co-operatization/privatization of distribution, to be considered.

- g) To consider innovations such as the creation of user groups/peoples' cooperatives to oversee LT distribution in composite clusters and to take over the responsibility of billing, collection, theft detection, etc.

Clearly the idea was to reduce the distribution losses and bring them down to the level of 20% by March 2004. In this connection, it is also to be underlined that while fixing the loss reduction trajectory, the Commission, did not consider the losses as given under the FRP for FY 2002-03, i.e. 38%, instead considering the ground realities, it fixed the opening losses for FY 2002-03 at 44.32%, i.e. 6.32% higher than the losses of 38.00% considered under the FRP. The Commission, therefore, allowed the utility extra cushion and comfort to reduce distribution losses in a gradual manner. Further, the trajectory for reduction of losses by 4% every year, specified by the Commission was applicable for an initial period of 5 years only. The Commission, so as to review and revise the loss reduction trajectory, has been repeatedly directing the Petitioner, in its previous Tariff Orders, to carry out the energy audit study. However, the Petitioner has so far not made substantial progress in this regard.

In this context, the Commission would also like to highlight the issues emerging out of the R-APDRP programme of the Central Government. The focus of the R-APDRP programme is to develop the distribution infrastructure in such a manner so as to improve the commercial viability of the sector. The programme, accordingly, focuses on actual, demonstrable performance in terms of sustained loss reduction. Under this Scheme, the projects are being taken up by the utilities in two parts. Part-A includes the projects for establishment of base line data and IT applications for energy accounting/auditing & IT based consumer service centres. Part-B includes regular distribution strengthening projects. The Central Government is providing 100% funds for the Part-A project as loan. Whereas under Part-B of the project, the Central Government shall provides up to 90% funds for the projects to special category States like Uttarakhand, through loan from GoI. The MoU further stipulates conditions for conversion of loans into grants for each of the projects. In case of Part-A, the loan along with the interest thereon shall be converted into grant in case projects are completed within 3 years from the date of sanctioning of the projects. In case of Part-B, the loan shall be converted into grant in five equal tranches on achieving 15% AT&C loss in the project area on a sustainable basis for a period of five years. Further, if the utility fails to achieve or sustain the 15% AT&C loss target in a particular year, conversion of that year's tranche of loan to grant will be reduced in proportion to the shortfall in achieving 15% AT&C loss target from the starting AT&C

loss figure. Thus, this would have a financial implication for both the Petitioner as well as the consumers. In case, the Petitioner is not able to achieve or sustain the 15% AT&C loss target, it would result in increased burden of loan on the Petitioner, which if allowed as pass through in tariffs, would put extra burden on the consumers. In case, the loss targets are revised as proposed by the Petitioner, the Petitioner will not be able to reach the AT&C loss target of 15%, which the Petitioner has itself committed to achieve while seeking funding under R-APDRP from the Central Government. .

Based on above and more so in the absence of any energy audit study, the Commission fixes the target for distribution loss for the FY 2015-16 at 15%. The Commission has set the target of 1% loss reduction in FY 2013-14 to 16% in line with the earlier trajectory for distribution loss reduction, and, thereafter, the loss reduction target is lowered to 0.50% in FY 2014-15 and FY 2015-16 to attain the target of 15% by the end of the Control Period, i.e. FY 2015-16.

#### **4.4.3 Power Procurement Plan**

In its Petition, the Petitioner has submitted the power procurement plan for the Control Period for FY 2013-14 to FY 2014-15 based on the sales forecast and distribution loss trajectory for each year of the Control Period. The Petitioner has projected source wise annual energy availability from existing as well as upcoming generating stations from which it shall be availing power during the Control Period. Further, the Petitioner has submitted that it shall be procuring deficit power through short term sources. The detailed year wise power purchase quantum and cost for the Control Period as projected by the Petitioner along with justification submitted has been summarised in Chapter 2 of this Order.

The Commission has gone through the submissions made by the Petitioner. The Commission for projection purposes has considered energy availability from various generating stations on the basis of monthwise energy availability from all generating stations. On the basis of monthly energy availability and estimated energy requirement, the Commission has computed deficit quantum of power to be purchased through short term sources.

The Commission for projecting power has considered both existing generating stations and upcoming stations to be commissioned, in which UPCL has a share during the Control Period. The Commission, however, has projected power purchase cost only for FY 2013-14 and not for FY 2014-15 and FY 2015-16 as the tariff for Central Generating Stations are yet to be determined by CERC for



period beyond FY 2013-14. Further, the Commission is of the view that projecting power purchase cost at this point of time for FY 2014-15 and FY 2015-16 will be of no relevance as the fuel costs varies significantly over a period of time. Further, as per MYT Regulations 2011, the Petitioner shall be filing Petitions for tariff determination of FY 2014-15 and FY 2015-16 alongwith the Annual Performance Review for FY 2013-14 and FY 2014-15. The detailed approach for approving power purchase quantum and cost has been discussed in the relevant sections of chapter 5 and chapter 6 of this Order.

#### **4.4.4 Capital Cost of Transferred Assets**

The original cost of the Petitioner's capital assets is important as it determines crucial cost elements like Depreciation, Interest and Return on Equity. The Petitioner's assets were originally created by the erstwhile Uttar Pradesh State Electricity Board (UPSEB), which were then transferred to its successor transmission and distribution company in the State of Uttar Pradesh, i.e. Uttar Pradesh Power Corporation Limited (UPPCL). After creation of the State of Uttarakhand, part of the assets owned by UPPCL (i.e. transmission and distribution assets falling within the geographical territory of Uttarakhand) were transferred to State's new transmission and distribution company namely Uttaranchal Power Corporation Limited (UPCL) (now known as Uttarakhand Power Corporation Limited). The above company (UPCL) was again unbundled into a Transmission Company (PTCUL) and a Distribution Company (UPCL) on 01.06.2004 with only distribution assets remaining with UPCL, i.e. the Petitioner, which is now looking, only after the distribution function within the State. For tariff determination, what is relevant is the original cost of acquisition/creation of assets and not the values that may have been assigned to them during each such transfer. The original cost of these assets is not known and they have been given different values at the time of each such transfer. The Commission, in its earlier Tariff Orders has already dealt with this issue and considered the opening value of assets transferred to UPCL as Rs. 508.00 Crore. However, so as to have a reliable basis for fixing the opening values of gross fixed assets and considering the fact that provisional transfer schemes notified are disputed, the Commission had directed UPCL to get the Transfer Scheme finalized by the Government at an early date in its previous Orders.

The Petitioner submitted that the Government of Uttarakhand vide its Order No.-117/I(2)/2011-05/19/2002, dated April 27, 2012 approved the Transfer Scheme of assets and liabilities executed between UPPCL and UPCL on October 10, 2003. The Commission is of the view

that the Transfer Scheme cannot be considered as finalised based on the documentary evidence submitted by UPCL as it is only a letter to UPCL from Government of Uttarakhand and not a proper notification on finalisation of Transfer Scheme in accordance with the Reorganisation Act. The Commission is of the view that the Petitioner has not been heeding to the directives of the Commission in this regard. The Commission is of the view that this inordinate delay on the part of the Petitioner despite repeated directives is not acceptable in the best interest of the consumers of the State. The Commission, if justified that there is lack of sincere effort on part of the Petitioner to get the Transfer Scheme finalised within a reasonable time limit might not consider any further revision in capital cost of transferred asset in the interest of the Consumers of the State. **Hence, the Commission directs the Petitioner to expedite its efforts for getting the Transfer Scheme finalised within six months from the date of this Order.**

#### ***4.4.5 Capitalisation of Assets added till FY 2011-12***

In the Tariff Order for FY 2009-10, dated October 23, 2009, highlighting the importance of Electrical Inspector's Certificates from the safety point of view of personnel and equipment, the Commission had disallowed capitalization of such HT works carried out during FY 2007-08, FY 2008-09 for which Electrical Inspector Clearance Certificates were not made available. The Commission had further directed UPCL to submit the Electrical Inspector's Clearance Certificate for all the HT works completed upto FY 2008-09 within 3 months of the issuance of the above Tariff Order. However, in the ARR/Tariff Petition for FY 2010-11, it was submitted by UPCL that though it had completed all the formalities and had requested the Electrical Inspector, for inspection and issuance of clearance certificates as required under the Rules/Act, the Electrical Inspectorate is not in a position to test all the installations of UPCL in a timely manner due to dearth of officers and staff with the Inspector. It was also submitted by UPCL, that it has apprised the GoU regarding the same and requested for appointment of the officers of PTCUL for carrying out the inspection and testing of all the HT/EHT installations of UPCL which were energized on or after November 09, 2001, as per the Electricity Rules, 1956. The Commission also advised the State Government to depute atleast 2 officers each from PTCUL and UPCL, who are capable of carrying out the inspections and tests in accordance with the IE rules at the office of Electrical Inspectorate for clearing all HT and EHT works under the Rules before they are being energised and put to use.

In view of the steps taken by the Petitioner, the Commission in its Tariff Order for FY 2010-

11, while not disallowing any capitalizations of past HT/EHT schemes capitalized upto the FY 2006-07, directed the Petitioner to submit all the pending Electrical Inspector's Clearance Certificates upto FY 2009-10 within 6 months of issuance of that Tariff Order. The Petitioner had submitted Electrical Inspector's Certificates for some of its HT schemes. However, on examination of above certificates submitted by UPCL, the Commission observed that in most of the cases the Electrical Inspector instead of clearing the scheme had recorded its observations on the Clearance Certificates.

In the current Petition, the Petitioner has submitted updated Electrical Inspector's Certificates for some of the works carried out from FY 2007-08 to FY 2012-13 under the funding schemes by RGGVY, APDRP, AREP, Deposit Works and also internal sources. The Petitioner has submitted that out of 78 substations and associated lines it had deposited fees for 70 substations which were inspected by the electrical inspector and out of these 67 projects have got the clearance while for other 3 the clearance report is still awaited. The Commission has considered capitalisation of the schemes for which the Petitioner has presented the Electrical Inspector's Certificates.

The Commission had been asking the Petitioner to segregate & submit to the Commission the details of HT/EHT/LT works capitalised during FY 2007-08 to FY 2011-12 alongwith the financing of the same. However, the Petitioner did not submit details for the same except the details of works pertaining to release of new LT connections by it during the period mentioned above. However, the Petitioner has been requesting for more time and has not been able to submit the details. In this regard, the Commission is dismayed at the lackadaisical approach of UPCL. Even after 12 years of its incorporation, UPCL does not have any system of identifying and segregating the works into EHT/HT or LT schemes. This is more so, considering the fact that it is being denied capitalization of even LT works, other than the deficit towards release of New LT Connections in the absence of any details. **Recognising the fact that, this issue has been in abeyance since FY 2007-08, if allowed, may have considerable impact on consumer tariffs, the Commission directs UPCL to submit the details of its LT/HT works capitalised since 2007-08 within 6 months of the date of the Order, so that they may be considered during the APR, failing which the Commission would be forced to consider this issue as closed once for all.** The Commission also asked the Petitioner to submit the complete details of LT works capitalized during FY 2010-11 and FY 2011-12, in response to which, the Petitioner has submitted the division-wise amounts received from consumers and amount incurred by it towards release of new LT connection. Since LT schemes do

not require Electrical Inspector's clearance, the Commission has allowed capitalization of all such LT works and also capital related expenses such as depreciation, return on equity and interest in accordance with the Regulations. Further, the Commission has also allowed the actual capitalization of other assets like Vehicles, Furniture and Fixtures and Office Equipment, which does not require Electrical Inspector's clearance, based on audited accounts for FY 2010-11 and provisional annual accounts for FY 2011-12 submitted by UPCL. Accordingly, in accordance with the approach adopted by the Commission in the previous Tariff Orders, the Commission is constrained not to allow capitalization of any works except for the schemes for which the Petitioner has submitted the Electrical Inspector's Certificates.

#### **4.5 Multi Year Tariff for the first Control Period**

Regulation 11 of UERC Tariff Regulations, 2011 specifies that:

##### ***"11. MYT Petition for the Control Period***

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

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

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

.....

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

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

.....

(iii) *In the case of a Distribution Licensee, based on prevailing retail & wheeling tariffs as on the date of making the application and estimates of quantum of electricity supplied to consumers in different categories and wheeled for open access consumers for each financial year of the Control Period;*

.....

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

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

.....

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

*Provided that such variables shall be limited to the major items of cost and revenue forecast of the applicant that in the Commission's opinion could have a material impact on the cost of supply of electricity to consumers in the State over the Control Period:*

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

In accordance with the provisions of the above Regulations, the Commission has approved the forecast of Aggregate Revenue Requirement excluding Power Purchase Cost for the first Control Period of MYT of the Petitioner. The Commission has approved the total Aggregate Revenue Requirement including Power Purchase Cost and expected revenue from Tariff only for first year of

the Control Period, i.e. FY 2013-14. The Commission's analysis on the approval of ARR of the Petitioner for the first Control Period has been detailed in Chapter 6 of this Order. The approach adopted by the Commission on some of the key issues while approving the ARR for the first Control Period is summarised below:

#### **4.5.1 Depreciation on assets created through grants/subsidies**

The principles to be followed for calculating the depreciation and the rates applicable for it have clearly been spelt out under UERC Tariff Regulations, 2011. Regulation 29(1) of the above Regulations, however, provides as under:

*"The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.*

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

Accordingly, the above Regulations do not allow depreciation on that part of an asset which has been created through Government grants, consumer contribution or capital subsidy. The same is in accordance with the provisions of Accounting Standard-12, which deals with Accounting of Government Grants. In line with the above provision of the UERC Tariff Regulations, 2011, the Commission has not considered those assets or part of those assets which has been created through Government grants, consumer contribution or capital subsidy for the purposes of estimating the depreciation. The detailed methodology of the same has been explained in Chapter 6 of the Order.

#### **4.5.2 Return on Equity**

The principles to be followed for calculating the Return on Equity have been clearly spelt out under the UERC Tariff Regulations, 2011. Regulation 27 of the above Regulations provides as under:

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

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

*(2) Return on equity shall be computed on at the rate of 15.5% for Generating Stations, Transmission Licensee and SLDC and at the rate of 16% for Distribution Licensee on a post-tax basis.*

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

In accordance with the above Regulations, the Commission has calculated the Return on Equity for each year of the first Control Period from FY 2013-14 to FY 2015-16. The detailed methodology of the same has been explained in Chapter 6 of the Order.

### **4.5.3 Interest and Finance Charges**

The principles to be followed for calculating the Interest and Finance Charges have been clearly spelt out under the UERC Tariff Regulations, 2011. Regulation 28 of the above Regulations provides as under:

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

*(2) The normative loan outstanding as on 1.4.2013 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2013 from the gross normative loan.*

*(3) The repayment for each year of the Control Period shall be deemed to be equal to the depreciation allowed for that year.*

.....

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

.....

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

....."

In accordance with the above Regulations, the Commission has calculated the Interest and Finance Charges for each year of the first Control Period from FY 2013-14 to FY 2015-16. The detailed methodology of the same has been explained in Chapter 6 of the Order.

#### 4.5.4 O&M expenses

O&M expenses comprises of Employee Expenses, A&G Expenses and R&M Expenses, i.e. expenditure on staff, administration overheads and repairs and maintenance etc. For estimating the O&M expenses for the first Control Period, Regulation 84 of UERC Tariff Regulations, 2011 provides as below:

“.....

(2) *The O&M expenses for the first year of the Control Period shall be approved by the Commission taking into account the actual O&M expenses for last five years till Base Year subject to prudence check and any other factors considered appropriate by the Commission.*

(3) *The O&M expenses for the nth year and also for the year immediately preceding the Control Period, i.e. 2012-13, shall be approved based on the formula given below:-*

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

Where –

- *O&M<sub>n</sub> – Operation and Maintenance expense for the nth year;*
- *EMP<sub>n</sub> – Employee Costs for the nth year;*
- *R&M<sub>n</sub> – Repair and Maintenance Costs for the nth year;*
- *A&G<sub>n</sub> – Administrative and General Costs for the nth year;*

(4) *The above components shall be computed in the manner specified below:*

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

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

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

Where -

- *EMP<sub>n-1</sub> – Employee Costs for the (n-1)th year;*



- $A\&G_{n-1}$  – Administrative and General Costs for the (n-1)th year;
- *Provision: Cost for initiatives or other one-time expenses as proposed by the Distribution Licensee and validated by the Commission.*
- 'K' is a constant specified by the Commission in %. Value of K for each year of the control period shall be determined by the Commission in the MYT Tariff order based on licensee's filing, benchmarking of repair and maintenance expenses, approved repair and maintenance expenses vis-à-vis GFA approved by the Commission in past and any other factor considered appropriate by the Commission;
- $CPI_{inflation}$  – is the average increase in the Consumer Price Index (CPI) for immediately preceding three years;
- $WPI_{inflation}$  – is the average increase in the Wholesale Price Index (CPI) for immediately preceding three years;
- $GFA_{n-1}$  – Gross Fixed Asset of the transmission licensee for the n-1th year;
- $G_n$  is a growth factor for the nth year. Value of  $G_n$  shall be determined by the Commission in the MYT tariff order for meeting the additional manpower requirement based on licensee's filings, benchmarking, and any other factor that the Commission feels appropriate:

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

The O&M expenses for FY 2013-14 has been projected taking into account the actual O&M expenses for last five years till base year FY 2011-12, i.e. from FY 2007-08 to FY 2011-12. The O&M expenses for remaining years of the Control Period have been calculated in accordance with the methodology specified in the above Regulations. The detailed methodology of the same has been elaborated in Chapter 6 of the Order.

#### **4.5.5 Interest on Working Capital**

The principles to be followed for calculating the Interest on Working Capital have been clearly spelt out under the UERC Tariff Regulations, 2011. Regulation 34(3) of the above Regulations provides as under:

*“3. Distribution*

- a) *The Distribution Licensee shall be allowed interest on the estimated level of working capital for the financial year, computed as follows:*
- (i) One month of the amount of Operation and Maintenance expenses for such financial year; plus*
  - (ii) Maintenance spares @ 15% of operation and maintenance expenses; plus*
  - (iii) Two months equivalent of the expected revenue from sale of electricity at the prevailing tariffs; minus*
  - (iv) Amount held as security deposits under clause (a) and clause (b) of sub-section (1) of Section 47 of the Act from consumers and Distribution System Users; minus*
  - (v) One month equivalent of cost of power purchased, based on the annual power procurement plan.”*

In accordance with the above Regulations, the Commission has calculated the Interest on Working Capital for each year of the first Control Period from FY 2013-14 to FY 2015-16. The detailed methodology of the same has been explained in Chapter 6 of the Order.

**4.5.6 Bad and Doubtful Debts**

In the Tariff Order for FY 2011-12, dated May 24, 2011, highlighting the absence of any serious efforts on the part of the Petitioner to recover the pending dues, the Commission disallowed any further provisioning on account of bad and doubtful debts. The Commission also directed the Petitioner to carry out an audit of its receivables and also identifying and classifying the same and submit the report to the Commission within 6 months of the issuance of the Order.

Further, in the Tariff Order for the FY 2012-13 dated April 11, 2012 the Commission observed that the Petitioner failed to take any serious effort to the satisfaction of the Commission to arrest the increasing level of bad debts which have reached alarming levels by any standard for any commercial organisation. The Commission re-directed the Petitioner to carry out an independent audit of its receivables, by appointing a Chartered Accountant firm through a fair and a transparent process of bidding after getting the scope of work approved by the Commission, and also identify and classify the same and submit the compliance report to the Commission within 6 months of the issuance of the Order.

In the Compliance report, the Petitioner has submitted that the work of audit of receivables outstanding as on 31-03-2012 has been awarded to three firms of Chartered Accountants in the month of January, 2013, covering the following scope of work:

- a) Identification of division-wise, category-wise & consumer-wise arrears as per ledgers as on 31-03-2012 showing Principal & Surcharge amount with age.
- b) Identification and verification of division-wise, category-wise & consumer-wise fictitious arrears & irrecoverable arrears.
- c) Identification of division-wise, category-wise, consumer-wise & department-wise list of Government Consumers (Departments) having arrears showing principal & surcharge amount.
- d) Identification of division-wise, category-wise, consumer-wise cases in litigation showing the break-up of cases in different courts.
- e) Category-wise reconciliation of arrears as per commercial statements (CS-4) with annual accounts.
- f) Identification of actual government (public lamps, water works and irrigation) arrears showing principal & surcharge as on 09-11-2000 & as on 31-03-2012. Consumer-wise & month-wise billing details (such as consumption, assessment and payment etc.) for the period from 09-11-2000 to 31-03-2012 shall be given.
- g) Verification of division-wise, category-wise & consumer-wise position of notices issued under section-5 of the U.P. Government electrical undertakings (Dues Recovery) Act, 1958, which are pending with District Magistrate.

The Petitioner submitted that the above work has been targeted to be completed within five months from the date of award. However, from the submission of the Petitioner, it is evident that it is deliberately not complying with the directions issued by the Commission in this regard within the time frame stipulated by the Commission. Moreover, Regulation 32 of UERC (Tariff Regulations) allows a provision for bad and doubtful debts upto 1% of the estimated revenue of the licensee subject to actual writing off of the bad debts. Hence, the Commission is not allowing any bad & doubtful debts in the absence of satisfactory compliance by the Licensee. This issue has been deliberated in detail by the Commission in Chapter 6 of the Order.

## 4.6 Truing up for Previous Years

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

- “ (1) *The Commission shall undertake a review of actual levels of expenses, revenues and operational parameters in a financial year vis-à-vis the approved levels in the relevant Tariff Order for that financial year either on a Petition moved by the concerned licensee/generating company or suo-moto. While doing so, the Commission after considering the reasons for these variations may permit carrying forward of financial impact of the same to the extent approved by the Commission to the following year(s). This exercise shall be called truing up exercise.*
- (2) *Truing up exercise for a financial year shall normally be carried out alongwith Tariff determination exercise(s) taken up after the close of that financial year.*
- (3) *Truing up can be done either based on provisional or audited data and can also be taken up for one or more items separately as deemed necessary by the Commission. No further true up shall normally be done after a truing up exercise based on audited data has been carried out.”*

The Commission vide its Tariff Order dated 18.03.2008 had Trued up the expenses and revenues of the Petitioner for the period from FY 2001-02 to FY 2006-07 based on audited accounts for the period upto FY 2004-05 and provisional accounts for FY 2005-06 and FY 2006-07. Further, in its Tariff Order dated 24.05.2011, the Commission undertook the True up of the expenses and revenues of the Petitioner for the period from FY 2005-06 to FY 2009-10 based on audited accounts for the period upto FY 2008-09 and provisional accounts for FY 2009-10. In its Tariff Order dated 11.04.2012, the Commission undertook final True up for FY 2009-10 and Provisional True up for FY 2010-11.

Along with the present Petition, the Petitioner has submitted the audited accounts for FY 2010-11 and sought true up of its expenses and revenues for FY 2010-11 based on the audited accounts. The Petitioner has also requested the Commission to carry out the provisional true up for FY 2011-12 based on the provisional accounts submitted by it for the year. Accordingly, considering the request of the Petitioner and in the interest of all the stakeholders, the Commission has decided to carry out the final true up for FY 2010-11 based on audited accounts and the provisional truing up for FY 2011-12 in this tariff determination exercise.

The Commission carried out the truing up of expenses and revenues in accordance with the UERC (Terms and Conditions for Truing Up of Tariff) Regulations, 2008.

## 4.7 Tariff Design

Regulation 92 of UERC Tariff Regulations, 2011 specifies in this regard that:

***“92. Cost of Supply***

*The tariffs for various categories/voltages shall be benchmarked with and shall progressively reflect the cost of supply based on costs that are prudently incurred by the Distribution Licensee in its operations. The category-wise/voltage-wise cost to supply may factor in such characteristics as the load factor, voltage, extent of technical and commercial losses etc. The consumers availing electricity at higher voltage shall be entitled to receive suitable rebate, as stipulated by the Commission. However, pending the availability of information that reasonably establishes the category wise/voltage-wise cost to supply, average cost of supply shall be used as the benchmark for determining tariffs.”*

The Government of Uttarakhand on September 25, 2009 had however, issued the following Policy Directions under section 108 of the Electricity Act, 2003 to the Commission for consideration during the determination of retail supply tariff for consumers in the State:

*“The electricity generated by UJVNL and the share of free power of the State made available to UPCL shall be allocated to the State consumers in the following order of priority:*

- i. Private Tube Well*
- ii. Domestic Consumers*
- iii. Government Category Consumers*
- iv. Other Consumers.*

*The tariff for different categories of consumers shall be calculated by considering the cost of power as per the above allocation. The Commission may, however, apply merit order in the above priority on State and outside purchases as it deems fit”.*

Accordingly, in the Tariff Orders for FY 2009-10 and FY 2010-11, the Commission had designed tariff for various categories of consumers considering the provisions of Regulations and Policy Directions issued by the Government of Uttarakhand. Aggrieved by the Tariff Order for FY 2009-10 issued in compliance to the Policy Direction by the Government, M/s Polyplex Corporation Ltd., M/s Greenply Industries Ltd. and M/s KGCCI filed appeals against the above order before the

Hon'ble Appellate Tribunal of Electricity. Hon'ble Appellate Tribunal, vide its Judgment dated January 31, 2011, set aside the Tariff Order for FY 2009-10 and directed the Commission as below:

*"As indicated above, we set aside the order impugned and remand the matter to the State Commission for re-determination of the tariff on the basis of the existing Regulations and the regulatory principles and also in the light of the observations made above."*

To comply with the above order of the Tribunal, the Commission in its Tariff Order dated 24.05.2011 undertook the tariff re-determination exercise for FY 2009-10. Further, in the light of observations made by the Hon'ble Appellate Tribunal in para 53 of the above judgment, the Commission had also adopted the average cost of supply as principle for deciding the tariff for different category of consumers for FY 2011-12, subject of course to phased reduction of cross-subsidies as per the mandate of the Electricity Act, 2003.

Further, the Hon'ble Appellate Tribunal of Electricity in its Judgment dated February 27, 2013, in Appeal No. 152 of 2011, directed the Commission to re-determine the tariff for FY 2010-11 in line with the Judgment of the Tribunal dated 31.1.2011, as extracted below:

*"30. Summary of Our Findings*

*(a) Tariff Order as per the directions of the State Government: The judgment of the Tribunal dated 31.2.2011, in Appeal No.41 of 2010 setting aside the tariff order for FY 2009-10 on the ground that the same was based on the policy direction would also be applicable to the impugned order in this Appeal as the same was also based on the policy directives of the State Government. According to the learned Counsel for the Uttarakhand State Commission, the State Commission would re-determine the tariff while truing-up the expenses and revenues for the FY 2010-11 in line with the judgment of the Tribunal dated 31.1.2011 and that UPCL has already filed the truing up application. In view of the submissions made by the learned Counsel for the State Commission, we deem it appropriate to direct the State Commission to re-determine the tariff for FY 2010-11 while truing up the expenses in accordance with the ratio decided by this Tribunal in the judgment dated 31.1.2011."*

To comply with the above Judgment of the Tribunal, the Commission in this Order has re-determined the tariff for the FY 2010-11 in compliance to the Hon'ble ATE Judgment dated February 27, 2013, in Appeal No. 152 of 2011.

## Voltage-wise Cost of Supply

Regulation 92 of UERC Tariff Regulations, 2011 specifies in this regard that:

### ***“92. Cost of Supply***

*The tariffs for various categories/voltages shall be benchmarked with and shall progressively reflect the cost of supply based on costs that are prudently incurred by the Distribution Licensee in its operations. The category-wise/voltage-wise cost to supply may factor in such characteristics as the load factor, voltage, extent of technical and commercial losses etc. The consumers availing electricity at higher voltage shall be entitled to receive suitable rebate, as stipulated by the Commission. However, pending the availability of information that reasonably establishes the category wise/ voltage-wise cost to supply, average cost of supply shall be used as the benchmark for determining tariffs.”*

The Hon'ble ATE in Appeal No. 15 of 2012 dated February 18, 2013 has directed the Commission to initiate study for voltage wise cost of supply for determination of tariff based on voltage wise cost of supply as extracted below:

*“Regulation 20 of the Tariff Regulations of the State Commission stipulates that the tariffs for various categories/voltages shall be benchmarked and progressively reflect the cost of supply based on costs that are prudently incurred by the distribution licensee in its operations. However, pending the availability of information that reasonably establishes the category wise or voltage-wise cost of supply, average cost of supply shall be used as the benchmark for determining tariffs.*

*This Tribunal has laid down the principle of tariff fixation on the basis of the cost of supply in its judgment dated 30.5.2011 in the case of Tata Steel Ltd. Vs Orissa Electricity Regulatory Commission in Appeal No. 102, 103 & 112 of 2010. The State Commission is directed to initiate the study for voltage wise cost of supply in order to take into account the voltage wise cost of supply as an input for determination of tariffs in future.”*

As per Regulation 92 of UERC Tariff Regulations, 2011, as quoted above, tariffs should reflect the cost of supply for various categories/voltages. Despite repetitive directions by the Commission, the Petitioner has not able to complete the Energy Audit to assess the voltage wise Distribution Losses. In the absence of crucial data, the category-wise/voltage-wise cost to supply information cannot be assessed and hence the Commission has considered the average cost of supply as the benchmark for determining category-wise tariffs.

In compliance to the Hon'ble ATE direction issued in its Judgment dated February 18, 2003, the Commission intends to initiate the study for voltage wise cost of supply in order to take into account the voltage wise cost of supply as an input for determination of tariffs in future. To facilitate the study on Voltage wise cost of supply, **the Commission directs the Petitioner to segregate the Assets at different voltage levels and provide the value of Gross Fixed Assets at each voltage level within 3 months from the date of this Order. Further, the Commission directs the Petitioner to submit the status of metering at various voltage levels, Distribution Transformers and at consumer level within one month from the date of this Order. Further, the Petitioner is also required to submit the action plan for completion of the metering at various points necessary for assessment of voltage wise losses.**

As regards the segregation of voltage wise losses, the Petitioner has submitted that work of energy audit in its operational area has been awarded vide UPCL's letter No.- 711/UPCL/Comm/SE, dated August 27, 2012. **The Petitioner is directed to submit the detailed progress report indicating the status of the work of energy audit and key findings till date within one month from the date of this Order.** The Commission based on the review of detailed scope of work and progress made till date may suggest the modifications, if required in the scope of work of Energy Audit to assess the voltage wise losses.



## **5. Commission's Analysis, Scrutiny and Conclusion on Business Plan for the first Control Period**

In accordance with Regulation 9 and Regulation 10 of UERC Tariff Regulations, 2011, the Petitioner submitted the Business Plan for the first Control Period from FY 2013-14 to FY 2015-16. The Petitioner in its Business Plan Petition and subsequent submissions submitted the Capital expenditure Plan, Capitalisation Plan, Sales Forecast, Distribution Loss Reduction Trajectory and Power Procurement Plan for the first Control Period from FY 2013-14 to FY 2015-16. This Chapter deals with the components of Business Plan as submitted by the Petitioner for the first Control Period from FY 2013-14 to FY 2015-16. Based on the analysis and scrutiny of Petitioner's projections in the Petition and considering the subsequent submissions including actual data for FY 2010-11 and FY 2011-12, the Commission has approved the Business Plan for UPCL for the first Control Period from FY 2013-14 to FY 2015-16. The details regarding Business Plan components as submitted by the Petitioner and the Commission's ruling are elaborated in subsequent Sections of this Order.

### **5.1 Energy Sales Forecast**

The Petitioner in its Petition submitted that for projecting category-wise energy sales of UPCL for FY 2013-14 to FY 2015-16 (Control Period) both Econometric Method and Adjusted Trend Analysis Method have been applied. Furthermore, sales projections from the draft report of the 18<sup>th</sup> Electric Power Survey (EPS) undertaken by the Central Electricity Authority (CEA) have been taken into account for projecting the total sales.

In reply to the Commission's query on the details of methodology adopted for sales projections, the Petitioner submitted that the projected unrestricted energy requirement has been calculated using regression analysis. The Petitioner submitted that the sales at State periphery have been calculated for ten years from FY 2002-03 to FY 2011-12 by grossing up actual restricted sales (at the consumer level) by actual distribution losses and PTCUL's loss percentages. Following this, unrestricted Energy requirement at State periphery have been derived by adding actual annual rostering data (at State periphery) to restricted sales at State periphery. For forecasting unrestricted Energy requirement at State periphery, linear regression method has been applied using historical unrestricted sales at State periphery as dependent variable and, historical GSDP and population of

Uttarakhand as independent variables. Forecast of annual unrestricted energy requirement has been further allocated month-wise based on FY 2011-12 on actual monthly unrestricted energy requirement data. Based on this forecast of unrestricted energy requirement, UPCL has computed the unrestricted sales at the consumer level.

UPCL in Adjusted Trend Analysis method has projected the sales based on past growth trends in each consumer category. UPCL submitted that 5 year CAGR has been chosen for the purpose of projections, except for a few categories like Non-Domestic, Private tube-wells, HT industries and Mixed Load. For consumption by the Non-Domestic category, 8% growth rate is considered keeping in mind the declining growth trend. While for consumption by HT industries and Mixed Load, growth rates of 8% and 10% respectively have been considered as the growth in the future, because it is not expected to be in tune with the high growth rate observed from the past trends because of the current global economic scenario and the country's substantially low industrial production growth rate. Similarly, for projecting consumption by Private Tube Wells category, 10% growth rate has been considered.

After projecting the sales under two methods, UPCL submitted it has also considered the total projected energy availability and the difference of total sales calculated from the CAGR method and the total available units for sale are considered and this difference in units for each year of the Control Period are proposed to be distributed among all the categories of consumers in ratio of the sales figure.

As discussed in the Commission's Approach in Chapter 4, the Commission has scrutinized Petitioner's projections for category-wise sales based on the above mentioned methodology. However, the Commission is of the view that use of top down approach, i.e. sales projections based on energy availability, is inappropriate as energy consumption is independent of the supply conditions with an exception of load shedding.

Till Tariff Orders for FY 2011-12, the Commission had been estimating the un-restricted sales for ensuing year, based on un-restricted sales data for the past years. However, during the tariff determination exercise for FY 2011-12, the Commission observed that the Petitioner is struggling to cater to the demand which has suddenly increased in the last few years which continues in FY 2012-13 as well. The load shedding reported for each year is increasing exponentially as evident from the table below:

**Table 5.1: Load Shedding (MU)**

<b>Financial Year</b>	<b>Load Shedding</b>
FY 2007-08	207.58
FY 2008-09	78.38
FY 2009-10	580.42
FY 2010-11	560.30
FY 2011-12	301.06
FY 2012-13 (till November 2012)	518.67

For the purpose of computing CAGR of annual sales for past year, the Commission has recasted sales of past years for domestic and PTW categories having un-metered consumers as discussed in the true up section in Chapter 6. The Commission also asked UPCL to provide category-wise load shedding details. The Petitioner submitted category-wise Load shedding, however, the Petitioner submitted that load shedding (MU) for HT industry category is based on power cuts on industrial feeders whereas load shedding (MU) for remaining categories is based on power cuts on non-industrial/mixed feeders. Therefore, load shedding for remaining categories has been apportioned among these categories in ratio of consumption of these categories during the year. During the TVS, the petitioner also clarified that the load shedding data submitted by it is at State periphery. Thus, the Commission has computed the load shedding at consumer level excluding distribution and PTCUL losses and then proportionately added the same across all consumer category in the past years based on the methodology adopted in the previous Orders for analysis.

However, as the load shedding quantum is increasing over a period of time and as UPCL has not made adequate arrangements for additional procurement of power, the Commission has considered restricted sales and growth rates for projections, as according to it that is the expected scenario for this year. For FY 2012-13, the Commission has projected category wise sales based on the actual sales for FY 2011-12 and applying a growth rate equivalent to Compounded Annual Growth Rate (CAGR) of annual sales for past years. The Commission on sales figures for FY 2012-13 has applied the same CAGRs as for the sales figures of FY 2012-13 to arrive at sales projections for the Control Period, except in case of Industry, wherein the growth rate for projecting sales has been moderated for the reasons discussed later in this Section. For most of the categories, the Commission has considered 4 years' CAGR. In cases of deviation from this approach, the reasons for the same have also been recorded.

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The Commission in the past Tariff Orders for FY 2009-10 and FY 2010-11, while projecting

sales, had been reducing sales from domestic, non-domestic and LT industry consumer categories on account of consumption of consumers being billed on normative basis continuously for more than 12 billing cycles which is mostly dubious/spurious sales to ghost/non-existent consumers. Deduction of dubious/spurious sales was affecting the Petitioner adversely by reducing its power purchase requirements for the prospective tariff year. In any case, while undertaking true-up for that year as per the Regulations, the Commission allows the actual power purchase and based on the target loss levels arrives at sales figures. Therefore, in its Tariff Order for FY 2011-12, the Commission had decided to approve the projected sales by applying the CAGR growth rate on the actual sales figures for previous year without any deduction on account of dubious/spurious sales. In this Tariff Order also, the Commission is continuing with the same approach as adopted in the last Tariff Order.

In order to assess the recent trend in growth in sales, the Commission also analysed the actual sales for FY 2012-13 as available till November 2012 as given below:

**Table 5.2: Sales Analysis for FY 2012-13 (MU)**

Categories	FY 2010-11	FY 2011-12	FY2012-13			Growth Rate	
	Re-Casted Sales	Re-Casted Sales	Approved Sales in Tariff Order	Actual Recasted Sales upto Nov 2012	FY 2012-13 (Annualised based on actual sales till Nov. 12)	FY 2011-12 over FY 2010-11	FY 2012-13 (Annualised Sales) over FY 2011-12
Domestic (RTS - 1)	1418	1593	1815	1122	1716	12.34%	7.72%
Non-domestic, incl Commercial (RTS - 2)	813	885	979	628	961	8.86%	8.59%
Public Lamps (RTS - 3)	54	67	61	40	61	24.07%	-8.96%
Private Tubewell/Pump Sets (RTS - 4)	166	176	182	121	186	6.02%	5.68%
Government Irrigation System (RTS - 5)	113	137	139	78	119	21.24%	-13.14%
Public Water Works (RTS - 6)	276	325	341	195	298	17.75%	-8.31%
Industrial Consumers (RTS - 7)	4198	4798	5059	3250	4968	14.29%	3.54%
Mixed Load (RTS - 8)	121	160	136	103	158	32.23%	-1.25%
Railway Traction (RTS - 9)	8	8	9	5	8	0%	0%
<b>Total</b>	<b>7165</b>	<b>8149</b>	<b>8722</b>	<b>5543</b>	<b>8474</b>	<b>13.73%</b>	<b>3.99%</b>

Based on the analysis of actual sales during FY 2012-13 till November 2012, it is observed

that the growth rate in actual sales for most of the categories has reduced substantially in FY 2012-13. The main reason for reduction in growth rates has been the increase in load shedding quantum by UPCL, which is likely to continue as UPCL has not made adequate arrangements for procurement of power on medium term or long term basis. In view of this and as discussed in Chapter 4 of the Order, the Commission has projected the restricted sales for all the categories for the Control Period. The category-wise growth rates considered by the Commission for different categories of consumers and sales projections for the Control Period are discussed in the following paras.

#### **5.1.1 Domestic (RTS-1)**

The Petitioner has first considered a growth rate of 8.65% in respect of sales of domestic consumers including consumers in Snow Bound Area and then adjusted the sales based on energy availability. Accordingly, the Petitioner has projected energy sales to domestic consumers for FY 2013-14 as 1989.83 MU.

For projecting the sales for the Control Period, the Commission has considered four year Compounded Average Growth Rate (CAGR) of 8.58% for metered category. Hence, the sales for domestic Category projected by the Commission for FY 2013-14 works out to 1878.23 MU, for FY 2014-15 works out to 2039.38 MU and for FY 2015-16 works out to 2214.35 MU.

#### **5.1.2 Non-Domestic (RTS-2)**

The Petitioner has first estimated sales to Non-Domestic Consumers on the basis of growth rate of 8.00% and then adjusted the sales based on energy availability. Thus, the Petitioner has projected a total sale of 1038.46 MU for FY 2013-14 in this category.

For projecting sales for the Control Period, the Commission has considered four year CAGR of 9.85% and projected the total consumption of non-domestic consumers as 1068.46 MU for FY 2013-14, 1173.72 MU for FY 2014-15 and 1289.34 MU for FY 2015-16.

#### **5.1.3 Public Lamps (RTS-3)**

The Petitioner has first estimated sales to Public Lamps on the basis of growth rate of 10.54% and then adjusted the sales based on energy availability. Thus, the Petitioner has projected a total sale of 82.11 MU for FY 2013-14 in this category.

The Commission considered a four year CAGR of 10.28% for projecting the sales for the Control Period for this category. With these assumptions, the total consumption of public lamps as estimated by the Commission for FY 2013-14 works out to 81.34 MU, 89.70 MU for FY 2014-15 and 98.93 MU for FY 2015-16.

#### **5.1.4 Private Tube-Wells (RTS-4)**

The Petitioner has first considered a growth rate of 10% and then adjusted the sales based on energy availability. Thus, the Petitioner projected the consumption for Private Tube-Wells as 229.11 MU for FY 2013-14.

The Commission considered a four year CAGR of 6.14% for projecting the sales for the Control Period for this category. With these assumptions, the total consumption of private tube wells as estimated by the Commission for FY 2013-14 works out to 198 MU, 210.16 MU for FY 2014-15 and 223.07 MU for FY 2015-16.

#### **5.1.5 Government Irrigation Systems (RTS-5)**

The Petitioner has first estimated sales to Government Irrigation System on the basis of normal growth rate of 10.38% and then adjusted the sales based on energy availability. The Petitioner has projected a total sale of 167.26 MU for FY 2013-14 in this category.

The Commission considered a four year CAGR of 9.57% for projecting the sales for the Control Period for this category. With these assumptions, the total consumption of Government Irrigation Systems as estimated by the Commission for FY 2013-14 works out to 163.94 MU, 179.62 MU for FY 2014-15 and 196.80 MU for FY 2015-16.

#### **5.1.6 Public Water Works (RTS-6)**

The Petitioner has first estimated sales to Public Water Works on the basis of five year CAGR of 10.60% and then adjusted the sales based on energy availability. The Petitioner has projected a total sale of 399.07 for FY 2013-14 in this category.

The Commission considered a four year CAGR of 10.53% for projecting the sales for the Control Period for this category. With these assumptions, the total consumption of public water works as estimated by the Commission for FY 2013-14 works out to 396.49 MU, 438.26 MU for FY 2014-15 and 484.42 MU for FY 2015-16.

### **5.1.7 Industry (RTS-7)**

The Petitioner has projected the sales to LT Industry category during FY 2013-14 by considering a growth rate of 11.69% on estimated sales for FY 2012-13, which is again worked out by applying the same growth rate on the actual sales for FY 2011-12 and then adjusted the sales based on energy availability. The Petitioner has, accordingly, projected consumption of LT Industrial consumers as 338.36 MU for FY 2013-14. For HT Industrial consumers, the Petitioner has applied a growth rate of 8.00% on actual sales for FY 2011-12 for working out sales for FY 2012-13 and again further 8.00% on the estimated sales for FY 2012-13 and then adjusted the sales based on energy availability, The Petitioner has, accordingly, projected the sales to HT Industrial consumers as 5320.51 MU.

As regards sales projections for Industry, the Commission is of the view that due to recessionary trend in the economy, the Industrial growth has slowed down. Further, the Industrial Package in the State of Uttarakhand has been already concluded on March 31, 2010, which has reduced any scope of attracting new Industries to the State. The same view was expressed by a number of Industry Consumers and Associations of Industry in their written submission, in the Public Hearing proceedings as well as during the State Advisory Committee meeting. In view of the above, the Commission is also of the opinion that going forward it would not be possible to sustain a high growth rate in the Industrial consumption as projected by the Petitioner and the same needs to be rationalised. The Commission's approach towards projecting sales for LT Industries and HT Industries is discussed below:

#### **5.1.7.1 LT Industries**

The Commission has applied a growth rate of 5.00% on estimated sales of FY 2012-13 and projected energy sales for LT Industry category for FY 2013-14 works out to of 297.43 MU, for FY 2014-15 works out to 312.30 MU and 327.91 MU for FY 2015-16.

#### **5.1.7.2 HT Industries**

The Commission has applied a growth rate of 5.00% on estimated sales of FY 2012-13 and projected energy sales for HT Industry for FY 2013-14 works out to 4992.31 MU, for FY 2014-15 works out to 5241.92MU and 5504.02 MU for FY 2015-16..

### 5.1.8 Mixed Load

The Petitioner has projected sales under this category to be 194.95 MU in FY 2013-14 considering an estimated increase of 10.00% and then adjusted the sales based on energy availability.

However, the Commission has considered four year CAGR of 11.01% for projecting the sales for the Control Period. Accordingly, the sales projected by the Commission for this category works out to 197.49 MU for FY 2013-14, for FY 2014-15 works out to 219.23 MU and 243.36 MU for FY 2015-16.

### 5.1.9 Railway Traction

The Petitioner has projected sales under this category to be 9.36 MU in FY 2013-14 considering a nominal increase of 5.25% and then adjusted the sales based on energy availability. However, the Commission has applied two year CAGR of 6.93% for projecting the sales for this category and approves the same as 9.59 MU for FY 2013-14, 10.26 MU for FY 2014-15 and 10.97 MU for FY 2015-16.

The summary of the category-wise sales projected by the Petitioner and as approved by the Commission for the Control Period is given in the Table below:

**Table 5.3: Category-wise Sales for the Control Period**

Category	CAGR Approved	FY 2013-14		FY 2014-15		FY 2015-16	
		Petitioner	Approved	Petitioner	Approved	Petitioner	Approved
Domestic (RTS - 1)	8.58%	1990	1878	2157	2039	2370	2214
Non-domestic, incl Commercial (RTS - 2)	9.85%	1038	1068	1126	1174	1238	1289
Public Lamps (RTS - 3)	10.28%	82	81	89	90	98	99
Private Tubewell / Pump Sets (RTS - 4)	6.14%	229	198	248	210	272	223
Government Irrigation System (RTS - 5)	9.57%	167	164	181	180	199	197
Public Water Works (RTS - 6)	10.53%	399	396	433	438	475	484
Industrial Consumers (RTS - 7)	5.00%	5659	5290	6128	5554	6735	5832
Mixed Load (RTS - 8)	11.01%	195	197	211	219	233	243
Railway Traction (RTS - 9)	6.93%	9	10	10	10	11	11
<b>Total</b>		<b>9769</b>	<b>9283</b>	<b>10583</b>	<b>9915</b>	<b>11631</b>	<b>10593</b>



## 5.2 Efficiency Parameters

### 5.2.1 Distribution Loss Trajectory:

The Petitioner has proposed following initiatives for loss reduction:

- (a) Installation of Capacitor Bank at 33/11 kV substations
- (b) Implementation of R-APDRP Part A scheme
- (c) Implementation of R-APDRP Part B scheme
- (d) Installation of Double metering in selected 11 kV & 33 kV consumers
- (e) Shifting of 1 Phase & 3 Phase meter outside the premises of the consumers
- (f) Implementation of AMR
- (g) Replacement of Mechanical Meters with Electronic Meters and Installation of Electronic meters in un-metered connections
- (h) Laying of LT ABC
- (i) DT Metering
- (j) Replacement of defective meters
- (k) Procurement of High value consumer management system (HVCMS)

The Petitioner submitted that Distribution losses are measured considering the difference between the energy input within the State and the energy billed to consumers. The Petitioner further submitted that concerted efforts made by it have resulted in gradual decrease in distribution losses. For FY 2011-12, the actual distribution loss has been to the tune of 19.96%.

The Petitioner submitted that it has proposed various loss reduction schemes to achieve the distribution losses target of 16.32% by the end of FY 2015-16. The following Table shows the distribution loss projected by the Petitioner for the Control Period:

**Table 5.4: Projected Distribution Loss Trajectory for the Control Period**

Particulars	FY 2011-12 (Actuals)	FY 2012-13 (Estimated)	FY 2013-14 (Projected)	FY 2014-15 (Projected)	FY 2015-16 (Projected)
Distribution Loss	19.96%	19.00%	18.25%	17.28%	16.32%

The Commission had considered the distribution loss level of 44.32% for FY 2002-03, and

further set the loss reduction target as 4.00% p.a. for next five years, on the basis of which the target of distribution losses set for FY 2007-08 was 24.32%. However, for FY 2008-09 and FY 2009-10, the Commission considered a reasonable loss reduction target of 2.00%, which was reduced to only 1.32% for the FY 2010-11 and has further come down in the Tariff Order for FY 2011-12, wherein the Commission set the loss reduction target of only 1.00% for FY 2011-12 and FY 2012-13.

Continuing with the same trajectory, the Commission has now set a target of loss reduction of 1.00% for FY 2013-14 also. Thereafter, the loss reduction target is lowered to 0.50% each in FY 2014-15 and FY 2015-16 to attain the target of 15% by the end of the Control Period, i.e. FY 2015-16. The distribution loss reduction trajectory approved by the Commission for the Control Period is given in the Table below:

**Table 5.5: Distribution Loss Trajectory approved by the Commission**

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Distribution Loss	17.00%	16.00%	15.50%	15.00%

In line with the approach adopted by the Commission in its previous Tariff Orders, the Commission has considered the entire distribution loss reduction target approved by the Commission for each year of the control period as reduction in commercial losses of the petitioner and has therefore, considered the impact of distribution loss reduction in terms of increase in sales due to efficiency improvement.

Accordingly, the estimated energy requirement at distribution periphery, State Periphery and approved loss level for the Control Period are given in the Table below:

**Table 5.6: Energy Input Requirement at Distribution Level for the Control Period**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Distribution Sales (MUs)	9283.28	9914.54	10593.18
Loss level for Energy Input (MUs)	17.00%	16.00%	15.50%
Energy Input Required at T-D Interface (MUs)	11,184.67	11,803.03	12,536.30
Commercial Loss Reduction (%)	1.00%	0.50%	0.50%
Commercial Loss Reduction (Sales due to efficiency improvement) (MUs)	111.85	59.02	62.68
Total Sales with Efficiency Improvement (MUs)	9,395.12	9,973.56	10,655.86
Overall Distribution Loss (%)	16.00%	15.50%	15.00%
PTCUL Loss% (as per data from PTCUL)	1.84%	1.82%	1.80%
Energy Input at State Periphery (MUs)	11,394.33	12,021.83	12,766.09

### 5.2.2 Collection Efficiency

The Petitioner submitted that it has taken following initiatives for commercial loss reduction and improvement of collection efficiency:

- (a) Implementation of R-APDRP, Part-A & Part-B in 31 towns having population above 10,000, SCADA/DMS in towns having population greater than 4 lacs and energy input greater than 350 MU/annum
- (b) Replacement of electromagnetic meters with tamper proof electronic meters
- (c) Double metering, shifting of single phase & three phase meters outside the premises of the consumers
- (d) Regularisation of unauthorised PTW/I.P. installation and thereby increasing the sales
- (e) Convenient bill payment options like cash collection counters, online bill payment through credit card, debit card, internet banking, etc.
- (f) More teams to be sent to rural areas for increasing collection.
- (g) Recovery of past arrears

The Petitioner submitted that in FY 2011-12, the actual collection efficiency was 93.06%. The Petitioner further submitted that it is making concentrated efforts to improve its performance and efficiency by incurring proposed capital expenditure which has been dealt along with the capital expenditure plan and it aims to achieve the collection efficiency level of 97% by the end of FY 2015-16.

The Petitioner has considered the collection efficiency of 97% for FY 2015-16.

The Commission has observed that it had allowed a collection efficiency of 97% for FY 2012-13, on which the Petitioner is expected to make improvements with a target to achieve 100% collection efficiency in future. The Commission has considered improvement in collection efficiency by 0.50% every year to reach the target of 98.50% by FY 2015-16.

### 5.3 Power Procurement Plan

The Petitioner in its Business Plan Petition has submitted its power procurement plan for the Control Period of FY 2013-14 to FY 2015-16. The Petitioner has estimated power purchase quantum for FY 2013-14 to FY 2015-16 and submitted the energy availability from various sources which includes the following:

- a) State Generating Stations of UJVNL Ltd.
- b) National Thermal Power Corporation (NTPC)
- c) National Hydro Power Corporation (NHPC)
- d) Nuclear Power Corporation of India Limited (NPCIL)
- e) Tehri Hydro Development Corporation (THDC)
- f) Satluj Jal Vidyut Nigam Limited (SJVN Ltd)
- g) Vishnu Prayag Hydro Electric Project
- h) Independent Power Producers
- i) New Stations

The energy availability from these sources as projected by the Petitioner have been summarised in Chapter 2 of this Tariff Order and is reproduced below for reference.

**Table 5.7: Summary of Power Availability projected by UPCL for FY 2013-14 to FY 2015-16 (MU)**

Major Sources	FY 2013-14	FY 2014-15	FY 2015-16
UJVNL	4339.00	4401.00	4926.00
NTPC	2630.52	2630.52	2638.19
NHPC	370.06	370.06	370.06
THDC (including Koteswar)	136.89	136.89	136.89
NPCIL	207.29	207.29	207.82
SJVNL	32.84	32.84	32.84
Free Share of GoU	895.14	895.14	895.75
IPP Stations	336.27	336.27	337.19
Upcoming Stations	1014.9	1521.78	2530.25
<b>Total Available from firm Sources</b>	<b>9962.89</b>	<b>10531.77</b>	<b>12074.97</b>
<b>Deficit Power Purchase</b>	<b>2096.66</b>	<b>2432.20</b>	<b>1880.07</b>
<b>Total Power Purchase</b>	<b>11949.87</b>	<b>12794.90</b>	<b>13899.68</b>

The Commission for projecting energy availability for the Control Period, has considered all the above mentioned sources as considered by the Petitioner. However, the Commission while

projecting the quantum of energy available from these sources for the Control Period has made certain assumptions as detailed below.

The Commission for the Control Period for existing stations has projected energy availability from various generating stations on the basis of past years generation trends and UPCL's actual share from these generating stations during FY 2012-13. However, for new generating station, the Commission has projected energy availability considering the petitioner's projection on quantum of energy except for Rihand-III and Sasan as discussed section 5.3.5 based on their expected commissioning schedule. The detailed approach for source wise projection of energy availability has been discussed as follows.

### 5.3.1 Energy Availability from UJVN Ltd.

The Commission has considered the availability of generating stations of UJVN Ltd. for FY 2013-14 as under:

- For 10 main generating stations of UJVN Ltd., the Commission has considered average of last three years gross generation, i.e. FY 2010-11 to FY 2012-13.
- For existing SHPs based on monthly projections submitted by UJVN Ltd.

The Commission has estimated the energy sent out from these generating stations after considering the normative auxiliary consumption and transformation losses (wherever applicable) as per UERC Tariff Regulations, 2011. Accordingly, the availability of power from UJVN Ltd. stations to the Petitioner for the Control Period after excluding Himachal Pradesh's (HP) share works out to be 4522.22 MU. The summary of the energy availability for FY 2013-14 from UJVN Ltd. stations as estimated by the Commission is shown in the Table below:

**Table 5.8: Summary of Energy Availability from UJVNL for FY 2013-14 to FY 2015-16 (MU)**

Particulars	Approved
UJVN Ltd.-Main Stations	3103.03
Maneri Bhali-II	1266.09
UJVN Ltd.-SHPs	63.82
Pathri	57.06
Mohammadpur	32.23
<b>Total</b>	<b>4522.22</b>

### **5.3.2 Energy Availability from Central Generating Stations**

In continuation with the approach followed by the Commission in its Order dated April 11, 2012, the Commission has considered the average generation of the previous three years for estimating the energy availability during the Control Period from existing generating stations of NTPC, NHPC, SJVNL and THDC (except for Koteswar). For estimating the energy availability from Koteswar plant, the Commission has considered the design energy. Further, the Commission has considered the average of last three years monthly generation from these stations for projecting the monthly energy availability for the Control Period. The energy sent out from these stations has been estimated considering the normative auxiliary consumption as specified by CERC in the Regulations. In addition to the energy availability from existing generating stations, the Commission has also considered the energy availability from Sewa-II and Chamera-III Project during the Control Period based on its design energy. The Petitioner has a firm allocation of share of power from generating stations of NTPC Ltd., NHPC Ltd., Nuclear Power Corporation of India Ltd. (NPCIL), Tehri Hydro Development Corporation Ltd. (THDC) and Satluj Jal Vidyut Nigam Ltd. (SJVNL) stations. In addition to the firm share allocation, most of these stations have 15% unallocated power. The distribution of this unallocated power among the constituents of Northern Region is decided from time to time based on the power requirement and power shortages in different States. For projecting the energy availability from Northern Region Central Generating Stations during the Control Period, the Commission has considered the actual weighted average allocation of power (firm share of UPCL as well as unallocated power) for FY 2012-13 (actual till March 2013). The Commission has also considered the northern region transmission losses of 4% based on the submission of the Petitioner, for purchase of power from Central Generating Stations and other sources outside the State. The summary of the energy availability to the Petitioner from CGS as estimated by the Commission for the Control Period is shown in the Table below:

**Table 5.9: Summary of Energy Available from CGS during FY 2013-14 to FY 2015-16 (MU)**

Generating Stations	Gross Generation	ESO	UPCL's Share	Availability after Inter-State Transmission Loss
Salal	3,234.19	3,201.85	1.21%	37.19
Tanakpur	476.82	472.06	3.89%	17.63
FreePower to GOU (Tanakpur)			12.00%	54.38
Chamera-I	2,514.69	2,484.52	3.53%	84.20
Chamera-II	1,465.69	1,448.10	1.09%	15.18
Chamera -III	1,108.17	1,094.87	4.98%	52.34
Uri	2,895.42	2,860.67	3.48%	95.57
Dhauliganga	1,143.17	1,129.45	4.96%	53.77
Free Power to GOU (Dhauliganga)			12.00%	130.11
Dulhasti	2,182.13	2,155.94	5.00%	103.47
Sewa-2	533.53	527.13	5.06%	25.60
<b>Sub Total</b>	<b>15,553.82</b>	<b>15,374.59</b>		<b>669.44</b>
<b>THDC Ltd.</b>				
Tehri HEP - I	3,401.46	3,360.64	3.29%	106.02
FreePower to GOU(Tehri)			12.00%	387.15
Koteshwar	1,065.00	1,052.22	3.75%	39.99
Free Power to GoU Tehri-Koteshwar			12.00%	130.00
<b>Sub Total</b>	<b>4,466.46</b>	<b>4,412.86</b>		<b>663.16</b>
<b>SJVNL</b>				
NJHEP	7,186.87	7,100.63	0.59%	40.16
<b>Sub Total</b>	<b>7,186.87</b>	<b>7,100.63</b>		<b>40.16</b>
<b>NTPC</b>				
Anta(L)/ Anta(G)	2,477.84	2,403.51	4.68%	108.06
Auraiya(L)/ Auraiya(G)	3,746.31	3,633.92	4.46%	155.51
Dadri(L)/ Dadri(G)	5,143.38	4,989.08	3.83%	183.29
Unchahar-I	3,385.78	3,088.85	8.80%	260.88
Unchahar-II	3,385.78	3,081.06	4.32%	127.79
Unchahar-III	1,692.89	1,540.53	6.90%	102.01
Rihand-I STPS	8,127.52	7,436.68	4.64%	331.60
Rihand-II STPS	8,127.52	7,517.96	4.12%	297.39
Singrauli STPS	16,234.79	14,976.59	5.54%	796.59
Dadri Thermal	13,802.89	12,629.65	0.72%	87.36
Jhajhar	5,013.62	4,587.46	0.45%	19.83
Kahalgaon-II	14,065.26	13,010.37	2.19%	171.17
<b>Sub Total</b>	<b>85,203.59</b>	<b>78,895.65</b>		<b>2,641.47</b>
<b>NPCIL</b>				
Narora APP	2,113.03	1,717.90	4.52%	74.58
Rajasthan APP	3,159.03	2,874.72	4.33%	119.50
<b>Sub Total</b>	<b>5,272.06</b>	<b>4,592.61</b>		<b>194.07</b>
<b>Total</b>	<b>1,17,682.79</b>	<b>1,10,376.34</b>		<b>4,208.31</b>

### 5.3.3 Energy Availability from Vishnu Prayag Hydro Electric Project

The Commission has considered the average generation of previous three years for estimating the energy availability from Vishnu Prayag HEP to the Petitioner for the Control Period

and has considered the average of last three years monthly generation from this station for projecting the generation for the Control Period. The auxiliary consumption has been considered on normative basis. For projecting the energy available to the Petitioner, the Commission has considered the free power of 12% available to the State of Uttarakhand. With these assumptions, the total energy available from this station during the Control Period is estimated at 219.35 MU at distribution periphery.

#### ***5.3.4 Energy Availability from the Independent Power Producers (IPPs)***

The Commission has considered the availability from existing and upcoming stations based on the projections made by these stations and as submitted by the Petitioner except in case of Rishiganga, Motigad and Birahi Ganga where energy availability projected by the Petitioner is considerably lower than that approved for FY 2012-13. For these stations the energy availability has been retained as that approved for FY 2012-13. The total availability from these sources, thus, works out to 384.68 MU.

#### ***5.3.5 New Generating Stations***

The Petitioner has projected power from new generating stations that is supposed to be commissioned during the Control Period from FY 2013-14 to FY 2015-16. The Petitioner for new Central Generating Stations has considered 4% allocation for projecting energy availability. The Commission has considered the monthly/annual quantum energy projected by the Petitioner for these new/upcoming stations except for Rihand-III and Sasan UMPP where the generation has been projected as discussed below. However, for the purpose of approval of energy available from new sources the Commission has taken into consideration the revised schedules of the commissioning of the new generating stations, since the Commission observed that projected energy availability on the basis of date of commissioning of the plant for some of the generating stations that the Petitioner had considered doesn't match with the current schedule of commissioning of the plants. The Petitioner has considered energy available from Koldam station for FY 2013-14, however, the commissioning of the plant has been revised to April 2014 and therefore, the Commission has not considered energy availability from Koldam for FY 2013-14.

For Rihand – III, the Commission has considered 85% PLF and estimated the energy availability from its first unit from April 2013 onwards as it has been already commissioned and for the second unit from November 2013 onwards as it is scheduled for commissioning in November



2013. The Commission for projection purposes has considered energy allocation from new central generating station as 4% as submitted by the Petitioner except for Rihand III for which allocation of 4.62% has been considered as per the current bills raised by NTPC on the Petitioner.

For Sasan UMPP, the Commission has also considered 85% PLF and estimated energy available from four out of its six units in FY 2013-14. For computing quantum of energy availability, the Commission has considered energy available from the first unit from April 2013 onwards and has further considered energy availability from subsequent units after every three months. For projecting energy availability for FY 2014-15, the Commission has considered energy available from five units for the period April 2014 to June 2014 and thereafter, energy has been projected from all the six units of Sasan UMPP.

For rest of the new generating stations scheduled to get commissioned during the Control Period, the Commission has considered energy availability from the generating stations as projected by the Petitioner. The Commission has, accordingly, estimated the energy availability from new generating stations for the Control Period as shown in the Table below:

**Table 5.10: Summary of Energy Available from New Generating Station during FY 2013-14 to FY 2015-16 (MU)**

New Generating Stations	FY 2013-14	FY 2014-15	FY 2015-16
<b>NTPC</b>			
Koldam	0	146.53	146.93
Rihand III	219.70	310.16	310.16
Tapovan Vishnugad	0	0	47.75
Barh STP-I	0	0	258.3
Barh STP-II	0	171.73	344.4
North Karanpura	0	0	258.3
Singrauli STPS Stage-III	0	0	65.23
<b>NHPC</b>			
Parbati Stage-III	95.24	95.24	95.24
Uri II	43.96	43.96	43.96
<b>OTHERS</b>			
Mejia Thermal - I	0	0	172.2
Sasan	287.80	661.93	690.71
UREDA	72.98	72.98	75.14
Hersil Hydro Limited	0	0	29.35
Himalaya Hydro Pvt. Ltd.	19.51	19.51	19.51
<b>Total</b>	<b>739.18</b>	<b>1522.04</b>	<b>2557.18</b>

### 5.3.6 Total Power Procurement Plan for the Control Period

Accordingly, as discussed above the Commission approves the power procurement plan for the Control Period as shown below:

**Table 5.11: Summary of Total Firm Energy Available during FY 2013-14 to FY 2015-16 (MU)**

Source of Power	Power Procurement Quantum		
	FY 2013-14	FY 2014-15	FY 2015-16
UJVNL Total	4,522.22	4522.22	4522.22
NHPC	669.44	669.44	669.44
THDC	663.16	663.16	663.16
NTPC	2641.47	2,641.47	2,641.47
NPC	194.07	194.07	194.07
Vishnu prayag (free power)	219.35	219.35	219.35
SJVNL	40.16	40.16	40.16
Others-IPPs	384.68	384.68	384.68
New Generating Stations	739.18	1,522.04	2,557.18
<b>Total Firm Energy Available</b>	<b>10,073.74</b>	<b>10,856.59</b>	<b>11,891.73</b>
<b>Total Energy Requirement</b>	<b>11,394.33</b>	<b>12,021.83</b>	<b>12,766.09</b>
<b>Deficit Power Purchase</b>	<b>1,320.59</b>	<b>1,165.24</b>	<b>874.36</b>

Apart from energy available from firm sources, the Petitioner has proposed to meet any deficit arising out of demand supply mismatch during the Control Period through short term sources. The Commission has considered quantum of deficit power purchase for the Control Period in meeting the energy input requirement for FY 2013-14 as discussed in Chapter 6 of the Order. **The Commission directs the Petitioner to get the prior approval of the Commission for power procurement of deficit power at the rate beyond Rs 4.07/kWh.**

Further, as discussed in Chapter 4 of this Tariff Order and reasons stated therein the Commission in this Tariff Order is only approving power purchase cost for FY 2013-14 and not approving power purchase cost for FY 2014-15 and FY 2015-16 of the Control Period at this point of time. The source wise estimated power purchase cost along with the methodology adopted for projecting the cost has been discussed in detail in Chapter 6 of this Order.

## 5.4 Capital Expenditure Plan

The Petitioner submitted that it needs capital expenditure for the following two primary reasons:

- (a) The rising electricity demand makes it essential for Petitioner to make investments in

procuring power to meet the demand and also prepare its distribution infrastructure for evacuating the increasing power that shall be procured and subsequently distributed to its growing consumers.

- (b) Making investments to facilitate loss reduction, increase operational efficiency through IT and automation to improve the quality and reliability of supply.

The Petitioner submitted the details of existing electricity distribution infrastructure of the state of Uttarakhand, along with a detailed Capital Investment Plan for improving the performance in terms of meeting the load growth, reduction of losses and reliability of supply, based on various technical and physical requirements carried out by its staff followed by discussions at various levels and review by senior management.

The Petitioner further submitted that the Capital expenditure Plan, has been worked out after amalgamating the requirement at various levels as well as the historical trends. The Petitioner submitted that the costs have been calculated considering the historical trends and Stock Issue Rates (SIR) of UPCL for FY 2012-13 with suitable escalations for the Control Period. The Petitioner has proposed a total capital investment requirement of Rs. 2355.37 Crore for the Control Period FY 2013-14 to FY 2015-16.

The deployment of Capex as proposed by the Petitioner has been done under the following four benefit centres:

- (v) Load growth
- (vi) Loss reduction
- (vii) System reliability & safety improvement
- (viii) Creation of infrastructure facilities & other misc. works

The proposed expenditure to be incurred on various Capital expenditure schemes as discussed in Section 2 of this Order, along with the funding arrangement under each benefit centres as submitted by the Petitioner is as follows:

**Table 5.12: Summary of various schemes along with the proposed capex and funding arrangement for the Control Period (Rs. Crore)**

Sr. No.	Proposed Capital Expenditure Schemes	Debt Equity Ratio	FY 2013-14	FY 2014-15	FY 2015-16	Total
<b>1</b>	<b>LOAD GROWTH</b>					
1.1	Construction of 33/11kV substation and associated 33kV Lines for strengthening of Distribution System		80.93	86.60	86.03	253.56
	Quantity		13	13	13	
	Debt	70	56.65	60.62	60.22	
	Equity- State Government	30	24.28	25.98	25.81	
1.2	Augmenting Capacity 33/11kV existing substation		5.30	5.89	5.53	16.71
	Quantity		20	21	18	
	Debt	70	3.71	4.12	3.87	
	Equity- State Government	30	1.59	1.77	1.66	
1.3	Release of New PTW Connections		11.86	13.05	14.35	39.26
	Quantity		700	700	700	
	Debt	70	8.3	9.13	10.05	
	Equity- State Government	30	3.56	3.91	4.31	
1.4	Installation of Compac Substations (11kV/0.44kV)		13.93	15.32	0	29.25
	Quantity		30	30		
	Debt	70	9.75	10.72		
	Equity- State Government	30	4.18	4.6		
1.5	Installation of meters for giving new connections		30.92	37.74	45.76	114.42
	Quantity		124820	133798	143426	
	Debt	70	21.65	26.42	32.03	
	Equity- State Government	30	9.28	11.32	13.73	
1.6	Lying of 11kV ABC		5.87	6.45	7.10	19.42
	Quantity		50km	50km	50km	
	Debt	70	4.11	4.52	4.97	
	Equity- State Government	30	1.76	1.94	2.13	
1.7	Lying of LT Lines		9.78	10.75	11.83	32.36
	Quantity		250km	250km	250km	
	Debt	70	6.84	7.53	8.28	
	Equity- State Government	30	2.93	3.23	3.55	
	<b>Sub Total for Load Growth</b>		<b>158.58</b>	<b>175.80</b>	<b>170.60</b>	<b>504.98</b>
<b>2</b>	<b>Loss Reduction</b>					
2.1	Installation of Capacitor Bank at 33/11kV		10	10	0	20
	Quantity		50	50		

**Table 5.12: Summary of various schemes along with the proposed capex and funding arrangement for the Control Period (Rs. Crore)**

Sr. No.	Proposed Capital Expenditure Schemes	Debt Equity Ratio	FY 2013-14	FY 2014-15	FY 2015-16	Total
	<i>Debt</i>	70	7	7		
	<i>Equity- State Government</i>	30	3	3		
2.2	Implementation of R-APDRP Part A schemes		37.60	0	0	37.60
	<i>Debt (UPCL Component)</i>		37.60			
2.3	Implementation of R-APDRP Part B schemes		150.00	242.63	238.88	631.51
	<i>Central Government Grant</i>	90	135.00	218.37	214.99	
	<i>Debt</i>	10	15.00	24.26	23.89	
2.4	Installation of Double Metering in selected 11kV and 33kV consumers		1.96	1.43	0	3.39
	<i>Quantity</i>		300	200		
	<i>Debt</i>	70	1.37	1		
	<i>Equity- State Government</i>	30	0.59	0.43		
2.5	Shifting of single phase and three phase meters outside the premises of the consumers		1.99	2.19	2.41	6.58
	<i>Quantity</i>		2500	2500	2500	
	<i>Debt</i>	70	1.39	1.53	1.68	
	<i>Equity- State Government</i>	30	0.6	0.66	0.72	
2.6	Implementation of AMR		6.26	2.58	0.95	9.78
	<i>Quantity</i>		8000	3000	1000	
	<i>Debt</i>	70	4.38	1.81	0.66	
	<i>Equity- State Government</i>	30	1.88	0.77	0.28	
2.7	Replacement of Mechanical Meters with Electronic Meters and Installation of Electronic Meters in un-metered connections		5.41	5.38	5.91	16.70
	<i>Quantity</i>		26000	25000	25000	
	<i>Debt</i>	70	3.79	3.76	4.14	
	<i>Equity- State Government</i>	30	1.62	1.61	1.77	
2.8	Laying of LT ABC		78.21	86.03	0	164.24
	<i>Quantity</i>		1500km	1500km		
	<i>Debt</i>	70	54.75	60.22		
	<i>Equity- State Government</i>	30	23.46	25.81		
2.9	DT Metering		1.14	1.25	1.38	3.78
	<i>Quantity</i>		350	350	350	
	<i>Debt</i>	70	0.8	0.88	0.97	
	<i>Equity- State Government</i>	30	0.34	0.38	0.41	
2.1	Replacement of Defective Meters		14.05	13.31	12.27	39.63

**Table 5.12: Summary of various schemes along with the proposed capex and funding arrangement for the Control Period (Rs. Crore)**

Sr. No.	Proposed Capital Expenditure Schemes	Debt Equity Ratio	FY 2013-14	FY 2014-15	FY 2015-16	Total
	<i>Quantity</i>		70700	60700	50700	
	<i>Debt</i>	70	9.84	9.31	8.59	
	<i>Equity- State Government</i>	30	4.22	3.99	3.68	
2.11	Procurement of High Value Consumer Management System (HVCMS)		0.20	0	0	0.20
	<i>Debt</i>	70	0.14			
	<i>Equity- State Government</i>	30	0.06			
	<b>Sub Total for Loss Reduction</b>		<b>306.81</b>	<b>364.80</b>	<b>261.80</b>	<b>933.41</b>
<b>3</b>	<b>SYSTEM RELIABILITY AND SAFETY IMPROVEMENT</b>					
3.2	Additional Transformers installation of with associated 11kV & LT lines		241.54	234.94	240.78	717.26
	<i>Quantity</i>		4595	4300	4150	
	<i>Debt</i>	70	169.08	164.46	168.55	
	<i>Equity- State Government</i>	30	72.46	70.48	72.23	
3.2	Safety and Protection related- Installation of LT protection system on the transformers and fencing of transformers		29.33	21.51	23.66	74.5
	<i>Quantity</i>		7000	5500	5500	
	<i>Debt</i>	70	20.53	15.06	16.56	
	<i>Equity- State Government</i>	30	8.8	6.45	7.1	
3.3	Safety and Protection related- Installation of poles and guard wires, reconductoring of lines etc.		39.95	31.76	0	71.71
	<i>Quantity</i>					
	<i>Debt</i>	70	27.97	22.23		
	<i>Equity- State Government</i>	30	11.99	9.53		
3.4	Installation of 11kV underground cables		6.52	7.17	7.89	21.57
	<i>Quantity</i>		50km	50km	50km	
	<i>Debt</i>	70	4.56	5.02	5.52	
	<i>Equity- State Government</i>	30	1.96	2.15	2.37	
3.5	Smart Grid projects for Industrial areas		0	10	10	20
	<i>Debt</i>	70		7	7	
	<i>Equity- State Government</i>	30		3	3	
	<b>SubTotal for System Reliability and Safety improvement</b>		<b>317.34</b>	<b>305.38</b>	<b>282.32</b>	<b>905.04</b>

**Table 5.12: Summary of various schemes along with the proposed capex and funding arrangement for the Control Period (Rs. Crore)**

Sr. No.	Proposed Capital Expenditure Schemes	Debt Equity Ratio	FY 2013-14	FY 2014-15	FY 2015-16	Total
<b>4</b>	<b>CREATION OF INFRASTRUCTURE FACILITIES AND OTHER MISC.</b>					
4.1	Prepaid Metering		4.04	4.44	0	8.49
	<i>Quantity</i>		5000	5000		
	<i>Debt</i>	70	2.83	3.11		
	<i>Equity- State Government</i>	30	1.22	1.33		
4.2	Video Conferencing services and integrating it with all the divisions/ sub-divisions		0.20	0	0	0.20
	<i>Debt</i>	70	0.14			
	<i>Equity- State Government</i>	30	0.06			
4.3	Procurement of Sub Station and consumer meter testing equipments		0.50	0.50	0	1.00
	<i>Debt</i>	70	0.35	0.35		
	<i>Equity- State Government</i>	30	0.15	0.15		
4.4	Consumer Care centres, E-payment of bills and cash collection centres		0.25	0.25	0.25	0.75
	<i>Debt</i>	70	0.18	0.18	0.18	
	<i>Equity- State Government</i>	30	0.08	0.08	0.08	
4.5	New and emerging Technologies and miscellaneous works like new vehicles, office infrastructure, IT infrastructure etc.		0.50	0.50	0.50	1.50
	<i>Debt</i>	70	0.35	0.35	0.35	
	<i>Equity- State Government</i>	30	0.15	0.15	0.15	
	<b>SubTotal for creation of Infrastructure facilities and other misc.</b>		<b>5.49</b>	<b>5.69</b>	<b>0.75</b>	<b>11.94</b>
<b>5=1+2+3+4</b>	<b>Total Capital Expenditure</b>		<b>788.23</b>	<b>851.67</b>	<b>715.47</b>	<b>2355.37</b>

As regards the Commission's query on details of schemes yet to be submitted to the Commission for approval, the Petitioner submitted that detailed DPR has to be prepared for each such scheme and since DPR preparation is a time consuming process it shall require in-depth analysis inclusive of field study and cost benefit analysis. Further each such scheme/DPR has to be approved and consented upon by the senior management of UPCL.

The Petitioner requested the Commission to provide time till June 2013 for submission of the

schemes for approval of the Commission. **The Commission directs the Petitioner to submit the Detailed Project Reports (DPRs) for the Capital Expenditure Schemes proposed during the Control Period by June 30, 2013.**

As regards Capitalization, the Petitioner submitted that it has estimated that the expenditure incurred towards R-APDRP schemes will be capitalized within two years from the year in which the expenditure has been incurred and the capitalisation of balance capital expenditure has been split into 50%, 25% and 25% over three years based on the historical trend.

The Petitioner further submitted that at this stage, it is not possible to determine the percentage of capitalisation from each scheme during each year of the Control Period. Therefore, the Petitioner has assumed capitalisation of 50% in the first year of the Control Period and 25% in the subsequent two years based on the nature of scheme proposed. The assumptions for estimated capitalisation as submitted by Petitioner are reiterated as under:

- The actual capital expenditure details for FY 2012-13 are not available with the Petitioner and therefore, it has been considered in accordance with the investment plan proposed by the Petitioner in the Tariff Petition of FY 2012-13.
- Opening CWIP for FY 2012-13 equivalent to Rs 543.84 Crore has been capitalised over the period of 3 years.
- It has assumed that the expenditure incurred towards R-APDRP schemes will be capitalised within two years and the balance expenditure will be capitalised in the ratio of 50%, 25% and 25% over three years.

The Petitioner further submitted that it has projected the GFA on the basis of capital expenditure and capitalisation as proposed above. The Petitioner has considered the opening GFA and opening CWIP of FY 2012-13 equivalent to closing GFA and closing CWIP of FY 2011-12 from the provisional accounts. The proposed GFA, CWIP and Capitalisation as provided by the Petitioner are shown in the table below:



**Table 5.13: GFA and CWIP as proposed by the Petitioner (Rs. Crore)**

Particulars	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Opening GFA	2330.18	2760.30	3097.49	3606.67	4368.15	5361.02
Opening CWIP	744.23	579.10	543.84	690.45	717.20	575.99
Capex	264.99	301.93	655.79	788.23	851.67	715.47
Capitalisation	430.12	337.19	509.17	761.48	992.88	781.47
Closing GFA	2760.30	3097.49	3606.67	4368.15	5361.02	6142.49
Closing CWIP	579.10	543.85	690.45	717.20	575.99	510.00

The Petitioner submitted that as per Accounting Policies for FY 2010-11, cost attributable to Capital WIP has been taken on an estimated basis and borrowing costs attributable to the Fixed Assets during their construction/renovation and modernization have been apportioned on the average balance of Capital Work-in-Progress for the year. As regards the same, the Commission has asked the Petitioner to submit the detailed computation of the same. In reply to the Commission's query, the Petitioner reiterated the following:

*"As such there is no detailed working of scheme-wise IDC for FY 2010-11 and FY 2011-12. However, as per clause 5.6 and 6.1 of 'Significant Accounting Policies' in Annual Accounts for FY 2010-11, cost attributable to Capital WIP is taken on an estimated basis and borrowing costs attributable to the Fixed Assets during their construction/renovation and modernization are apportioned on the average balance of Capital Work-in-Progress for the year."*

Further, the Petitioner submitted that since the cost attributable to Capital WIP has been taken on estimation basis so computation of the same is not available and, therefore, it requested for Commission's waiver on the same.

In the absence of approval of Capital Expenditure schemes, the Commission analysed, the average capital expenditure incurred by the Petitioner in past 5 years as given in the Table below. The Commission observed that the actual capital expenditure incurred by the Petitioner during the last five years is in the range of Rs 317.45 Crore to Rs 437.23 Crore with average Capital Expenditure of Rs 360.47 Crore. The Commission is of the view that the Capital Expenditure proposed by the Petitioner for the Control Period is on a higher side as compared to the Capital Expenditure incurred during the past five years. Further, the Petitioner is yet to submit the Capital Expenditure Schemes for approval of the Commission. In the absence of detailed cost benefit analysis of the Capital Expenditure Schemes, the Commission at this stage for the approval of Business Plan has considered the average capital expenditure of Rs. 360.47 Crore for each year of the Control period.

However, the Commission will analyse the complete details of proposed Capital Expenditure once the scheme wise details are submitted to the Commission and variation in Capital Expenditure approved for the Control Period based on detailed analysis of the schemes will be considered during Annual Performance Review Exercise.

For projecting the capitalisation for the Control Period, the Commission analysed the trends of amount capitalised by the Petitioner as percentage of sum of opening Capital Work in Progress (CWIP) and Capital Expenditure for the past 5 years from FY 2007-08 to FY 2011-12 based on the annual accounts submitted by the Petitioner.

**Table 5.14: Capitalisation as per accounts (Rs. Crore)**

Particulars	FY 2007-08	FY 2008-09	FY 2009-10	FY 2010-11	FY 2011-12
Opening CWIP	271.42	319.57	433.03	411.72	245.71
Capital Expenditure	437.23	317.45	351.06	325.61	371.00
Capitalisation	389.08	203.99	372.37	491.63	368.62
Closing CWIP	319.57	433.03	411.72	245.71	248.09
Capitalisation (% of Opening CWIP + Capital Expenditure)	55%	32%	47%	67%	60%

The Commission observed that the amount capitalised by the Petitioner during the past five years is in the range of 32%-67% of opening CWIP + Capital Expenditure during the year. In the absence of scheme wise details, the Commission has considered the average of such percentage arrived in the above step for the past 5 years from FY 2007-08 to FY 2011-12 for projecting the Capitalisation during the first Control Period from FY 2013-14 to FY 2015-16.

Based on the above, the year-wise Capitalisation and total Capitalisation for the first Control Period from FY 2013-14 to FY 2015-16 projected by the Commission is shown in the Table below:

**Table 5.15: Projection of Capitalisation for the first Control Period (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Opening CWIP (A)	291.05	311.60	321.43
Capital Expenditure during the year (B)	360.47	360.47	360.47
Capitalisation (C=52.17%×(A+B))	339.92	350.64	355.77
Closing CWIP (D=A+B-C)	311.60	321.43	326.13

The Commission for projecting the various Capital related expenses of ARR, i.e. Depreciation, Interest on Loan Capital and Return on Equity for the Control Period has considered the Capital Expenditure Plan and Capitalisation approved for the Control Period in this Order. The Commission will analyse the actual Capital Expenditure and Capitalisation while carrying out the truing up of ARR for respective year. In case, the actual Capital Expenditure and Capitalisation

during any year of the first Control Period is less than that approved by the Commission in this Order, the impact of the same shall be considered while carrying out the truing up and any reduction in expenses on account of lower actual capitalization as compared to capitalization considered by the Commission in this Order shall not be considered as reduction in expenses on account of controllable factors.

**Further, for the MYT Control Period, the Petitioner is directed to energise/capitalise the HT/EHT works only after obtaining clearance by the Electrical Inspector. The Commission has so far allowed capitalisation of the assets from the year in which it was charged/capitalised irrespective of the fact that clearances from Inspector have been received at a later date. The Petitioner is hereby cautioned to take note of the same, as the Commission, for the MYT period, would be recognising the capitalisation of the asset from the date of clearances obtained from the Electrical Inspector as detailed in Chapter 6. Moreover, for HT/EHT works for which clearances of the Electrical Inspector are not available those works would not be considered as energized/capitalized by the Commission. LT works which do not require clearances of the Electrical Inspector will be allowed subject to the petitioner furnishing complete details of such works. However, as discussed in Chapter 4 and Chapter 6 of the Order, the Petitioner has not been maintaining the details of LT and HT/EHT works capitalised separately despite repetitive directions of the Commission. The Commission has taken serious note of this aspect and accordingly, directs the Petitioner to maintain the separate details of LT works and HT/EHT works and submit the same to the Commission while claiming the truing up for the respective year.**

## 5.5 Capital Structure

Regulation 22 of UERC Tariff Regulations, 2011 specify that,

*“(1) For a project declared under commercial operation on or after 1.4.2013, debt-equity ratio shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as normative loan. Where actual equity employed is less than 30%, the actual equity would be used for determination of Return on Equity in tariff computations.*

(2) In case of Generating Company, Transmission Licensee, Distribution Licensee, or SLDC where investments have been made prior to 1.4.2013, Debt: Equity Ratio shall be as approved by the Commission in the previous Orders."

The Petitioner submitted the means of finance as shown in the Table below:

**Table 5.16: Financing of Capitalisation for the first Control Period (Rs. Crore)**

Sr. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16	Total
1	Capital Expenditure amount	788.23	851.67	715.47	2355.37
2	Financing				
	Debt	473.04	450.59	357.50	1281.14
	Equity-State Govt.	180.19	182.71	142.98	505.88
	Grant-State Govt.				
	Grant-Central Government	135.00	218.37	214.99	568.36
3	<b>Total</b>	<b>788.23</b>	<b>851.67</b>	<b>715.47</b>	<b>2355.37</b>

The Petitioner has considered Debt Equity ratio of 70:30 for all capital expenditure proposed during the Control Period, except for R-APDRP schemes.

As the means of finance considered by the Petitioner is in line with the UERC Tariff Regulations, 2011, the Commission has considered the same. Further, the Petitioner has included Grants as a means of finance for R-APDRP Part B, however, as the Commission has not allowed scheme wise Capitalisation and the contribution of grants to funding is not known, the Commission has considered financing through grants on pro-data basis. The Commission has computed the proportion of grants in ratio of capitalisation approved by the Commission and capitalization proposed by the Petitioner. For the balance financing requirement the Commission has allowed Debt Equity ratio of 70:30. Accordingly, the means of finance considered by the Commission for year-wise capitalization approved by the Commission is given in Table below:

**Table 5.17: Financing of Capitalisation approved for the first Control Period (Rs. Crore)**

Sr. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16	Total
1	Capitalisation	339.92	350.64	355.77	1046.33
2	Financing				
	Debt	197.19	182.52	174.21	553.91
	Equity-State Govt.	84.51	78.22	74.66	237.39
	Grant-State Govt.	-	-	-	-
	Grant-Central Government	58.22	89.91	106.90	255.03
3	<b>Total</b>	<b>339.92</b>	<b>350.64</b>	<b>355.77</b>	<b>1046.33</b>

## 5.6 Human Resources Plan

In accordance with Regulation 9(2) of UERC Tariff Regulations, 2011, the Petitioner submitted the details in respect of its manpower planning for the first Control Period from FY 2013-14 to FY 2015-16.

The Petitioner submitted that India power sector in general requires augmentation of capacity across the value chain including manufacturing, project planning and implementation, financial management, operations and, maintenance management. Rapid growth in the power sector requires additional capacity building for the power utilities across the country. Also, the power sector employs highly skilled personnel with specialisation in related areas. Hence, the severe shortage calls for recruitment of such skilled employees and increase in training and development initiatives.

The Petitioner submitted that it has a total of 4024 regular employees (as on 01-12-2012) whereas the total Sanctioned posts are 6111. Owing to the shortage of staff, UPCL has recruited personnel from the Uttarakhand Purv Sainik Kalyan Limited (UPNL) on a contractual basis to fill a major portion of the vacant posts which are within the total number of sanctioned posts. As per data available as on January, 2011 a total of 1767 personnel have been engaged through UPNL on contractual basis against the vacancies.

The Petitioner further submitted that 215 employees are retiring in FY 2012-13, 211 in FY 2013-14, 197 in FY 2014-15 and 178 in FY 2015-16. UPCL added that the report on man power assessment, which includes the analysis of the current man power requirement of UPCL has been sent to the Government of Uttarakhand (GoU) for approval. Once the report is approved by GoU, it will be submitted to the Commission. The additional sanctioned posts will be filled within six months after approval from the Government of Uttarakhand.

The Petitioner thus submitted that as per its Recruitment Plan it has estimated recruitment of 1332 and 458 vacancies in FY 2013-14 and FY 2015-16, respectively within the sanctioned posts, and 572 in FY 2013-14 as additional posts. The Petitioner further submitted that it has recruited 879 personnel on contract basis from UPNL for the post of Technician Grade-II and in future, recruitment for this post will be on a regular basis and the existing posts will be filled by recruiting regular UPCL employees instead of UPNL personnel.

The Commission is of the view that although the Petitioner has proposed addition of 1332 in FY 2013-14, however, for making such substantial number of recruitment, it has not yet began the recruitment process. The Commission observed that the Petitioner has projected an ambitious recruitment plan which the Commission doubts that the Petitioner would be able to recruit. Thus, the Commission has spread the recruitment of 1332 employee against the sanctioned posts over the Control Period instead of considering the entire recruitment in one year. As regards 572 employees against additional posts proposed to be recruited in FY 2013-14, UPCL has not received sanction for the same and hence, these positions are not considered to be added. As regards recruitment of 458 Technician Grade-II proposed by Petitioner in FY 2015-16, it is understood that the positions are already occupied on contract basis from UPNL and UPCL is bearing the cost for it, so this recruitment will not result in additional costs, hence, these recruitments are not considered as addition while computing the growth factor. If the actual addition to number of employees is lower than the number of employee's addition considered in this Order, the impact of same shall be adjusted while carrying out the Truing Up. Based on the above, the Commission has considered recruitment of employees as under:

**Table 5.18: Number of Employees approved for FY 2013-14 to FY 2015-16**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Opening no. of Employees	4024	4257	4504
Recruitment	444	444	444
Retirement	211	197	178
Closing No. of Employees	4257	4504	4770

## **6. Commission's Analysis, Scrutiny and Conclusion on Truing up and MYT for the first Control Period**

### **6.1 Background**

Truing-up of various heads of expenses and revenues approved for the preceding year is an exercise, which is generally required to be carried out by the State Electricity Regulatory Commission along with the ARR and Tariff proceedings for the ensuing financial year. The Uttarakhand Electricity Regulatory Commission (Terms and Conditions for Truing up of Tariff) Regulations, 2008 notified on March 11, 2008 provides for Truing up of approved expenses and revenue either on the basis of provisional or audited accounts. These Regulations also specify the procedure for Truing up.

The Commission had, in its Order dated April 11, 2012, while carrying out the final truing up for FY 2009-10 based on the audited data, had also carried out the provisional truing up of the expenses and revenues for FY 2010-11 based on the provisional accounts. The Petitioner in its MYT Petition for the Control Period from FY 2013-14 to FY 2015-16 has submitted the audited accounts for FY 2010-11 and has requested the Commission for carrying out the final truing up of expenses and revenues for FY 2010-11 based on the audited accounts. Further, the Petitioner also sought truing up for FY 2011-12 based on the provisional accounts submitted alongwith the Petition. With a view to finalise the figures to the latest possible financial year, the Commission has decided to carry out the truing up of expenses and revenue for FY 2010-11 based on the audited accounts and the provisional truing-up for FY 2011-12 based on the provisional accounts.

The Commission, in the first Section of this Chapter has discussed the final truing-up for FY 2010-11, for which provisional truing-up was undertaken in the Tariff Order dated April 11, 2012. In the second Section of this Chapter, the Commission has discussed the provisional truing-up for FY 2011-12 based on the provisional accounts submitted by the Petitioner. Further, in the third Section of this Chapter the Commission has discussed the MYT Petition for the Control Period from FY 2013-14 to FY 2015-16.

#### **6.1.1 Past Adjustment**

The Petitioner has claimed past adjustments along with the carrying cost under the

following sub-heads:

- (a) Depreciation on the opening value of GFA as per Transfer Scheme
- (b) Depreciation on the capitalization not considered by the Commission in its previous Tariff Orders
- (c) Depreciation on the assets created out of grants received from Government (but no depreciation allowed by the Commission).
- (d) Return on Capital Base (9-11-2001 to 31-05-2004)
- (e) Return on Equity/Capital (01-06-2004 to 31-03-2010)

#### **Depreciation on the opening value of GFA as per Transfer Scheme**

The Petitioner submitted that the Commission has considered the opening value of GFA as Rs. 508.00 Crore, whereas the opening value of GFA as per Transfer Scheme is Rs. 1058.18 Crore.

Accordingly, the amount of depreciation not allowed by the Commission due to non-consideration of value of GFA as per the Transfer Scheme for the period from 09-11-2001 to 31-03-2011 is shown as follows:

**Table 6.1: Claim of Depreciation “As per Transfer Scheme” (Rs. Crore)**

Year	Depreciation
2001-02	16.96
2002-03	43.25
2003-04	43.3
2004-05	36.69
2005-06	16.70
2006-07	16.70
2007-08	16.70
2008-09	16.70
2009-10	16.70
2010-11	16.70
Total	240.40

#### **Depreciation on the “Capitalizations not considered by the Commission” in Tariff Orders**

The Petitioner submitted that the Commission has not considered the capitalization of Rs. 1318.25 Crore for FY 2005-06 to 2010-11 which includes assets created out of value of grant amounting to Rs. 565.42 Crore. The Petitioner further submitted that the Commission has allowed capitalization of Rs. 752.83 Crore only (Rs. 1318.25 – Rs. 565.42), in the absence of clearance



certificate of Electrical Inspector in respect of the HT works. The Petitioner requested that since it has invested money for creation of the assets and the non recovery (through depreciation) of the same, is adversely affecting the financial health of the company. The Petitioner requested the Commission to allow the depreciation on the assets capitalized and not considered by it in previous Tariff Orders. The amount of depreciation not allowed by the Commission, in this regard, is as follows:

**Table 6.2: Claim of Depreciation on "Capitalizations not considered by the Commission" (Rs. Crore)**

Year	Depreciation
2005-06	1.66
2006-07	3.41
2007-08	9.94
2008-09	15.37
2009-10	16.05
2010-11	28.73
<b>Total</b>	<b>75.16</b>

**Depreciation on the assets created out of grants received from Government:**

The Petitioner submitted that the Commission had not allowed depreciation on the assets created out of grant received from the Government on the basis of Accounting Standards according to which no depreciation is allowed on the assets created out of grant received and depreciation is also not allowed as per the provisions of Income Tax Act on such assets.

The Petitioner submitted that the grant is received for the assets, the life of which is about 25 years, while the connection charges are recovered from the consumers at one time only, i.e. at the time of release of the connection. The Petitioner further submitted that the consumer and his successors are not required to pay connection charges in spite of the fact that the connection may run for a period of 100 years or more. The Petitioner submitted that in case, depreciation is not provided on the assets created out of grants, the consumer could not get supply after the expiry of the life of the assets created out of grants. Hence, it is logical to allow depreciation on the assets created out of grants. The amount of depreciation not allowed by the Hon'ble Commission due to non-consideration of Assets created out of Grants, as submitted by the Petitioner, is shown in the following Table:

**Table 6.3: Claim of Depreciation on “Assets created out of Grant” (Rs. Crore)**

Year	Depreciation
2005-06	6.05
2006-07	11.15
2007-08	12.70
2008-09	18.88
2009-10	18.99
2010-11	21.58
<b>Total</b>	<b>89.35</b>

**Return on Capital Base (09-11-2001 to 31-05-2004):**

The Petitioner submitted that while truing up the expenses and revenues of the Petitioner Company, the Commission had allowed return on capital base as per the provisions of schedule VI for the period from 09-11-2001 to 31-05-2004 and, thereafter, applied the provisions of the UERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2004. However, as per the values of the Transfer Scheme, the return on capital base works out as Rs. 113.62 Crore.

**Return on Equity (01-06-2004 to 31-03-2010):**

The Petitioner submitted that it had inherited a net block of asset of Rs. 661.08 Crore and CWIP of Rs. 73.48 Crore from UPPCL consequent to the transfer scheme. The Petitioner submitted that the total assets of Rs. 734.56 Crore (Rs. 661.08 Crore & Rs. 73.48 Crore) was financed through long term loans of Rs. 253.53 Crore and balance Rs. 481.03 Crore was financed out of the liability of CPSU's of Rs 572 Crore which was converted into equity by GoU. Out of Rs. 481.03 Crore, the Petitioner has claimed interest on Rs. 372.77 Crore (Rs. 481.03 Crore – Rs. 108.26 Crore), i.e. after reducing the amount of the assets transferred to PTCUL, at the rate of 8.5% for the period from 01-06-2004 to 31-01-2010 and Return on Equity at the rate of 14% for the period from 01-02-2010 to 31-03-2011. The Petitioner submitted that as the opening GFA worth Rs. 108.26 Crore have been transferred to PTCUL, interest on the reducing value has been claimed for the period from 01-06-2004 and, accordingly, the total claim of interest/return on equity works out to Rs. 188.25 Crore.

As regards the carrying cost of deficit up to FY 2011-12, the Petitioner submitted that for FY 2001-02 to FY 2004-05 interest has been considered at a normative rate of 11% based on the market rates, whereas interest for FY 2005-06 to 2010-11 has been considered equivalent to the short term prime lending rate of the State Bank of India, i.e. the rate which has been allowed by the Commission on Working Capital.

The Summary of claims with respect to past adjustments as submitted by the Petitioner is shown below:

**Table 6.4: Summary of claims (Rs. Crore)**

Sr. No.	Particulars	Amount
A	Depreciation	404.91
A1	Impact of Transfer Scheme	240.4
A2	Non-consideration of capitalization by UERC	75.16
A3	Asset created out of grant	89.35
B	Return on Capital Base (09-11-2001 to 31-05-2004)	113.62
C	Return on Equity / Capital (01-06-2004 to 31-03-2011)	188.25
D	Carrying Cost of Deficit up till FY 2010-11	512.64
	<b>Sub-Total</b>	<b>1,219.42</b>

As the Petitioner submitted that the Government of Uttarakhand vide its order No.-117/I(2)/2011-05/19/2002, dated 27-04-2012 approved the Transfer Scheme of assets and liabilities executed between UPPCL and UPCL on October 10, 2003, the Commission asked the Petitioner to submit a copy of the Order/letter on approval of the Scheme. However, as discussed in Chapter 4 in the Commission's Approach, the Commission observed that the letter submitted by UPCL is not sufficient evidence towards approval of the Transfer Scheme. The Petitioner appears to be in some haste to finalise the transfer scheme without going into the merits of the transfer scheme in light of the observations made by the Commission in its previous Tariff Orders regarding the assets and liabilities inherited by UPCL from UPPCL consequent to the Transfer Scheme. One such instance of the same is the GFA inherited by UPCL. The total value of GFA inherited by UPCL from UPPCL was Rs. 1058 Crore, but no detail of the same was available in the Transfer Scheme. The Commission in its Tariff Order dated 25.04.2005 held as under:

*"If proper registers of fixed assets are maintained by a company, determining the historical value of the fixed assets is simple and does not pose any problem. In the present case, the petitioner company viz. UPCL has not maintained proper registers and, therefore, for determining the historical value of its fixed assets one has to fall back upon secondary methods. Most of the petitioner company's fixed assets were transferred from UPPCL on 09.11.2001. Accordingly, the value of assets so transferred would be the opening value of fixed assets of the petitioner company. This value has been shown differently in different contexts. In the provisional accounts of the petitioner company, filed along with the tariff petition for the year 2003-04, this opening value of fixed assets was shown as Rs. 478.86 crore. In the same petition this value as on 31.03.2002 was shown as Rs. 507.34 crore. In the last Tariff Order, the Commission had accepted the above value.*

*In the present Petition, the value of these assets has been claimed to be Rs.1,058.18 crore as on 09.11.2001 which is a normative value agreed to between UPPCL and UPCL in the transfer scheme. It is clear from paragraph 2 & 3 of the transfer scheme that this value has not been worked out on the basis of the cost of acquisition of these assets but has been calculated on the basis of a formula agreed to, between the two companies. This is a normative value and is, therefore, different from the historical value which is the original cost of their acquisition. Putting a normative value on these assets in the transfer scheme may have become necessary as a substantial part of the liabilities earmarked for transfer to Uttaranchal had no corresponding assets to match. Therefore, while actual assets remained the same their value was raised on normative basis to match the value of total liabilities transferred to Uttaranchal. The Regulations framed under the Electricity Act, 2003 require certain costs like depreciation to be calculated based only on the historical cost of fixed assets. The distinction between any normative value and the true historical cost of these assets is, therefore, important and should not be lost sight of, particularly when the two values are so much at variance.*

*The Transfer Scheme envisaged transfer of total liabilities of Rs. 1,239.90 crore, to UPCL and to match this figure, the value of fixed assets was worked out and raised on normative basis. However, the liabilities actually transferred to the petitioner company stood reduced to the extent of CPSUs dues of Rs.572 crore which had been taken over by the Government even before the transfer scheme was finalized and that also with effect from 30-09-2001. Government's assistance given for this purpose, therefore, amounts to a grant and necessary correction for that has to be done in the value of fixed assets."*

In the provisional accounts of the petitioner company for FY 2001-02, the opening value of fixed assets was shown as Rs. 478.86 Crore and the Petitioner Company had submitted that the same was based on the information available with its field offices. However, subsequently, the transfer scheme was agreed upon by UPCL with UPPCL wherein the opening value of fixed assets was taken as Rs. 1058 Crore. The Petitioner apportioned this value to the various asset class based on the allocation available for Rs. 478.00 Crore which is unacceptable. It clearly suggests that the Petitioner has merely considered the value of assets without any details thereof.

Further, the Petitioner has submitted a letter from Secretary (Energy), GoU addressed to MD, UPCL informing him that the transfer scheme is being approved with the condition that that UPCL would carry out all the necessary legal as well as administrative formalities. Hence, this letter cannot be considered as finalization of the transfer scheme which requires notification under

the Reorganization Act. Accordingly, the Commission is of the view that in the absence of finalization of transfer scheme, it will not be appropriate to carry out the final truing up of previous years for depreciation as well as return on capital base and return on equity as suggested by the Petitioner. **Further, the Petitioner is also directed to submit its response on the observations made by the Commission not only in this Tariff Order but also in its previous Tariff Orders with regard to the Transfer Scheme. The Commission is of the view that this inordinate delay towards finalization of the Transfer Scheme despite repeated directives is not acceptable in the best interest of the consumers of the State.**

**The Commission, if satisfied that there is lack of sincere effort on part of the Petitioner to get the Transfer Scheme finalised within a reasonable time limit might not consider any further revision in capital cost of transferred asset in the interest of the Consumers of the State. Hence, the Commission directs the Petitioner to expedite its efforts for getting the Transfer Scheme finalised within six months from the date of this Order.**

The Commission has not been allowing capitalization to UPCL in FY 2007-08 as UPCL failed to comply with the Commission's directions to get the clearance certificate from the Electrical Inspector of all the HT/EHT works energized by it. The Commission had also insisted on UPCL to give the details of LT works capitalized by it since FY 2007-08 and UPCL failed to provide this also. The details of LT works were required so that at least they can be allowed as there was no requirement of getting clearance from the Electrical Inspector before energizing the same. However, no details were provided by UPCL and the Commission had to disallow the capitalization. In this regard, it would be relevant to refer to Rule 63 of the Indian Electricity Rule, 1956 which stipulates as under:

*"63. Approval by Inspector-*

*(1) Before making an application to the Inspector for permission [to commence or recommence supply after an installation has been disconnected for one year and above] at high or extra-high voltage to any person, the supplier shall ensure that the high or extra-high voltage electric supply lines or apparatus belonging to him are placed in position, properly joined and duly completed and examined. The supply of energy shall not be commenced by the supplier unless and until the Inspector is satisfied that the provisions of rules 65 to 69 both inclusive have been complied with and the approval in writing of the Inspector have been obtained by him..."*

Thus, Rule 63 clearly mandates that no supply of energy will commence at high or extra-high voltage without obtaining the approval of the Electrical Inspector so as to ensure safety of life and assets. The Commission cannot jeopardise the safety by relaxing the provisions of the Act/Rules. The Petitioner cannot charge its lines/substations before getting approval of the Inspector, hence, there is no question of allowing capitalisation of any assets which is not cleared by the Electrical Inspector. **Hence, for future also the Petitioner is directed to energise/capitalise the HT works only after obtaining clearance by the Electrical Inspector.** The Commission has so far allowed capitalisation of the assets, right from the date on which it was charged/capitalised irrespective of the fact that clearances from Inspector have been received at a later date. **The Petitioner is hereby cautioned to take note of the same, as the Commission, for the MYT period, would be recognising the capitalisation of any asset from the date of clearances obtained from the Electrical Inspector.**

Regarding the contention of UPCL to allow it depreciation on the Grants received for assets so that it can carry out replacement of the asset after its useful life is over. The Commission has already dealt with this issue in its previous Tariff Orders and hence, is not reiterating the same again. However, the Commission would like to point out that depreciation in electricity sector is allowed for repayment of loans and not for replacement of assets. For replacement of assets created out of grant/consumer contribution after a useful life can be done either from the internal resources or through additional borrowings for which servicing cost is allowed in tariffs in accordance with the Regulations. Hence, the petitioner's submission that in case depreciation is not provided on the assets created out of Grant, the consumers will not get the supply after the useful life of the assets is not correct and unfounded. The Petitioner must bear in mind that their approach of raising issues on which Order of the Commission already exist, which have attained finality, is highly improper and legally unsustainable. The Commission may consider returning their further Petitions if they contain such issues on which final order of the Commission exist.

## **6.2 Truing up for FY 2010-11**

UPCL in its Petition has submitted that the Commission vide its Order dated April 11, 2012 had trued up the expenses and revenue for FY 2009-10 based on the audited data and for FY 2010-11 based on the provisional data in the absence of availability of audited data at that time. The Petitioner also submitted that annual accounts for the FY 2010-11 have since been audited and on

the basis of these audited accounts, the Petitioner has sought the final truing up of expenses and revenue for FY 2010-11. The Commission has analysed the head-wise elements of ARR and Revenue in the succeeding paragraphs.

### 6.2.1 Sales

The Commission had approved the energy sales for FY 2010-11 in the Tariff Order dated April 10, 2010 as 6280.12 MU. However, while carrying out the truing up for FY 2010-11 the Commission in the order dated April 11, 2012, had provisionally approved the sales for FY 2010-11 at 7222.07 MU for FY 2010-11. However, the Petitioner in the current petition has submitted the actual sales for FY 2010-11 as 7250.68 MU.

The Commission recasted the sales of departmental employees, unmetered consumers in domestic and PTW category based on the load factor, i.e. sales per connected load, of metered consumers for reasons elaborated in Para 6.3.2 of this Order. Accordingly, for FY 2010-11 the Commission has reworked the sales as 7165.40 MU which is shown in Table below:

**Table 6.5: Category-wise Sales for FY 2010-11 (MU)**

Categories	Provisionally Trued up	Claimed Now	Approved in this Order
Domestic (RTS - 1)	1478.79	1485.57	1417.71
Non-domestic, incl Commercial (RTS - 2)	813.25	812.52	812.52
Public Lamps (RTS - 3)	53.86	53.86	53.86
Private Tubewell/Pump Sets (RTS - 4)	160.46	183.02	165.59
Government Irrigation System (RTS - 5)	112.97	112.97	112.97
Public Water Works (RTS - 6)	276.38	276.37	276.38
Industrial Consumers (RTS - 7)	4197.72	4197.72	4197.72
Mixed Load (RTS - 8)	120.85	120.86	120.85
Railway Traction (RTS - 9)	7.80	7.80	7.80
<b>Total</b>	<b>7222.07</b>	<b>7250.68</b>	<b>7165.40</b>

### 6.2.2 Distribution Losses

In the present Petition, the Petitioner has submitted its distribution losses for FY 2010-11 at 21.61%. However, as per the actual data submitted by the Petitioner, the Commission has recomputed the actual distribution losses for FY 2010-11 as 22.72%. The Commission for FY 2010-11 had approved the distribution losses of 19%.

The Commission, in accordance with the approach adopted in its previous Orders, has not disallowed the power purchase cost for higher distribution losses as compared to the approved

distribution losses. Considering the actual input energy of 9,272.57 MU at distribution periphery (T&D interface) for FY 2010-11 and applying the approved loss level of 19.00% for the year, the Commission has re-estimated the sales of 7510.78 MU for FY 2010-11. As against this sale of 7510.78 MU, the Commission has considered the recasted actual sales of 7165.40 MU. Therefore, there is a loss of 345.39 MU on account of commercial inefficiencies of the Petitioner failing to achieve target distribution loss approved by the Commission. The Commission has considered the revenue of Rs. 127.33 Crore at an average billing rate of Rs. 3.69/unit on this additional sale on account of higher distribution losses while provisionally truing up the ARR for FY 2010-11. The following Table shows actual distribution loss and approved distribution loss along with efficiency loss for FY 2010-11 as explained above.

**Table 6.6: Assessed Distribution losses for FY 2010-11 (MU)**

S. No.	Particulars	Provisionally Trued up	Claimed Now	Approved in this Order
a	Actual/ Re-casted Sales	7222.07	7250.68	7165.40
b	Approved Distribution Loss Level	19.00%	21.61%	19.00%
c	Actual Energy Input at T-D Interface	9209.14	9249.00	9272.57
d	Sales at Actual Energy Input with 19.00% Loss (MU) (c*(1-b))	7459.40	7491.69	7510.78
e	Loss of Sales due to Inefficiency (d-a)	237.33	241.01	345.39

### **6.2.3 Power Purchase Expenses (including Transmission Charges)**

The Petitioner has submitted the actual Power Purchase cost for FY 2010-11 as Rs. 2,292.45 Crore. This amount includes inter-State and intra-State transmission charges of Rs. 237.42 Crore. Accordingly, the net Power Purchase cost excluding transmission charges for FY 2010-11 works out to Rs. 2,055.03 Crore as against the power purchase expenses of Rs. 1,720.49 Crore approved by the Commission in its Order dated April 10, 2010. While working out this power purchase cost, the Petitioner has submitted that it has considered the cost of free power at the average power purchase rate in line with the methodology adopted by the Commission.

In the Tariff Order dated April 11, 2012, the Commission had carried out the provisional true up of FY 2010-11 expenses and had approved Rs. 2293.36 Crore towards power purchase expenses against Rs. 2292.45 Crore now claimed by UPCL for the year. The Commission has analysed the source-wise power purchase from the month-wise data obtained from the Petitioner and actual bills for FY 2010-11. Further, the Commission has considered rate for free power equivalent to the average power purchase rate for purchase from all the firm sources except free energy. Based on the



above approach, the rate of free power works out as Rs. 2.02/kWh as against Rs 2.03/kWh submitted by the Petitioner. The Commission however, observed that for computation of free power rate, the total power purchase cost from UJVNL Ltd. claimed by the Petitioner is Rs. 655.68 Crore towards purchase of 4414.69 MU as against the cost of power purchase of Rs. 647.85 Crore shown in the audited balance sheet for FY 2010-11. Hence, the Commission has considered this amount as approved by it for computation of free power rate. Further, the Commission in the data gaps/deficiencies asked the petitioner to submit details of energy overdrawn and UI charges imposed on UPCL at system frequency below 49.2 Hz and 49.7 Hz for FY 2010-11 and FY 2011-12, as per the Commission's directive in the previous Order till April 8, 2013. The Petitioner has not submitted the desired information to the Commission. The Commission in absence of such data has not considered the impact of the same, however, **the Commission hereby directs the Petitioner to submit the desired data within two month from the issue of this Tariff Order.** The Commission shall consider the impact of the same for FY 2010-11 as well as FY 2011-12, once desired information is received from the Petitioner. The Commission accordingly approves the power purchase cost for FY 2010-11 of Rs. 2286.07 Crore against Rs. 2292.45 Crore claimed by the petitioner as shown in the table below.

**Table 6.7: Power Purchase Expenses Claimed and Approved for FY 2010-11 (Rs. Crore)**

Generating Stations	Provisionally Approved			UPCL Claimed			Approved after Truing Up		
	Quantum (MU)	Cost (Rs. Crore)	Cost per Unit (Rs./kWh)	Quantum (MU)	Cost (Rs. Crore)	Cost per Unit (Rs./kWh)	Quantum (MU)	Cost (Rs. Crore)	Cost per Unit (Rs./kWh)
NTPC	2,845.64	688.24	2.42	2667.27	688.24	2.58	2667.27	688.24	2.58
NPCL	186.62	49.33	2.64	174.66	49.32	2.82	174.66	49.32	2.82
NHPC (Excl Tanakpur & Dhauliganga)	449.91	119.44	2.65	423.44	119.45	2.82	423.44	119.45	2.82
UJVNL	4414.7	647.85	1.47	4308.01	647.85	1.50	4308.01	647.85	1.50
SJVNL	48.15	13.41	2.79	45.07	13.41	2.97	45.07	13.41	2.97
THDC(Excl Free power from tehri & Koteshwer)	101.43	49.4	4.87	94.93	49.32	5.19	94.93	49.32	5.19
IPPS	231.44	71.86	3.10	230.51	71.87	3.12	230.51	71.87	3.12
Open market purchase	243.07	101.42	4.17	227.51	101.43	4.46	227.51	101.43	4.46
UI Overdrawl	643.08	228.95	3.56	601.92	228.95	3.80	601.92	228.95	3.80

**Table 6.7: Power Purchase Expenses Claimed and Approved for FY 2010-11 (Rs. Crore)**

Generating Stations	Provisionally Approved			UPCL Claimed			Approved after Truing Up		
	Quantum (MU)	Cost (Rs. Crore)	Cost per Unit (Rs./kWh)	Quantum (MU)	Cost (Rs. Crore)	Cost per Unit (Rs./kWh)	Quantum (MU)	Cost (Rs. Crore)	Cost per Unit (Rs./kWh)
Banking				10.36			10.36		
<b>Sub-Total</b>	<b>9,164.04</b>	<b>1,969.90</b>	<b>2.15</b>	<b>8783.70</b>	<b>1969.83</b>	<b>2.24</b>	<b>8783.70</b>	<b>1969.83</b>	<b>2.24</b>
<b>Free power</b>									
Tanakpur	43.75	8.67	1.98	40.54	8.75	2.16	40.54	8.17	2.02
Dhauliganga	134.6	26.66	1.98	125.82	26.20	2.08	125.82	25.36	2.02
Tehri	371.97	73.68	1.98	348.16	72.53	2.08	348.16	70.17	2.02
Vishnuprayag	202.15	40.04	1.98	189.21	40.74	2.15	189.21	38.13	2.02
<b>Sub-Total</b>	<b>752.47</b>	<b>149.04</b>	<b>1.98</b>	<b>703.74</b>	<b>148.22</b>	<b>2.11</b>	<b>703.74</b>	<b>141.83</b>	<b>2.02</b>
<b>Transmission and Other Cost</b>					<b>237.42</b>			<b>237.42</b>	
<b>Less: UI Received</b>	<b>293.2</b>	<b>-63.01</b>	<b>2.15</b>	<b>294.62</b>	<b>-63.01</b>	<b>-2.14</b>	<b>294.62</b>	<b>-63.01</b>	<b>-2.14</b>
Banking	35.36								
<b>Total Power Purchase Cost</b>	<b>9,587.95</b>	<b>2,055.93</b>	<b>2.14</b>	<b>9192.82</b>	<b>2292.45</b>	<b>2.49</b>	<b>9192.82</b>	<b>2286.07</b>	<b>2.49</b>

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

The Petitioner has claimed O&M expenses (including employee cost, R&M expenses and A&G expenses) for FY 2010-11 as Rs. 286.39 Crore based on its audited accounts against the amount of Rs. 286.32 Crore approved by the Commission during provisional truing up for FY 2010-11, in its Order dated April 11, 2012.

As regards the capitalisation of employee and A&G expenses, for FY 2010-11 the Petitioner submitted that due to multiplicity of functional units as well multiplicity of functions in a particular unit, employee cost and administration and general expenses incurred on supervision of capital works have been capitalized at the rate of 18.45% in accordance with UPCL's Policy.

The Petitioner further submitted that it has included Rs. 44.28 Crore pertaining to arrears on account of implementation of Sixth Pay Commission's report during FY 2010-11 in employee expenses.

Since, the variation between the amount claimed and amount already approved by the Commission is marginal, the Commission has decided to consider the O&M expenses now claimed

by the Petitioner based on audited accounts. However, out of the O&M expenses now claimed by the Petitioner, the Commission has disallowed an amount of Rs. 0.46 Crore on account of penalty paid by the Petitioner during FY 2010-11 in respect of supply of electricity without meters (Order dated 11.08.2005) and facilitation of bill collection system and related consumer services (Order dated 01.09.2005). The Commission in the said Orders had held that the expenditure incurred on this account would not be passed on to consumers in tariffs and it was for the company's Board of Directors to decide as to whether this expenditure should be borne by the delinquent company or the same should be recovered from the concerned employees. Thus, the same is not being allowed as pass through in tariffs and has, accordingly, been reduced from the expenses of UPCL.

Accordingly, the Commission has allowed net O&M expenses at Rs. 285.93 Crore for FY 2010-11 against Rs. 286.39 Crore claimed by the petitioner as given in the below Table:

**Table 6.8: O&M Expenses approved by the Commission (Rs. Crore)**

Particulars	Approved provisionally vide Order dated April 11, 2012	Actual as Per Audited Account	Approved after Truing Up
Operation and Maintenance Expenses	286.32	286.39	285.93

## 6.2.5 Cost of Assets & Financing

### 6.2.5.1 Capital Cost of Original Assets

The Petitioner has submitted the value of Gross Fixed Assets (GFA) as on 08.11.2001 at Rs. 508.00 Crore as per the value recognised by the Commission in its Tariff Orders issued from time to time in its true up petition for FY 2010-11. However, where the Petitioner is claiming additional cost on account of finalization of the transfer scheme, the Petitioner has submitted the value of GFA as on 08.11.2001 as Rs. 1058.18 Crore and the same value has been reflected by the Petitioner in the Annual Accounts for FY 2010-11. The Petitioner has requested the Commission to recognize the actual value of GFA as on 08.11.2001 on the bases of finalization of the Transfer Scheme and allow depreciation, accordingly, on the value of final GFA as detailed in above paragraphs of this Section.

The Commission observed that the issue of original value of fixed assets for the Petitioner was examined in detail in Paras 5.3.1 and 5.3.2 of the Order dated April 25, 2005. For reasons provided in the said Order, the original value of GFA as on November 09, 2001 was fixed at Rs. 508 Crore for the Petitioner, instead of the value of Rs 1058.18 Crore assigned in the Provisional Transfer

Scheme. The Commission has already recorded the reasons for the same in its previous Tariff Orders. The Commission has further explained its approach regarding the same in Chapter 4 and Section 6.2.1 of this Order. Since, there is no change in the factual position the Commission feels it unnecessary to revisit the above issue. The Commission, therefore, has considered the original value of the Petitioner's GFA as on November 09, 2001 as Rs. 508 Crore.

#### **6.2.5.2 Capitalisation of Assets**

Prior to Tariff Order for FY 2007-08 and FY 2008-09 dated March 18, 2008, the Commission had been allowing capitalizations of HT/EHT works without specific need for clearance certificate by the Electrical Inspector. However, in view of occurrences of electrical accidents and taking cognizance of the provision of IE Rules which compulsorily requires Electrical Inspector's Certificate before energization of HT/EHT works, the Commission from the Tariff Order for FY 2007-08 and FY 2008-09 dated March 18, 2008 onwards, insisted for Electrical Inspector's Certificates for capitalisation of any assets and allowed capitalisation of only such HT/EHT works for which Electrical Inspector's clearance certificate was provided.

This approach continued in the subsequent Tariff Orders also namely FY 2009-10, FY 2010-11 and FY 2011-12 and the Commission again disallowed capitalization of the HT/EHT schemes as Electrical Inspector's Clearance Certificate had not been provided by the Petitioner. However, the Commission also stated that in case the Petitioner submits the scheme-wise details of various HT/EHT works under taken by it along with the Electrical Inspector's Clearance Certificate and details of financing the scheme, the Commission may consider the same for capitalization subject to prudence check.

During the last tariff order proceedings for FY 2012-13, the Petitioner had submitted Electrical Inspector's clearance certificates for some of the HT assets capitalised. However, in most of the cases, the Commission observed that the Electrical Inspector instead of clearing the scheme has recorded its observations on the certificates, which the Commission had not considered in the absence of proper clearance of the Electrical Inspector.

The Petitioner now has submitted Electrical Inspector Certificate for Capitalization of Rs. 142.13 Crore from FY 2007-08 onwards. However, the total capitalization of assets from FY 2007-08 to FY 2011-12 as per accounts is Rs. 1825.68 Crore. The Commission at this stage has allowed capitalization of assets for which Electrical Inspector Certificate has been submitted from FY 2007-08

to FY 2011-12 and has accordingly updated the value of Opening GFA for FY 2010-11. **The Commission directs the Petitioner to submit the Electrical Inspector Certificate for the balance assets along with reconciliation of capitalization amount as per accounts.** The Commission would consider allowing the impact of capitalization from FY 2007-08 onwards only after complete details for the same are submitted by the petitioner. Further, the Commission would like to point out that the delay on this account is due to the inefficiency of the petitioner for which it will not be allow any carrying cost.

With a view to allow capitalization of atleast LT works, till the Petitioner completes the requisite compliances in respect of HT works, the Commission has been repeatedly asking the Petitioner to segregate the HT and LT works and submit to the Commission, the scheme-wise detail of capital expenditure along with its funding mechanism. The Petitioner has not submitted the scheme-wise (project-wise) detail of assets capitalised and means of finance for these schemes. The Petitioner submitted that break up for LT/HT works capitalized for FY 2007-08 to FY 2010-11 was not available with Corporate office and requested the Commission to grant waiver on the same.

As LT schemes does not require Electrical Inspector's clearance, the Commission has allowed capitalization of works pertaining to release of new LT connection submitted by the Petitioner distinctly and also capex related expenses such as depreciation, return on equity and interest on these works have been allowed in accordance with the applicable Tariff Regulations. Accordingly, the Commission has considered the additional expenditure incurred or the deficit amount funded by the Petitioner for release of LT connections. The Commission has also allowed the capitalization of other assets like Vehicles, Furniture and Fixtures and Office Equipment, which does not require Electrical Inspector's clearance, in accordance with the audited accounts for FY 2010-11 submitted by the Petitioner.

The Commission has thus recasted the Gross Fixed Assets till FY 2010-11, considering the capitalization of the schemes for which Electrical Inspector's clearance has been received. This has necessitated revision of figures of GFA as well as its funding mechanism, through grants, debt and equity. The Commission, based on the details available with it has considered actual loans and grants for assets financed for different Schemes. Further, for capitalization through internal resources, the Commission has considered the financing at the normative debt-equity ratio of 70:30 and has reworked the interest on loans and return on equity accordingly. The summary of year-

wise GFA capitalization as considered by the Commission is provided in the Table given below:

**Table 6.9: GFA and Additional Capitalisation till FY 2009-10 (Rs. Crore)**

	Particulars	Opening value	Additions during the year	Deletions during the year	Transferred to PTCUL	Closing value of GFA
2001-02	Grant etc.	17.50	5.63	0.40	-	22.73
	Loan	490.50	2.47	4.54	-	488.43
	Internal resources		22.64	-	-	22.64
	<b>Total</b>	<b>508.00</b>	<b>30.74</b>	<b>4.94</b>	<b>-</b>	<b>533.80</b>
2002-03	Grant etc.	22.73	43.44	3.87	-	62.30
	Loan	488.43	26.63	17.16	126.34	371.56
	Internal resources	22.64	29.87	-	-	52.51
	<b>Total</b>	<b>533.80</b>	<b>99.94</b>	<b>21.03</b>	<b>126.34</b>	<b>486.37</b>
2003-04	Grant etc.	62.30	9.32	9.11	-	62.50
	Loan	371.56	129.59	22.76	19.76	458.62
	Internal resources	52.51	8.15	-	-	60.66
	<b>Total</b>	<b>486.37</b>	<b>147.05</b>	<b>31.87</b>	<b>19.76</b>	<b>581.79</b>
2004-05	Grant etc.	62.50	149.40	8.27	-	203.64
	Loan	458.62	49.39	18.80	-	489.21
	Internal resources	60.66	87.16	0.59	-	147.23
	<b>Total</b>	<b>581.79</b>	<b>285.95</b>	<b>27.66</b>	<b>-</b>	<b>840.08</b>
2005-06	Grant etc.	203.64	41.03	11.74	-	232.93
	Loan	489.21	77.44	19.80	-	546.85
	Internal resources	147.23	14.89	1.15	-	160.97
	<b>Total</b>	<b>840.08</b>	<b>133.36</b>	<b>32.69</b>	<b>-</b>	<b>940.75</b>
2006-07	Grant etc.	232.93	145.00	19.27	-	358.65
	Loan	546.85	22.18	19.62	-	549.41
	Internal resources	160.97	160.55	1.83	-	319.70
	<b>Total</b>	<b>940.75</b>	<b>327.73</b>	<b>40.72</b>	<b>-</b>	<b>1,227.76</b>
2007-08	Grant etc.	358.65	19.60	30.69	-	347.57
	Loan	549.41	6.23	25.34	-	530.30
	Internal resources	319.70	39.88		-	359.58
	<b>Total</b>	<b>1,227.76</b>	<b>65.71</b>	<b>56.03</b>	<b>-</b>	<b>1,237.44</b>
2008-09	Grant etc.	347.57	37.33	26.35	-	358.55
	Loan	530.30	2.28	21.76	-	510.83
	Internal resources	359.58	57.73		-	417.31
	<b>Total</b>	<b>1,237.44</b>	<b>97.35</b>	<b>48.11</b>	<b>-</b>	<b>1,286.68</b>
2009-10	Grant etc.	358.55	19.53	155.46	-	222.62
	Loan	510.83	1.28	128.36	-	383.75
	Internal resources	417.31	60.85		-	478.17
	<b>Total</b>	<b>1,286.68</b>	<b>81.67</b>	<b>283.82</b>	<b>-</b>	<b>1,084.53</b>

Based on the above, the Opening GFA for FY 2010-11 works out to Rs. 1084.53 Crore as against Rs. 848.50 Crore allowed by the Commission while carrying out the provisional true up of FY 2010-11. The details of capitalization for FY 2010-11 are given below:

**Table 6.10: GFA and Additional Capitalisation for FY 2010-11 (Rs. Crore)**

Particular	Provisionally Trued up in TO dated 11.04.2012	Approved in this Order
Opening Balance of GFA	848.50	1084.53
Addition during the year	81.50	89.11
Deletion during the year	-	
Closing Balance of GFA	930.00	1173.64

While recasting the closing balance of GFA for FY 2010-11, the Commission has, however, not considered those HT/EHT schemes for which Electrical Inspector's Clearance Certificate have not been provided by the Petitioner since FY 2007-08 onwards. In case the Petitioner submits the scheme-wise details of various HT/EHT works under taken by it since FY 2007-08 onwards along with the Electrical Inspector's Clearance Certificate, the Commission may consider the same for capitalization subject to prudence check.

As per audited accounts, there has been deduction of assets to the extent of Rs. 198.65 Crore during FY 2010-11. However, as the Commission has not considered complete addition of assets as per the audited accounts due to non-submission of detailed information by the Petitioner, it would not be appropriate to consider the deduction of assets at this stage. Thus, the Commission has not considered any reduction in asset base of the Petitioner. However, the Commission shall consider the same while determining the impact of total capitalization on availability of complete information on capitalization of assets.

The Commission in its Tariff Order dated October 23, 2009 for FY 2009-10 had directed the Petitioner to get an independent audit of the value of assets capitalized since 09-11-2001 which should cover the date of capitalization, cost of assets including IDC and its financing, segregating the capital cost into loan, equity and grants/consumer contribution and submit the same within a period of six months. However, the Petitioner has submitted details till FY 2009-10 only. **The Commission again directs the Petitioner to get the audit of the assets capitalized since FY 2009-10 till FY 2012-13 and submit the complete Audit Report to the Commission within 6 months of the issue of this Tariff Order.**

Further, the Commission has also noted that the Accounting Codes in the books of the Petitioner do not provide segregated information of the Projects/Schemes/Capital Works. **The Commission directs the Petitioner to harmonise its Accounting codes with the Projects/ Schemes / Capital Works, so that expenses against each of the Scheme can be identified clearly.**

## 6.2.6 Financing of Capital Assets

Financing of an asset (i.e. debt, equity and grants components) is required to ascertain the capital related expenses such as Interest, Depreciation and Return on Equity of a licensee. As the Petitioner has submitted Electrical Inspector Certificate for Capitalisation of Rs. 142.13 Crore from FY 2007-08 onwards, the Commission has allowed the Capitalisation of such assets and accordingly updated the Opening GFA for FY 2010-11. This has necessitated revision of figures of GFA as well as its funding mechanism vide grants, debt and equity for FY 2010-11 as discussed earlier. The Commission based on the details available with it has considered actual loans and grants for assets financed for different Schemes. Further, for capitalization through internal resources, the Commission has considered the financing at the normative debt-equity ratio of 70:30 and has reworked the interest on loans and return on equity accordingly. The following Table shows the revised means of finance as considered by Commission for different assets allowed to be capitalized for FY 2010-11:

**Table 6.11: Means of Finance during FY 2010-11 (Rs. Crore)**

Particulars	FY 2010-11 (considering Audited Accounts)			
	Grant etc.	Loan	Internal Resources	Total
<b>Opening GFA</b>	<b>222.62</b>	<b>383.75</b>	<b>478.17</b>	<b>1,084.53</b>
Additions during the year	3.48	59.94	25.69	89.11
Deletion during the year				
<b>Closing GFA</b>	<b>226.09</b>	<b>443.69</b>	<b>503.86</b>	<b>1,173.64</b>

## 6.2.7 Interest and Finance Charges

The Petitioner has claimed Interest and Finance Charges of Rs. 66.77 Crore for FY 2010-11 against the amount of Rs. 77.48 Crore approved by the Commission in its Order dated April 11, 2012 while carrying out the provisional truing up for FY 2010-11.

The Petitioner has considered the interest expenses for FY 2010-11 on actual basis as is reflected in Schedule 17 of the accounts except for REC (old loan) which has been considered on the basis of the re-schedulement package of REC (old loan) as determined by the Commission in Annexure 7 of the Tariff Order of FY 2009-10. Also, the Petitioner has not considered interest on GPF and UP Govt Loan.

In reply to the Commission's query, the Petitioner submitted detailed reconciliation of Interest expenses as claimed by it in the Petition and that appearing in the accounts. In the



reconciliation statement it was observed that the Petitioner has included the cost of short term funding through Overdraft facility to fund Working Capital requirement under the head of 'Other Finance and Bank Charges' of Rs. 4.13 Crore.

As the Working Capital is allowed separately on normative basis, interest on short term funding through Overdraft facility cannot be allowed under interest expenses. The Commission has already allowed Rs. 12.42 Crore as normative interest on working capital to the Petitioner for FY 2010-11 considering the collection efficiency of 96%. Any additional interest expense borne by the Petitioner on account of working capital requirement is due to its inefficiency to collect dues from the consumers. As per the Regulations, the Commission approves the ARR on accrual basis and not collection basis and hence the entire additional expenses due to inefficiency of the Utility to collect the revenue cannot be loaded on to the consumer.

Further the expense head "Interest on Loans" to be allowed as per UERC Tariff Regulations include the cost of funding capital expenditure through loans and not the cost of borrowing to meet the working capital requirement as the interest on working capital on normative basis is allowed separately. Thus the Commission has not allowed Rs. 4.13 Crore on account of Overdraft facility.

The Petitioner has again claimed interest on AREP Loans which has not been allowed by the Commission in its previous Tariff Orders for reasons given in the respective Orders. Further, the petitioner has not submitted any justification for allowing the same and hence, the Commission is not allowing any interest on AREP Loans. The Commission has worked out the Interest on Loans for FY 2010-11 considering the loan amount corresponding to the assets capitalised in the year based on the approved means of finance, as shown in the Table below:

**Table 6.12: Interest on Govt. of Uttarakhand Loans for FY 2010-11 (Rs. Crore)**

Particulars	Opening Balance	Addition	Repayment	Closing Balance	Interest Approved in this Order
APDRP	4.38	0.00	0.12	4.27	0.40
District Plan	2.19	0.00	1.96	0.23	0.11
PMGY	3.52	0.00	0.27	3.25	0.39
State Plan	8.25	0.00	2.12	6.13	0.72
MNP	59.16	0.00	4.23	54.93	6.57
AREP	40.00	0.00	8.02	31.98	0.00
RGVY	6.96	0.00	0.94	6.01	0.78
<b>Sub-Total</b>	<b>124.45</b>	<b>0.00</b>	<b>17.66</b>	<b>106.80</b>	<b>8.97</b>
Others	198.52	59.94	35.03	223.43	17.99
<b>Total</b>	<b>322.97</b>	<b>59.94</b>	<b>52.69</b>	<b>330.23</b>	<b>26.96</b>

**6.2.7.1 Interest on Security Deposit**

The details of the actual Consumer Security Deposit for FY 2010-11 and the computation of Interest on Consumer Security Deposit as submitted by the Petitioner are as below:

**Table 6.13: Consumers Security Deposit Details for FY 2010-11 (Rs. Crore)**

Amount at the beginning of the year	249.20
Amount added during the year	54.38
50% of the above	27.19
Average Security Deposit during the year	276.38
Interest @ 6%	16.58
Less: already accounted by the field units	6.25
Provision now to be done	10.33

The Petitioner added that the amount of Rs 54.38 Crore was received as consumer security deposit for FY 2010-11 and Rs. 297.85 Crore was the gross amount of the total progressive credit at the end of month of March, 2011. The amount of Rs 48.64 Crore is the net balance arrived at after deducting the total progressive debit of Rs 5.73 Crore at the end of month of March, 2011 from the progressive credit. The progressive debit amounts to the total refund of consumer security deposit made in FY 2010-11.

The Commission is of the view that interest on Security Deposit should be allowed in the ARR on actual basis and not on provisional or normative basis. However, in the absence of information on actual interest paid, the Commission has considered net addition of Rs. 48.64 Crore as per the audited Balance Sheet to compute the interest on Security Deposit of Rs. 16.41 Crore at the rate of interest of 6%. **The Commission directs the Petitioner to submit the actual interest paid on the security deposit to the consumers during FY 2009-10, FY 2010-11, and FY 2011-12 against the provisions made in the Audited/Provisional Accounts within 2 months from the date of this Order.**

**6.2.7.2 Rebates and Discounts allowed to the Consumers and other Financial and Bank Charges**

The Petitioner was required to explain as to how the rebate/discount is included in the interest expenses and the reason for the significant variation in the amount of rebate/discount allowed to consumer on sale of electricity for FY 2010-11 claimed as Rs. 0.13 Crore and Rs. 14.38 Crore claimed for FY 2011-12. UPCL has submitted that booking under rebate/discount allowed to consumers on sale of electricity is being checked and report on the same shall be submitted to the Commission by April 15, 2013 and the same has not been received by the Commission till date.

The rebate allowed to consumers should be an adjustment in the revenue and not an expense head under Interest and Finance Charges, and hence, the Commission has not considered rebate of Rs. 0.13 Crore under Interest Expense and adjusted the same against Revenue from Sales. Further, the Petitioner has not been able to justify the expense and provide the supporting details of the said rebate allowed to the consumers. **The Commission hereby directs the Petitioner to submit the reconciliation of the rebate allowed based on the information available at the field offices of the Petitioner within 3 months from the date of issue of this Order and the Commission shall take a view in the matter during the APR while carrying out the final truing up for FY 2011-12.**

Further, the Guarantee Fee and interest on REC Old Loan has been allowed as claimed by UPCL. The Commission has not reduced the amount of interest capitalised as the Commission has considered only those loans which have been utilised for creation of assets and not the total loans as taken by the Petitioner.

The Commission approves Interest and Finance Charges of Rs. 68.86 Crore for FY 2010-11 against the amount of Rs. 66.77 Crore claimed by the Petitioner as summarised in the Table below:

**Table 6.14: Interest and Finance Charges for FY 2010-11 (Rs. Crore)**

Particulars	Provisionally trued up	Claimed for final truing up	Approved after final truing up
APDRP	1.30	1.33	0.40
District Plan	3.19	2.22	0.11
PMGY	0.25	6.11	0.39
State Plan	3.45	2.40	0.72
MNP	7.42	1.64	6.57
RGGVY	0.42	-	0.78
AREP	-	1.70	-
Others	6.95	7.35	17.99
<b>Sub-Total (A)</b>	<b>22.98</b>	<b>22.75</b>	<b>26.96</b>
REC Old Loan	30.39	23.55	23.55
Guarantee Fee	2.73	1.40	1.40
Interest on Security Deposit	16.58	16.58	16.41
<i>Rebates/Discount allowed to consumers</i>	0.13	0.13	-
<i>Other Finance and Bank Charges</i>	4.67	4.67	0.54
<b>Total Interest Charges</b>	<b>77.48</b>	<b>69.07</b>	<b>68.86</b>
Capitalisation	-	2.30	-
<b>Net Interest and Finance Charges</b>	<b>77.48</b>	<b>66.77</b>	<b>68.86</b>

### 6.2.8 Depreciation

The Petitioner has claimed a depreciation of Rs. 21.95 Crore for FY 2010-11, which is in line with that approved by the Commission in its previous Order dated April 11, 2012 while carrying out the provisional truing up for FY 2010-11. Further, the Petitioner has also claimed Depreciation on account of additional GFA consequent to the finalization of the Transfer Scheme separately as detailed in above Sections of this Order.

The Commission has allowed depreciation at a weighted average rate of 3.85% based on the submission of the Petitioner for FY 2010-11 in accordance with the asset classification and rates specified in the Tariff Regulations. The Commission has been allowing depreciation on the value of opening GFA keeping in line with the practice being followed by the Petitioner of capitalising the asset in its accounts on the last day of the financial year. Further, nothing has been brought on record by the Petitioner to show that the asset is capitalised in the books/records when the same is put to use. Hence, the Commission has adopted the similar approach as adopted by it in the previous Orders of allowing depreciation on the opening GFA. The Tariff Regulations of the Commission provide for depreciation on pro-rata basis, and the Petitioner has neither been able to provide exact dates of capitalisation of fixed assets, nor has provided any capitalisation and depreciation policy despite being asked to do so by the Commission. Therefore, the Commission finds no justification to depart from the practice adopted in previous Tariff Orders of allowing depreciation on the opening balance of GFA.

The Commission has, accordingly, approved the depreciation of Rs. 33.18 Crore for FY 2010-11 based on the revised Opening GFA for FY 2010-11 against the Petitioner's claim of Rs. 21.95 Crore. The summary of Depreciation approved in the Order dated April 11, 2012 while carrying out provisional truing up, depreciation claimed by the Petitioner and depreciation approved by the Commission in this Order is shown in the following Table:

**Table 6.15: Variation in Depreciation for FY 2010-11 (Rs. Crore)**

Particulars	Provisionally Trued up vide Order dated April 11, 2012	Claimed	Approved after final Truing Up
Depreciation	21.95	21.95	33.18

### 6.2.9 Bad & Doubtful Debts

The Petitioner requested the Commission that considering the geographical spread of the

large consumer base across the State including a large part of the same prevailing in the difficult terrain and hilly region and the problem of realizing energy dues from retail consumers, provision for bad and doubtful debts should be allowed on actual basis.

The Petitioner submitted that the actual collection efficiency for FY 2010-11 comes out to 92.56% and, accordingly, the collection inefficiency works out to 7.44%. The Petitioner requested that since in actual practice also it makes a provision of 5% in the accounts and hence, the Commission should allow provision for bad debts on actual basis. However, the Petitioner, in the present Petition, has claimed Provision for bad and doubtful debts at the rate of 2.5% of the tariff revenue which works out to Rs. 67.77 Crore.

Regulation 12 of UERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2004 specifies as under:

*"Bad and Doubtful Debts shall be allowed as a legitimate business expense only if it is within the norms fixed by the Commission and to the extent the distribution licensee has identified and actually written off bad debts according to a transparent policy approved by the Commission."*

For an expense to be allowed, the pre-requisite is that it is incurred by the Licensee. Further, in this regard, the Commission had in its tariff Order for FY 2010-11 while allowing the provision for bad debts had provided that the provisioning of bad debts during FY 2010-11 would be trued up with actual bad debts written off by UPCL subject to prudence check. The Petitioner has till date not been able to report the details of bad debts actually written off. Hence, the Commission is not giving any allowance for bad debts for FY 2010-11 during the final truing up exercise for FY 2010-11.

#### **6.2.10 Interest on Working Capital**

The Petitioner has claimed Interest on Working Capital for FY 2010-11 at Rs. 21.44 Crore on a total working capital requirement of Rs. 182.43 Crore. The Petitioner has considered one month's O&M expenses, collection inefficiency of 4% and receivables for two and half months of the total revenue from sale of power. The interest rate for working capital has been considered at 11.75% for FY 2010-11 based on the interest on working capital allowed by the Commission in its Order on retail tariff for UPCL for FY 2012-13 for FY 2010-11.

The Commission has computed the working capital requirement by taking into account the allowable O&M expenses, receivables for two months and collection efficiency of 96% as approved by the Commission in its Tariff Order for FY 2010-11. Further, necessary adjustments as required under the Regulations for security given by the consumers and credit given by Generator/Power suppliers have been factored. Hence, the Commission worked out the total working capital requirement of Rs. 105.73 Crore for FY 2010-11. Considering the rate of interest of 11.75% as claimed by the Petitioner, the allowable interest on working capital works out to Rs. 12.42 Crore, which was computed as Rs. 14.06 Crore in the Order dated April 11, 2012 while undertaking provisional truing up for FY 2010-11.

The Interest on working capital as claimed by the Petitioner and as approved by the Commission is as follows:

**Table 6.16: Interest on Working Capital for FY 2010-11 (Rs. Crore)**

Particulars	Provisionally Trued up vide Order dated April 11, 2012	Claimed by the Petitioner	Approved after Final Truing Up
Interest on Working Capital	14.06	21.44	12.42

#### **6.2.11 Return on Equity**

The Petitioner has claimed RoE of Rs. 67.13 Crore for FY 2010-11 on equity base of Rs. 414.97 Crore against the amount of Rs. 5.91 Crore approved by the Commission in its Order dated April 11, 2012 while carrying out the provisional truing up for FY 2010-11. As discussed in earlier Section of this Order, the Petitioner has also considered the liability for CPSU dues, part of which has been converted to Equity of Rs 481.03 Crore less opening GFA of Rs 108.26 Crore which were transferred to PTCUL resulting in a higher opening equity of Rs. 414.97 Crore.

Based on the updated opening GFA for FY 2010-11 worked out on the basis of the assets which have been cleared by Electrical Inspector of Rs. 142.13 Crore from FY 2007-08 onwards, the Commission has updated the means of finance including Equity.

Further, the matter of conversion of liabilities against CPSU dues into share capital and claiming return on the same has already been discussed in its previous Orders by the Commission, wherein, the Commission had observed that though conversion of power bonds into share capital has resulted in an increase in the equity base of the Petitioner, however, as per Tariff Regulations, only that equity which is invested in creation of fixed assets is entitled for Return. Further, the

amount of Rs. 572.00 Crore, which pertains to CPSU past unpaid liabilities, would have already been taken into account as power purchase cost in the period it was incurred, while determining the tariff and recovered from the consumers. However, due to inefficiencies of the utility, this liability remained unpaid and, hence, the consumers could not be burdened again by accepting the conversion of this liability into equity and allowing RoE on the same.

Thus, the Commission has on the re-determined equity portion of the assets, capitalization of which has been considered by the Commission during FY 2007-08 to FY 2010-11 allowed a RoE of Rs. 16.20 Crore at a rate 14% .

The Return on Equity approved by the Commission for FY 2010-11 is shown in the following Table:

**Table 6.17: Return on Equity approved by the Commission (Rs. Crore)**

Particulars	Approved provisionally vide Order dated April 11, 2012	Actual as Per Audited Account	Approved after Truing Up
Return on Equity	5.91	67.13	16.20

#### 6.2.12 Non-Tariff Revenue

The Petitioner has claimed Non Tariff Income of Rs. 182.02 Crore for FY 2010-11 against the amount of Rs. 59.25 Crore approved by the Commission in its Order dated April 11, 2012 while carrying out the provisional truing up for FY 2010-11.

As regards the delayed payment for FY 2010-11, the Petitioner submitted that the amount received from consumers on account of delayed payment was Rs. 8.21 Crore and the same has been reflected in Schedule12 of the Audited Accounts. Further, as regards the miscellaneous receipts of Rs. 132.52 Crore, the Petitioner has included it in Non-Tariff Income, however, in reply to the Commission's queries the Petitioner submitted that the miscellaneous recoveries are a part of income from sale of power and the same have been booked under Miscellaneous receipts due to wrong bookings .

The Petitioner requested the Commission for not taking into account delayed payment charge of Rs 8.21 Cr while approving non-tariff income as it submitted that the utility has to make short-term arrangements against that amount when the amount due from consumers is not received on time. The Commission allows normative working capital to the Petitioner, assuming timely payment by all consumers.

In this regard, it would be relevant to mention that the Commission under Tariff Regulations, 2004 is not only allowing the collection inefficiency but also 2 month billing cycle as part of working capital requirement of the Petitioner and interest is being allowed on the same. Hence, the delay in collecting the dues from consumers has been factored into while calculating the working capital requirement. In this regard, the Commission had asked the Petitioner to submit whether the actual short term loans raised by the Petitioner exceeded the normative working capital and also to justify the increase in working capital requirement in view of the approved collection efficiency target of the Petitioner. However, no information on the same was submitted by the Petitioner. In case the utility resorts to short term arrangements in excess of the working capital requirement approved for it, due to its inefficiency in collecting its dues on time then such inefficiency cannot be allowed to be loaded on to the consumers through tariff. Hence, this argument of the Petitioner does not have any merit.

The Commission has considered the amount of Rs. 132.52 Crore under the head of “Miscellaneous Charges from Consumers” as Revenue from sale of power to consumers. However, the Commission expresses its displeasure on the state of Accounts in the Petitioner Company where in some years the revenues are adjusted for the rebates and other recoveries and in some other years the same are shown as expense item as discussed in section 6.2.7.2 or other revenues (non tariff income discussed above) thereby, having disproportionate trends in the accounts. It seems that there is no uniform policy in UPCL and the field offices are booking income and expenses as deemed fit by them. **The Commission directs the Petitioner to prepare a policy regarding capturing of expenses and revenues in its accounts and circulate the same in its field offices within 3 months of the date of the Order.** Accordingly, for the purpose of this Tariff Order, the Commission has considered Non-Tariff Income of Rs. 49.50 Crore as summarised in the Table below:

**Table 6.18: Non Tariff Income approved by the Commission(Rs. Crore)**

Particulars	Provisionally Trued up vide Order dated April 11, 2012	Claimed by Petitioner	Approved after final Truing Up
Non tariff income	59.25	182.02	49.50*

*\*Rs 132.52 Crore considered as part of revenue from sale of power*

### 6.2.13 Tariff Revenue

The Petitioner submitted that the Commission in its previous Tariff Orders has been



computing additional deemed revenue earned by the utility for adjusting the approved losses against the actual, which in reality is not earned by it. The Petitioner submitted that till FY 2011-12, the Commission has considered additional revenue amounting to Rs 505 Crore, which has not been received by it but has been considered by the Commission for adjustment of losses.

The Petitioner further submitted that that for the loss target not achieved during a particular year, the utility is penalised every year for its non-achievement and, therefore, it requested the Commission for not considering any additional revenue towards adjustment of losses and revisit and adjust the revenue that has been allowed in the past. Although, in compliance to the approach adopted by the Commission in its previous Tariff Orders, the Petitioner has calculated additional revenue for FY 2010-11.

Accordingly the Petitioner has considered tariff revenue of Rs. 2592.60 Crore including Rs. 83.40 Crore as deemed revenue on account of excess loss for FY 2010-11 as against Rs. 2718.44 Crore approved by the Commission in its Order dated April 11, 2012 while carrying out the provisional truing up for FY 2010-11.

Further, as discussed in Para 6.2.12, the Petitioner has shown some amount of Revenue from sale of power to consumers as "Miscellaneous Charges from Consumers" due to incorrect recording at field units. Therefore, based on the methodology discussed in Para 6.2.12 above, the Commission has excluded an amount of Rs. 132.52 Crore from Non-Tariff Income and added it to Revenue from sale of power to consumers, as shown in the Table below. This adjustment does not impact the ARR & revenues, since, the entire income reported by the Petitioner has been considered, either under Revenue from sale of power to consumers or under Non-Tariff Income. Further, the Petitioner had included Rebate paid to consumer of Rs. 0.13 Crore under Interest and Finance Charges as discussed in Section 6.2.7, the Commission has adjusted the same in Revenue as the expense pertains to revenue collection and the same should be adjusted with the revenue instead of being shown as expenses. Accordingly, the Commission considers Revenue from Tariff for FY 2010-11 at Rs. 2,641.59 Crore.

The Tariff Revenue as claimed by the Petitioner and as approved by the Commission is as follows:

**Table 6.19: Tariff Revenue approved by the Commission (Rs. Crore)**

Particulars	Provisionally Trued up vide Order dated April 11, 2012	Claimed by Petitioner	Approved after Final Truing Up
Tariff Revenue	2718.44	2509.20	2641.59

**6.2.14 ARR & Revenue for the FY 2010-11**

The Commission in its truing up Order for FY 2010-11 dated April 11, 2012 had approved provisionally trued up ARR for FY 2010-11 as Rs.2639.81 Crore. The Petitioner has now claimed an ARR of Rs. 2641.88 Crore for FY 2010-11 based on its audited accounts. However, based on the various elements of the ARR as discussed above and approved by the Commission, the summary of final Truing up for FY 2010-11 is given in the Table below:

**Table 6.20: Summary of Truing Up for FY 2010-11 (Rs. Crore)**

Particulars	Provisionally Trued up vide Order dated April 11, 2012	Claimed by Petitioner	Approved after final Truing Up
<b>A Expenditure</b>			
Power purchase expenses	2055.93	2055.03	2048.65
Transmission Charges-PGCIL	125.93	125.93	125.93
Transmission Charges-PTCUL	111.50	111.50	111.50
O&M Charges	286.32	286.39	285.93
Interest Charges	77.48	66.77	68.86
Depreciation	21.95	21.95	33.18
Interest on Working Capital	14.06	21.44	12.42
<b>B Gross Expenditure</b>	<b>2693.17</b>	<b>2689.00</b>	<b>2,686.47</b>
Other expenses/ Appropriations			
Bad and doubtful debts	0.00	67.77	0.00
Return on equity	5.91	67.13	16.20
<b>C. Net Expenditure</b>			
Less: Non Tariff income	59.25	182.02	49.50
<b>D. Net annual revenue requirements</b>	<b>2639.81</b>	<b>2641.88</b>	<b>2,653.17</b>
<b>E. Revenue at existing tariffs</b>	<b>2631.95</b>	<b>2509.20</b>	<b>2,641.59</b>
<b>F. Revenue Surplus/(Gap)</b>	<b>(7.86)</b>	<b>(132.69)</b>	<b>(11.58)</b>
<b>G. Other adjustment</b>			
Revenue from additional sale	86.49	83.40	127.33
<b>H. Adjusted Revenue surplus/(Gap)</b>	<b>78.63</b>	<b>(49.28)</b>	<b>115.75</b>

Accordingly, against the gap of Rs. 49.28 Crore claimed by the Petitioner for final truing up of FY 2010-11, the Commission has worked out the surplus of Rs. 115.75 Crore while carrying out the truing up for FY 2010-11 on the basis of the audited accounts. Thus, the Commission has re-determined an additional surplus of Rs. 37.13 Crore for FY 2010-11 which will be utilised by the Commission in reducing the revenue gap for FY 2013-14.

### 6.3 Provisional Truing-up for FY 2011-12

#### 6.3.1 Background

The Commission had approved the ARR for FY 2011-12 in its Tariff Order dated May 24, 2011. The Petitioner in its MYT Petition for FY 2013-14, has requested the Commission for carrying out the provisional truing-up of the expenses and revenue for FY 2011-12 based on the provisional accounts submitted by it. The Commission, in the previous Section of this Order, having already carried out the truing-up for FY 2010-11 based on the audited accounts, considers it fit to carry out the provisional truing-up for FY 2011-12 based on the provisional accounts submitted by the Petitioner, which is also in line with the UERC (Terms and Conditions for Truing Up of Tariff) Regulations, 2008.

#### 6.3.2 Sales

The Commission had approved Energy Sales for FY 2011-12 as 7503.53 MU. The Petitioner in its Petition submitted the actual sales for FY 2011-12 at 8252.72 MU.

During analysis certain infirmity in the sales was observed which was also informed to the Petitioner and it was asked to provide the justification of the same. The issues raised and the justifications provided by the Petitioner are discussed in the following paragraphs.

With regard to the very high consumption of Departmental Employee as compared to the average consumption of domestic consumers, the Petitioner accepted that the average consumption of departmental employees was high till March 2012, however, instructions have been issued to the field units to register the correct sales data in commercial statements. The Petitioner submitted that based on this, the average consumption per month per consumer has been reduced from 887 kWh to 634 kWh, which is apparent from the following Table:

**Table 6.21: Average consumption per consumer of Departmental Employees**

Particulars	March, 2011	March, 2012	September, 2012
Consumer (No.)	7982	8805	8775
Energy Sold (MU)	74.44	93.70	33.36
Average Consumption per consumer per month (kWh)	777.19	886.77	633.60

The Petitioner further submitted that as the tariff of departmental employees is on normative basis and hence, average consumption per consumer is on higher side. The Commission

is unable to accept this submission of the Petitioner. The Petitioner had submitted that departmental employees have been metered, thus, actual consumption to departmental employees should have been recorded on metered basis. Further, it is also understood from the reply of the Petitioner in this regard that meter reading is not being done and the consumption is being booked by the field officers depending upon the category of employees on the feeder, the connected load and the hours of supply on the respective feeder. Hence, it appears that there is no uniform policy in this regard and discretion has been provided to the field officers to assess the consumption. When the Petitioner is not reading the meters of its own employees who are not so large, then how can it be expected to read the meters of other consumers. This practise also suggests that losses are being camouflaged in the garb of higher consumption. It is unimaginable when the average consumption of domestic consumers derived from the commercial statement of the Petitioner is around 88 units/month in FY 2010-11 and 102 units/month in FY 2011-12, the average consumption of department employee in these years is around 777 units/month and 887 units/month respectively. The basis thereof and the underlying assumptions have not been brought up. **The Commission, therefore, directs the Petitioner to analyse the average consumption of the departmental employees including the reasons for such high consumption based on actual meter readings and submit the report to the Commission on quarterly basis.**

The Petitioner while submitting the compliance status of the directions of the Commission issued in the Tariff Order for FY 2012-13 submitted that it is in the process to evolve a mechanism for reimbursement of expenses against electricity consumed by the departmental employees of UPCL which is expected to be completed by 31-03-2013. However, till date nothing has been reported on this issue by the Petitioner. **Therefore, the Petitioner is directed to submit the mechanism for reimbursement of expenses against electricity consumed by the departmental employees of UPCL within 1 month of the date of the Order. The Petitioner is also directed to issue instructions to the field offices to record the sales of the departmental employees based on meter reading and submit compliance of the same within 1 month of the date of the Order**

Further, as per the Tariff Order issued by the Commission, the bills for PTW consumers were to be raised on 6 monthly basis. As regards the same, it has been observed that that there has been substantial variation in monthly sales of PTW as submitted by the Petitioner. The Commission during the technical validation session asked the Petitioner to submit the reasons for the same. In reply to the same, the Petitioner submitted that the meter reading of PTW consumers is being done

on monthly basis and ledgers are also generated on monthly basis. However, the bills of this category are being raised on half yearly basis as per the provisions of the Tariff Orders. The Commission does not accept this contention of the Petitioner for such substantial variation in month sales of PTW consumers **and directs the Petitioner to submit the reasons for the same within three months of the date of the order.**

It was observed that average consumption per consumer of BPL and Kutir Jyoti consumers is around 40-50 units per month implying that the consumption of certain consumers under this category could be around 75-80 unit per month. In this regard the Commission asked the Petitioner to examine the categorization of such consumers. The Petitioner submitted that such consumers are billed as per the tariff of BPL category for the months when their consumption is upto 30 units while for months when the consumption exceeds 30 units, their billing is done as normal domestic consumers. However, as these consumers are categorised in BPL and Kutir Jyoti, the consumption is recorded under this category. **The Commission directs the Petitioner to issue instructions to its field offices to either record such BPL/Kutir Jyoti consumers who are consuming more than 30 units under domestic category or book them as a separate BPL category having consumption in excess of the ceiling specified by the Commission, in the month in which their consumption exceeds the ceiling fixed by the Commission and report compliance within 1 month of the date of the Order.**

Further, it was also observed that the average consumption of unmetered PTW consumers is very high as compared to average consumption of metered PTW consumers and similarly the average consumption of unmetered domestic category is very high as compared to metered domestic category consumption. As regards the above observation, the Petitioner submitted that the tariff for unmetered PTW and unmetered domestic categories is normative and, therefore, average consumption for such categories is higher than the metered PTW and metered domestic categories respectively. The Petitioner submitted that consumption is being booked by the field officers depending upon the consumer category on the feeder, the connected load and the hours of supply on the respective feeder. The reply of the Petitioner is devoid of any logic as these consumers are unmetered then how can UPCL conclude that their consumption is higher. The only reason of booking higher consumption is to show reduced level of losses. The Petitioner has also violated Commission's order dated 25.05.2012 vide which penalty on the Petitioner has been waived off on account of submission of the Petitioner that it will meter the remaining unmetered consumers by

August, 2012. **The Petitioner is directed to submit the detailed Action Plan giving timeframe in which it intends to meter the remaining unmetered consumers within 2 months of the date of the Order. Based on the submission of the Petitioner, the Commission may take a view on re-imposing penalty on account of unmetered consumers.**

The Commission worked out the category wise actual Average Billing Rate (ABR) for FY 2011-12 based on the Commercial Statements of the Petitioner. On the basis of the same, it was observed that the actual ABR for FY 2011-12 for some of the categories such as Non Domestic Single Bulk Supply, Public Lamps, Govt. Irrigation System, Public Water Works, etc. worked out even lower than the energy charges approved by the Commission for these categories. The Commission asked the Petitioner to analyse this aspect and submit the justification. The Petitioner submitted that the details of the parameters are not available with it on the basis of which approved tariff of various subcategories has been derived by the Commission and, therefore, the reasons of low actual rate of the effective tariff as compared to the approved tariff cannot be found/ reconciled. The Petitioner further submitted that it has observed certain minor anomalies in its billing data, and it has sent the instructions for rectification of the same to the field units. The reply of the Petitioner is unacceptable as the average billing rate was worked out on the basis of the commercial statement of the Petitioner and energy charges are clearly given separately in the tariff order, hence, there is no question of Petitioner submitting that the details of the parameters on the basis of which approved tariff of various subcategories has been derived by the Commission are not available with it and, therefore, the reasons of low actual rate of the effective tariff as compared to the approved tariff cannot be found. The only reason of the same can be the Petitioner booking higher consumption under these categories to show reduced losses. **The Petitioner is directed to correct the practices creeping in the metering and billing system in these categories which are primarily Government categories except for single point bulk supply (non-domestic). The Commission also directs the Petitioner to submit the audited sales and revenue figures after scrutiny of information received from field offices and correct the discrepancies observed by the Commission during the current proceedings alongwith the Petition for Final Truing Up for FY 2011-12 failing which the Commission may consider working out the revenue of the Petitioner on the basis of approved ABR for FY 2011-12.**

For Provisional Truing Up of FY 2011-12, the Commission continuing with the approach adopted by it in the previous Orders has recast the sales for FY 2011-12. Under the process of

recasting sales, the Commission has considered the load factor (sales per connected load) of metered consumers as the basis for deriving the sales of unmetered consumers in domestic and PTW category. Under domestic category, the Commission has also recast sales of departmental employees equivalent to average consumption per consumer of metered domestic consumers in view of the discrepancies pointed out in preceding paras. The Commission has thus considered recasted sales of 8,148.86 MU for FY 2011-12 under provisional True up.

**Table 6.22: Category-wise Sales for FY 2011-12 (MU)**

Categories	Approved in Tariff Order of 2011-12	Claimed	Approved after provisionally trued up in this Order
Domestic (RTS - 1)	1648	1676	1593
Non-domestic, incl Commercial (RTS - 2)	843	886	885
Public Lamps (RTS - 3)	56	67	67
Private Tubewell/Pump Sets (RTS - 4)	182	188	176
Government Irrigation System (RTS - 5)	147	137	137
Public Water Works (RTS - 6)	308	325	325
Industrial Consumers (RTS - 7)	4162	4806	4798
Mixed Load (RTS - 8)	150	160	160
Railway Traction (RTS - 9)	8	8	8
<b>Total</b>	<b>7504</b>	<b>8253</b>	<b>8149</b>

### 6.3.3 Distribution Losses

In the present Petition, the Petitioner has submitted its distribution losses for FY 2011-12 at 19.96%. However, as per the actual data submitted by the Petitioner, the Commission has recomputed the actual distribution losses for FY 2011-12 as 20.60%. The Commission for FY 2011-12 had approved the distribution losses of 18% in the Tariff Order dated May 24, 2011.

The Commission, in accordance with the approach adopted in its previous Orders, has not disallowed the power purchase cost for higher distribution losses as compared to the approved distribution losses. Considering the actual input energy of 10,263.63 MU at distribution periphery (T&D interface) for FY 2011-12 and applying the approved loss level of 18.00% for the year, the Commission has re-estimated the sales of 8416.18 MU for FY 2011-12. As against this sale of 8416.18 MU, the Commission has considered the recasted actual sales of 8148.86 MU. Therefore, there is a loss of 267.32 MU on account of commercial inefficiency of the Petitioner failing to achieve target distribution loss approved by the Commission. The Commission has considered the revenue of Rs. 98.60 Crore at an average billing rate of Rs. 3.69/unit on this additional sale on account of higher

distribution losses while provisionally truing up the ARR for FY 2011-12. The following Table shows actual distribution loss and approved distribution loss along with efficiency loss for FY 2011-12 as explained above.

**Table 6.23: Assessed Distribution losses for FY 2011-12 (MU)**

S. No.	Particulars	Approved in Tariff Order of 2011-12	Claimed	Approved after provisionally trued up in this Order
1	Actual/ Re-casted Sales	-	8252.72	8,148.86
2	Approved Distribution Loss Level	18.00%	19.96%	18.00%
3	Energy Input Requirement at T-D Interface	9263.61	10310.74	10,263.63
4	Approved Sales at Energy Input at 18.00% Loss (MU) ( $c*(1-b)$ )	7596.16	8454.81	8,416.18
5	Loss of Sales due to Inefficiency in Distribution Loss (d-a)	-	202.09	267.32

#### **6.3.4 Power Purchase Expenses (including Transmission Charges payable to PGCIL and PTCUL)**

The Petitioner in its Petition had claimed Rs 3124.44 Crore as total power purchase cost for FY 2011-12 as against Rs 2441.08 Crore approved by the Commission in its Tariff Order dated May 24, 2011. This amount includes inter-State and intra-State transmission charges of Rs. 395.85 Crore. Accordingly, the net Power Purchase cost excluding transmission charges for FY 2011-12 works out to Rs. 2,728.59 Crore as against the power purchase expenses of Rs. 2195.91 Crore approved by the Commission for FY 2011-12. While working out this power purchase cost, the Petitioner has submitted that it has considered the cost of free power at the average power purchase rate in line with the methodology adopted by the Commission. The Commission has analysed the source-wise power purchase from the month-wise data obtained from the Petitioner and actual bills for FY 2011-12. Further, the Commission has considered rate for free power equivalent to the average power purchase rate for purchase from all the firm sources except free energy. Based on the above approach, the rate of free power has been worked out as Rs. 2.23/kWh as against Rs 2.34/kWh submitted by the Petitioner. The Commission, however, observed that for computation of free power rate the total power purchase cost from UJVN Ltd. claimed by the Petitioner is Rs. 702.12 Crore towards purchase of 4732.32 MU as against Rs. 631.09 Crore considered by it in the provisional accounts of FY 2011-12. Similarly, for other sources as well the Commission has taken



the costs as per the provisional accounts of the Petitioner. Further, as discussed in truing up section 6.2.3 of power purchase for FY 2010-11, in the absence of submission of energy drawl under UI vis-a-vis frequency by the Petitioner for FY 2011-12 as decided in the aforesaid section, the Commission shall consider the impact of the same once the desired information is received from the Petitioner. The Commission has considered power purchase quantum and rate as per the balance sheet and, accordingly, approves the power purchase cost for FY 2011-12 as shown in the table below.

**Table 6.24: Power Purchase Expenses as claimed and Approved by the Commission (Rs. Crore)**

Generating Stations	Approved in Tariff Order for FY 2011-12			Claimed for Truing Up			Approved after Truing Up		
	Quantum (MU)	Approved Cost (Rs. Crore)	Approved Cost per Unit (Rs./kWh)	Quantum (MU)	Cost Claimed (Rs. Crore)	Claimed (Rs./kWh)	Quantum Approved (MU)	Approved as per B/s (Rs. Crore)	Approved Cost per Unit (Rs./kWh)
NTPC	2506.63	663.76	2.65	2582.87	804.16	3.11	2582.87	804.16	3.11
NPCL	101.57	31.16	3.07	216.63	78.06	3.60	216.63	78.06	3.60
NHPC (Excl Tanakpur & Dhauliganga)	358.8	92.81	2.38	425.18	200.70	4.72	425.18	200.70	4.72
UJVNL	0.00	597.34	1.38	4732.32	664.47	1.40	4732.32	631.09	1.33
SJVNL	42.9	12.05	2.81	35.53	9.80	2.76	35.53	9.80	2.76
THDC( Excl Free power from tehri & Koteshwer)	62.15	33.67	5.42	139.92	66.54	4.76	139.92	66.54	4.76
IPPS	230.49	77.62	3.37	318.32	113.40	3.56	318.32	113.40	3.56
Open market purchase	1,298.74	545.47	4.20	941.48	398.22	4.23	941.48	398.22	4.23
UI Received				499.43	193.09	3.87	499.43	193.09	3.87
Banking									
Sub-Total	8941.27	2053.88	2.30	9891.68	2528.44	2.56	9891.68	2,495.05	2.52
<b>Free power</b>									
Tanakpur	50.91	10.05	1.97	46.08	10.77	2.34	46.08	10.25	2.23
Dhauliganga	130.35	25.73	1.97	131.65	30.76	2.34	131.65	29.30	2.23
tehri	326.09	64.36	1.97	457.32	106.84	2.34	457.32	101.76	2.23
Koteshwer				64.10	14.97	2.34	64.10	14.26	2.23
Vishnuprayag	212.25	41.89	1.97	234.85	54.86	2.34	234.85	52.26	2.23
Sub-Total	719.6	142.03	1.97	934.00	218.20	2.34	934.00	207.84	2.23
Transmission and Other Cost		245.17		0	395.85			395.84	
Less: UI Received				162.87	(18.04)			(18.04)	
Banking				193.13					
Total Power Purchase Cost	9660.87	2441.08	2.53	10469.70	3124.44	2.98	10469.70	3,080.69	2.94

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

For FY 2011-12 the Petitioner has claimed O&M expenses of Rs.296.83 Crore as against Rs. 272.50 Crore approved by the Commission vide its Tariff Order dated May 24, 2011. The

Commission asked the Petitioner to submit the justification of the difference in the above O&M expenses as claimed by the Petitioner and as approved by the Commission vide its Tariff Order dated May 24, 2011.

In reply, the Petitioner submitted the detailed break up of O&M cost into Employee expenses, A&G expenses and R&M expenses as shown in the following Table:

**Table 6.25: Comparison of O&M Expenses for FY 2011-12 (Rs. Crore)**

Particulars	Approved in the Tariff Order of FY 2011-12	Claimed
Employee Expenses including Arrears	194.62	210.71
R&M Expenses	52.96	70.38
A&G Expenses	24.95	15.74
Total O&M Expenses	272.50	296.83

The Petitioner submitted that as there has been a variation of Rs. 16 Crore in the employee expenses approved by the Commission from the actual expenses primarily due to expenses relating to salaries and wages and terminal benefits of the employees. The Petitioner submitted that since UPCL is a state owned entity and the salaries are governed by the State Government, hence, it has no say in fixing of the same, and further this amount is actually paid to the employees for the services rendered by them for the smooth functioning of the business.

As regards R&M expenses, the Petitioner submitted that in a distribution business, which involves use of heavy machinery it is difficult to keep the actual expenses equivalent to the approved levels. The expenses are majorly incurred on the repair and maintenance of plant & machinery and lines and lines and cables network, which relates to the general repair work as far as complexity of the business, is concerned.

The Petitioner also submitted that the actual A&G expenses have been much lower than that approved by the Commission.

As regards the capitalisation of employee and A&G expenses during FY 2011-12, the Petitioner submitted that due to multiplicity of functional units as well multiplicity of functions in a particular unit, Employee cost and Administration and General expenses incurred on supervision of capital works have been capitalized at the rate of 18.45% in accordance with UPCL's Policy.

Further, the Petitioner submitted that it has included Rs. 37.67 Crore pertaining to arrears on account of implementation of Sixth Pay Commission's report during FY 2011-12 in employee

expenses.

The Commission has provisionally approved the Petitioner's submission, subject to prudence check based on audited accounts during final truing up. The summary of O&M expenses provisionally approved for FY 2011-12 is given the below table:

**Table 6.26: O&M Expenses for FY 2011-12 provisionally approved by the Commission (Rs. Crore)**

Particulars	Approved in Tariff Order	Claimed by the Petitioner	Approved after Provisional Truing Up
Operation and Maintenance Expenses	272.52	296.83	296.83

### 6.3.6 Cost of Assets & Financing

#### 6.3.6.1 Capital Cost of Original Assets

The Petitioner has submitted the value of Gross Fixed Assets (GFA) as on 08.11.2001 at Rs. 508.00 Crore as per the value recognized by the Commission in its Tariff Orders issued from time to time in its true up petition of FY 2011-12. However, where Petitioner is claiming additional cost on account of finalization of the transfer scheme the Petitioner has submitted the value of GFA as on 08.11.2001 at Rs. 1058.18 Crore and the same value is reflected in the provisional Annual Accounts for FY 2011-12. The Petitioner has requested the Commission to recognize the actual value of GFA as on 08.11.2001 on the bases of finalization of the Transfer Scheme and allow depreciation, accordingly, on the value of final GFA as detailed in initial paragraphs of this Section.

As discussed in the previous Section of Truing Up for FY 2010-11, as there is no change in the factual position, the Commission feels it unnecessary to revisit the above issue. The Commission, therefore, has considered the original value of the Petitioner's GFA as on November 09, 2001 as Rs. 508.00 Crore.

#### 6.3.6.2 Capitalisation of Assets

As discussed in Section 6.2.5, in compliance to the directives, the Petitioner has submitted Electrical Inspector Certificate for asset capitalisation of Rs. 142.13 Crore from FY 2007-08 onwards. The Commission has considered the capitalisation of those assets for which the Electrical Inspector Clearance Certificate has been received from FY 2007-08 to FY 2011-12 and, accordingly, updated the Opening GFA for FY 2011-12. While recasting the GFA balance for FY 2011-12, the Commission has, however, not considered those HT/EHT schemes for which Electrical Inspector's Clearance

Certificate have not been provided by the Petitioner. In case the Petitioner submits the scheme-wise details of various HT/EHT works undertaken by it during the above financial years along with the Electrical Inspector's Clearance Certificate, the Commission may consider the same for capitalization subject to prudence check only after complete details for the same are submitted by the Petitioner. Further, as already mentioned in Para 6.2.5.2 of the Order, the delay on this account is due to the inefficiency of the Petitioner for which it will not be allowed any carrying cost.

As LT schemes does not require Electrical Inspector's clearance, the Commission has allowed capitalization of all works pertaining to release of new LT connection details of which have been submitted by the Petitioner distinctly and also capex related expenses such as depreciation, return on equity and interest on these works has been allowed in accordance with the applicable tariff Regulations. Accordingly, the Commission has considered the additional expenditure incurred or the deficit amount funded by the Petitioner for release of new LT connections. The Commission has also allowed the capitalization of other assets like Vehicles, Furniture and Fixtures and Office Equipment, which does not require Electrical Inspector's clearance, in accordance with the provisional accounts for FY 2011-12 submitted by the Petitioner.

The Commission has, accordingly, determined the Gross Fixed Assets for FY 2011-12 as provided in the Table given below:

**Table 6.27: GFA and Additional Capitalisation during FY 2011-12 (Rs. Crore)**

Particulars	Approved in Tariff Order	Claimed by the Petitioner	Approved after Provisional Truing up
Opening GFA	930.00	2760.30	1173.64
Total Addition during the year	33.69	608.86	75.82
Deletion during the year	-	271.67	-
Closing GFA	963.69	3097.49	1249.46

As per audited accounts, there has been deduction of assets to the extent of Rs. 271.67 Crore during FY 2011-12. However, as the Commission has not considered complete addition of assets as per the audited accounts due to non submission of the detailed information by the Petitioner, it would be appropriate not to consider the deduction of assets at this stage. Thus, the Commission has not considered any reduction in asset base of the Petitioner. However, the Commission shall consider the same while determining the impact of total capitalization on availability of complete information on capitalization of assets.

### 6.3.7 Financing of Capital Assets

Financing of an asset (i.e. debt, equity and grants components) is required to ascertain the capital related expenses such as Interest, Depreciation and Return on Equity of a licensee. As the Petitioner has submitted Electrical Inspector Certificate for Capitalisation of Rs. 142.13 Crore from FY 2007-08 onwards, the Commission has allowed the Capitalisation of such assets and, accordingly, updated the Opening GFA for FY 2011-12. This has necessitated revision of figures of GFA as well as its funding mechanism vide grants, debt and equity for FY 2011-12. The Commission based on the details available with it has considered actual loans and grants for assets financed for different Schemes. Further, for capitalization through internal resources, the Commission has considered the financing at the normative debt-equity ratio of 70:30 and has reworked the interest on loans and return on equity accordingly. The following Table shows the revised means of finance as considered by Commission for different assets considered to be capitalized for FY 2011-12:

**Table 6.28: Means of Finance during FY 2011-12 (Rs. Crore)**

Particulars	Grant etc.	Loan	Internal Resources	Total
<b>Opening GFA</b>	<b>226.09</b>	<b>383.75</b>	<b>563.80</b>	<b>1173.64</b>
Additions during the year	5.98	51.96	17.88	75.82
Deletion during the year				
<b>Closing GFA</b>	<b>232.07</b>	<b>435.71</b>	<b>581.68</b>	<b>1249.46</b>

### 6.3.8 Interest and Finance Charges

The Petitioner has considered the interest expenses for FY 2011-12 on actual basis as is reflected in the accounts for FY 2011-12 except for REC (old loan) which has been considered on the basis of the re-schedulement package of REC (old loan) as determined by the Commission in Annexure 7 of the Tariff Order of FY 2009-10. Also, the Petitioner has not considered interest on GPF and UP Govt Loan for both the years.

The Petitioner was required to explain as to how the rebate/discount is included in the interest expenses and the reason for such significant variation in rebate/discount allowed to consumer on sale of electricity of Rs. 14.38 Crore for FY 2011-12. UPCL submitted that booking under rebate/discount allowed to consumers was being checked and report on the same would be submitted to the Commission by April 15, 2013 and the same was not submitted by UPCL.

As the rebate allowed to consumers is an adjustment to the revenue and is not an expense head under Interest and Finance Charges, the Commission has not considered rebate of Rs. 14.38 Crore under Interest Expense and adjusted the same against Revenue as discussed in para 6.2.7. Further, the Petitioner has not been able to justify the expense and provide the supporting details of the said rebate allowed to the consumers. *The Commission hereby directs the Petitioner to submit reconciliation report of the rebate allowed based on the information available at the field offices of the Petitioner within 3 months from the date of issue of this Order and the Commission shall take a view in the matter during the final true-up for FY 2011-12.*

In reply to the Commission's query, the Petitioner submitted detailed reconciliation of Interest expenses as claimed by the Petitioner in the Petition and that appearing in the accounts. In the reconciliation statement it was observed that the Petitioner has included the cost of short term funding through Overdraft facility to fund Working Capital requirement under the head of 'Other Finance and Bank Charges' of Rs. 9.40 Crore, however, as the Working Capital is allowed separately on normative basis, interest on short term funding through Overdraft facility cannot be allowed under interest expenses. The Commission has already allowed Rs. 2.85 Crore as normative interest on working capital to the Petitioner for FY 2011-12 considering the collection efficiency of 97%. However, the Petitioner for FY 2011-12 has reported its collection efficiency to be 92.67% which is well below the target fixed by the Commission of 97% and the target of 97.50% proposed by the Petitioner in the petition for FY 2011-12. Hence, it is apparent that the Petitioner had to resort to short term lending because of its poor collection efficiency. Any additional interest expense borne by the Petitioner on account of working capital requirement due to the inefficiency in collecting dues from the consumers cannot be loaded on to them. As per the Regulations, the Commission approves the ARR on accrual basis and not collection basis and hence the entire additional expenses due to inefficiency of the Utility to collect the revenue cannot be loaded on to the consumer. Hence, the Commission has not allowed Rs. 9.40 Crore claimed as interest on account of Overdraft facility.

The Petitioner has again claimed interest on AREP Loans which has not been allowed by the Commission in its previous Tariff Orders for reasons given in the respective Orders and also based on the reasons discussed in Para 6.2.7 above.

The Commission has worked out the Interest and Finance Charges for FY 2011-12 considering the loan amounts corresponding to assets capitalised in the year based on the approved

means of finance, as shown in the Table below:

**Table 6.29: Interest on Govt. of Uttarakhand Loans for FY 2011-12 (Rs. Crore)**

Particulars	Opening Balance	Addition	Repayment	Closing Balance	Interest Approved
APDRP	4.27	0.00	0.12	4.15	0.39
District Plan	0.23	0.00	0.23	0.00	0.01
PMGY	3.25	0.00	0.27	2.98	0.36
State Plan	6.13	0.00	2.12	4.02	0.48
MNP	54.93	0.00	4.23	50.70	6.08
AREP	31.98	9.58	8.98	32.58	0.00
RGGVY	6.01	0.66	0.94	5.73	0.70
<b>Sub-Total</b>	<b>106.80</b>	<b>10.25</b>	<b>16.88</b>	<b>100.16</b>	<b>8.03</b>
Others	223.43	41.71	39.20	225.94	19.20
<b>Total</b>	<b>330.23</b>	<b>51.96</b>	<b>56.09</b>	<b>326.10</b>	<b>27.23</b>

#### 6.3.8.1 Interest on Security Deposit

The Petitioner has claimed interest liability on consumers' security deposits for FY 2011-12 as Rs. 20.36 Crore considering the Bank Rate of 6% applicable as on 01.04.2011 on the average of opening and closing balance of consumer security deposits as per provisional accounts for FY 2011-12 and the same has been allowed by the Commission.

Further, the Guarantee Fee and interest on REC Old Loan has been allowed as claimed by UPCL. Also, the Commission has not reduced the amount of interest capitalised as the Commission has considered only those loans which have been utilised for creation of assets and not the total loans as taken by the Petitioner.

The Commission approves Interest and Finance Charges of Rs. 68.55 Crore for FY 2011-12 as against the amount of Rs. 88.49 Crore claimed by the Petitioner as summarised in Table below:.

**Table 6.30: Interest and Finance Charges for FY 2011-12 (Rs. Crore)**

Particulars	Approved for FY 2011-12	Claimed for Provisional truing up	Approved after provisional truing up
APDRP	1.15	2.03	0.39
District Plan	2.80	3.22	0.01
PMGY	0.22	5.63	0.36
State Plan	3.06	2.81	0.48
MNP	6.95	0.72	6.08
RGGVY	0.42	-	0.70
AREP	-	1.46	-
Others*	8.44	7.53	19.20
<b>Sub-Total (A)</b>	<b>23.04</b>	<b>23.39</b>	<b>27.23</b>

**Table 6.30: Interest and Finance Charges for FY 2011-12 (Rs. Crore)**

Particulars	Approved for FY 2011-12	Claimed for Provisional truing up	Approved after provisional truing up
REC Old Loan	29.35	22.50	22.50
Guarantee Fee	2.61	2.50	2.50
Interest on Security Deposit	16.07	20.36	20.36
Rebates/Discount allowed to consumers	-	14.38	-
Other Finance and Bank Charges	-	9.87	0.47
<b>Total Interest Charges</b>	<b>71.08</b>	<b>92.99</b>	<b>73.05</b>
Capitalisation	-	4.50	0.00
<b>Net Interest and Finance Charges</b>	<b>71.08</b>	<b>88.49</b>	<b>73.05</b>

### 6.3.9 Depreciation

The Petitioner submitted that Depreciation has been calculated on the average basis on normative rates specified by the Commission in UERC (Terms and Conditions for determination of distribution tariff), 2011 on the assets as specified in the provisional accounts of FY 2011-12. Accordingly, the Petitioner has claimed a depreciation of Rs. 112.66 Crore for FY 2011-12.

The Petitioner has confirmed that depreciation in FY 2011-12 has been less than 90% of GFA for all assets in accordance with the UERC (Terms and Conditions for determination of Distribution tariff) Regulations, 2004.

As the Petitioner has submitted Electrical Inspector Certificate for Capitalisation of Rs. 142.13 Crore from FY 2007-08 onwards, the Commission has allowed the Capitalisation of such assets and accordingly updated the Opening GFA for FY 2011-12. The Commission has, accordingly, approved the depreciation of Rs. 35.19 Crore for FY 2011-12 based on the revised Opening GFA.

The summary of Depreciation approved in Order dated May 24, 2011, depreciation claimed by the Petitioner and depreciation approved by the Commission in this Order is shown in the following Table:

**Table 6.31: Variation in Depreciation for FY 2011-12 (Rs. Crore)**

Particulars	Approved in Tariff Order dated 24.05.2011 for FY 2011-12	Claimed by the Petitioner	Approved after Provisional Truing Up
Depreciation	27.95	112.65	35.19

### 6.3.10 Bad & Doubtful Debts

As discussed in Section 2 of this Order the Petitioner in its present Petition has calculated



provision for bad debts at 2.50% on the actual revenue of Rs 2830.57 Crore for FY 2011-12 which translates to Rs 76.04 Crore.

In the Tariff Order for the FY 2011-12, the Commission observed as under:

*"Moreover, as per the requirement of the Regulation, the Petitioner should identify and write off bad debts. Hence, in the absence of any sincere efforts by the Petitioner in this regard, the Commission is constrained to allow any further additional provisions to the Petitioner. Hence, for FY 2011-12 as mentioned in its last Tariff Order dated 10.04.2010, the Commission has not allowed any Provision for Bad Debts in the ARR as UPCL has not complied with the direction of the Commission to frame guidelines and procedures for identifying, physically verifying and writing off the bad debts. The Commission would take a view on this issue in future years when UPCL submits to the satisfaction of the Commission, its sincere and concerted efforts to realize the pending dues."*

However, as discussed in Chapter 4 of the Order, it has been observed that the Petitioner has failed to take any serious effort to the satisfaction of the Commission to arrest the increasing level of bad debts which have reached alarming levels by any standard for any commercial organisation. The Commission in its Order for FY 2011-12 had directed the Petitioner to carry out an audit of its receivables and also identifying and classifying the same and submit the report to the Commission within 6 months of the issuance of the Order. Subsequently, UPCL was also required to initiate recovery of its dues from the erring consumers.

As discussed in Chapter 4, in the Compliance report, the Petitioner has submitted that the work of audit of receivables outstanding as on 31-03-2012 has been awarded to three firms of Chartered Accountants in the month of January, 2013 almost after one and a half year when this direction was issued for the first time. The Petitioner submitted that the audit work has been targeted to be completed within five months from the date of award. However, merely undertaking an audit exercise would not be sufficient. **UPCL is also directed to submit an Action Plan as to how it intends to move forward upon receipt of the Audit Report.**

UPCL in one of its submissions informed the Commission that it has written off bad debts to the tune of Rs. 10.96 Crore during FY 2011-12. However, on being asked to furnish the details of the bad debts written off, UPCL failed to submit the same stating that the details were not available with it. Hence, as discussed in Para 6.2.9 above, the Commission is not allowing any provision in this regard in accordance with the Tariff Regulations, 2004.

### 6.3.11 Interest on Working Capital

The Petitioner has claimed Interest on Working Capital for FY 2011-12 at Rs. 13.21 Crore on a total working capital requirement of Rs. 99.67 Crore. The Petitioner has considered one month's O&M expenses, collection inefficiency of 3% and receivables for two and half months of the total revenue from sale of power.

The Petitioner has considered the rate of 13.25% to compute interest on working capital for FY 2011-12 based on the prevalent SBI Short Term Prime lending rate of 13.25% as on April 1, 2011.

The Commission has computed the working capital requirement by taking into account the allowable O&M expenses, receivables for two months and collection efficiency of 97% as approved by the Commission in its Tariff Order for FY 2011-12. Further, necessary adjustments as required under the Regulations for security given by the consumers and credit given by Generators/Power suppliers have been made. Hence, the Commission worked out the total working capital requirement of Rs. 24.23 Crore for FY 2011-12. Considering the rate of interest of 11.75% as considered by the Commission in Order dated May 24, 2011, the allowable interest on working capital works out to Rs. 2.85 Crore.

Interest on working capital as claimed by the Petitioner and as approved by the Commission is as follows:

**Table 6.32: Interest on Working Capital for FY 2011-12 (Rs. Crore)**

Particulars	Approved in Tariff Order dated 24.05.2011 for FY 2011-12	Claimed by the Petitioner	Approved after Provisional Truing Up
Interest on Working Capital	8.02	13.21	2.85

### 6.3.12 Return on Equity

The Petitioner has claimed Return on Equity on average Equity base of Rs. 594.59 Crore, which works out to Rs. 83.24 Crore. The Petitioner has considered the opening equity for FY 2011-12 equivalent to the closing equity of FY 2010-11 and further it has considered the additions at 30% of the actual capitalisation done during the year. The Petitioner has computed RoE on average basis at the normative rate of 14%.

Based on the updated opening GFA for FY 2011-12 worked out on the basis of the assets which have been cleared by Electrical Inspector of Rs. 142.13 Crore from FY 2007-08 onwards, the Commission has updated the means of finance including Equity.

The Return on Equity approved by the Commission for FY 2011-12 is shown in the following Table:

**Table 6.33: Return on Equity approved by the Commission (Rs. Crore)**

Particulars	Approved in Tariff Order dated 24.05.2011 for FY 2011-12	Claimed by the Petitioner	Approved after Provisional Truing Up
Return on Equity	7.48	83.24	19.80

### 6.3.13 Non-Tariff Revenue

The Petitioner in its Tariff Petition has submitted the values for Non-Tariff income for FY 2011-12 at Rs. 335.51 Crore, which is as per the provisional accounts for FY 2011-12 as detailed in Section 2 of this Order.

The Petitioner requested the Commission not to take into account delayed payment charge of Rs 8.92 Crore while approving non-tariff income as the utility has to make short-term arrangements against that amount when the amount due from consumers is not received on time. The Petitioner submitted that the Commission allows normative working capital to the Petitioner Company, assuming timely payment by all consumers. Likewise, the rebate amount of Rs 47.49 Crore should also not be considered as the Petitioner get rebate on account of timely payment to the generators, which is to due to its efficiency. However, the Petitioner has in the present Petition considered both delayed payment charges and rebate for the purpose of truing-up for FY 2011-12 in accordance with the practice adopted by the Commission.

Further, as regards the miscellaneous receipts of Rs. 189.53 Crore the Petitioner has included it in Non Tariff Income, however, in reply to the Commission's queries the Petitioner submitted that the miscellaneous recoveries are a part of income from sale of power and the same have been booked under Miscellaneous receipts due to wrong bookings .

The Commission has considered the amount of Rs. 189.53 Crore under the head of "Miscellaneous Charges from Consumers" as Revenue from sale of power to consumers instead of considering it as part of non-tariff income. Further, the Commission has considered the delayed payment surcharge as a revenue item for reasons already discussed in Para 6.2.12 above.

Accordingly, for the purpose of this Tariff Order, the Commission has considered Non-Tariff Income of Rs. 145.99 Crore as summarised in the Table below:

**Table 6.34: Non Tariff Income approved by the Commission (Rs. Crore)**

Particulars	Approved in Tariff Order dated 24.05.2011 for FY 2011-12	Claimed by the Petitioner	Approved after Provisional Truing Up
Non tariff income	35.20	335.51	145.99*

\*Rs. 189.53 Crore considered as part of revenue from sale of power

#### 6.3.14 Tariff Revenue

The Petitioner has submitted its actual revenue from existing Tariff for FY 2011-12 at Rs. 2830.57 Crore for actual energy sales of 8252.72 MU with an ABR of 3.43 Rs. /unit as already discussed in Section 2 of this Order.

Further, as discussed in Para 6.3.13, the Petitioner has shown some amount of Revenue from sale of power to consumers as “Miscellaneous Charges from Consumers” due to incorrect recording at field units. Therefore, based on the methodology discussed in Para 6.3.14 above, the Commission has excluded an amount of Rs. 189.53 Crore from Non-Tariff Income and added it to Revenue from sale of power to consumers, as shown in the Table below. This adjustment does not impact the ARR & revenues, since, the entire income reported by the Petitioner has been considered, either under Revenue from sale of power to consumers or under Non-Tariff Income. Further, the Petitioner had included Rebate paid to consumer of Rs. 14.38 Crore under Interest and Finance Charges as discussed in Section 6.3.9, the Commission has adjusted the same in Revenue as the expense pertains to revenue collection and the same should be adjusted with the revenue instead of being shown as expenses. Accordingly, the Commission considers Revenue from Tariff for FY 2011-12 at Rs. 3005.72 Crore.

**Table 6.35: Tariff Revenue approved by the Commission (Rs. Crore)**

Particulars	Approved in Tariff Order dated 24.05.2011 for FY 2011-12	Claimed by the Petitioner	Approved after Provisional Truing Up
Tariff Revenue	2804.70	2830.57	3005.72

#### 6.3.15 Provisional Truing-Up for FY 2011-12

The Commission in its Tariff Order for FY 2011-12 dated May 24, 2011 had approved ARR for FY 2011-12 as Rs. 2796.53 Crore. The Petitioner has now submitted revised ARR of Rs. 3459.39

Crore for FY 2011-12 based on its provisional accounts. However, based on the various elements of the ARR as discussed above and approved by the Commission, the summarised Provisional Truing up of expenses and revenues for FY 2011-12 is given in the Table below:

**Table 6.36: Summarised ARR, Revenue, and Surplus for FY 2011-12 (Rs. Crore)**

Particulars	Approved in Tariff Order dated 24.05.2011 for FY 2011-12	Claimed by the Petitioner	Approved after Provisional Truing Up
<b>A Expenditure</b>			
Power purchase expenses	2,195.91	2728.59	2684.85
Transmission Charges-PGCIL	113.35	211.02	211.02
Transmission Charges-PTCUL	131.82	184.82	131.82
O&M Charges	272.52	296.83	296.83
Interest Charges	71.08	88.49	73.05
Depreciation	27.95	112.65	35.19
Interest on Working Capital	8.02	13.21	2.85
<b>B Gross Expenditure</b>	<b>2,820.65</b>	<b>3635.62</b>	<b>3,435.62</b>
Other expenses/ Appropriations			
Bad and doubtful debts	0	76.04	-
Return on equity	7.47	83.24	19.80
<b>C. Net Expenditure</b>	<b>2,828.12</b>	<b>3,794.90</b>	<b>3,455.41</b>
Less: Non Tariff income	35.20	335.51	145.99
<b>D. Net annual revenue requirements</b>	<b>2,792.92</b>	<b>3459.39</b>	<b>3,309.43</b>
<b>E. Revenue at existing tariffs</b>	<b>2,804.70</b>	<b>2830.57</b>	<b>3,005.72</b>
Revenue from additional sale	-	69.31	98.60
Truing up gap of previous years including carrying cost	33.09		33.09
<b>Revenue from redetermination of tariff for FY 2009-10</b>	<b>21.51</b>		
<b>F. Revenue Surplus/(Gap)</b>	<b>0.20</b>	<b>(559.50)</b>	<b>(238.20)</b>

Accordingly, against the gap of Rs. 559.50 Crore claimed by the Petitioner for provisional truing up of FY 2011-12, the Commission has worked out a gap of Rs. 238.20 Crore while carrying out the truing up for FY 2011-12 on the basis of the provisional accounts.

### 6.3.16 Carrying Cost of Deficit

The Petitioner has claimed an amount of Rs. 160.42 Crore as carrying cost on deficit. The final truing up for FY 2010-11 and the provisional truing up for FY 2011-12 as discussed above, results in overall gap of Rs. 201.07 Crore. Regulation 4(4) of UERC (Terms and Conditions for Truing Up of Tariff) Regulations, 2008 specifies as under:

*“The Commission may allow carrying cost of such variations which shall be limited to the interest rate approved for working capital borrowings.”*

Hence, in accordance with the Regulation quoted above, the Commission will allow the carrying cost on the surplus worked for FY 2010-11 as Rs. 13.58 Crores and gap of Rs. 51.81 Crore for FY 2011-12 to be recovered alongwith the ARR of FY 2013-14 at the rate of Short term Prime Lending Rate of SBI considered for allowing interest on working capital. Thus, the carrying cost allowable to the Petitioner works out to Rs. 38.23 Crore which would be recovered alongwith the net gap of Rs. 201.07 Crore in the ARR for FY 2013-14. Hence, total recovery of Rs. 239.30 Crore due to the impact of truing up till FY 2011-12 would be recovered in FY 2013-14.

## **6.4 MYT for the Control Period from FY 2013-14 to FY 2015-16**

### **6.4.1 Background**

This Chapter deals with the determination of projected ARR of the Petitioner for the Control Period from FY 2013-14 to FY 2015-16. To determine the ARR of the Petitioner for the ensuing year FY 2013-14, the Commission has first projected the monthly power purchase requirement of the Petitioner by estimating the category wise sales based on the past trends and considering the normative distribution losses. After determining the monthly power purchase requirement, the Commission has determined the overall power purchase cost by applying monthly merit order. The Commission has discussed the Sales Projections, Distribution loss trajectory, Power Purchase Plan and Capital Expenditure in detail in Section 5 of this Order while approving the Business Plan components. The Commission has, thereafter, estimated the other elements of ARR such as Depreciation, O&M expenses, Interest and Finance Charges, Working Capital requirement and Return on Equity to project the ARR of the Petitioner for the Control Period from FY 2013-14 to FY 2015-16. Based on the analysis and scrutiny of Petitioner's projections in the Petition and considering the subsequent submissions including actual data for FY 2010-11 and FY 2011-12, the Commission has determined the total ARR for first year of the Control Period, i.e. FY 2013-14 and ARR excluding Power Purchase Cost for the remaining two years of the Control Period from FY 2014-15 to FY 2015-16 as detailed in the subsequent Paras of this Chapter.

### 6.4.2 Sales

The Commission has already discussed on the approach adopted by it for approving the category wise sales for each year of the control period in detail in Chapter 5 of the order. The sales approved by the Commission for the control period is given in the Table below:

**Table 6.37: Category-wise Sales for the Control Period**

Category	CAGR Approved	FY 2013-14		FY 2014-15		FY 2015-16	
		Petitioner	Approved	Petitioner	Approved	Petitioner	Approved
Domestic (RTS - 1)	8.58%	1990	1878	2157	2039	2370	2214
Non-domestic, incl Commercial (RTS - 2)	9.85%	1038	1068	1126	1174	1238	1289
Public Lamps (RTS - 3)	10.28%	82	81	89	90	98	99
Private Tubewell/ Pump Sets (RTS - 4)	6.14%	229	198	248	210	272	223
Government Irrigation System (RTS - 5)	9.57%	167	164	181	180	199	197
Public Water Works (RTS - 6)	10.53%	399	396	433	438	475	484
Industrial Consumers (RTS - 7)	5.00%	5659	5290	6128	5554	6735	5832
Mixed Load (RTS - 8)	11.01%	195	197	211	219	233	243
Railway Traction (RTS - 9)	6.93%	9	10	10	10	11	11
<b>Total</b>		<b>9769</b>	<b>9283</b>	<b>10583</b>	<b>9915</b>	<b>11631</b>	<b>10593</b>

### 6.4.3 Distribution Loss Trajectory:

Continuing with the trajectory approved by the Commission in its previous Tariff Orders, based on the discussions in Chapter 5 of the Order, the Commission has now set a target of loss reduction of 1.00% for FY 2013-14 also. Thereafter, the loss reduction target is lowered to 0.50% each in FY 2014-15 and FY 2015-16 to attain the target of 15% by the end of the Control Period, i.e. FY 2015-16. The distribution loss reduction trajectory approved by the Commission for the Control Period is given in the Table below:

**Table 6.38: Distribution Loss Trajectory approved by the Commission**

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Distribution Loss	17.00%	16.00%	15.50%	15.00%

In line with the approach adopted by the Commission in its previous Tariff Orders, the Commission has considered the entire distribution loss reduction target approved by the Commission for each year of the control period as reduction in commercial losses of the petitioner

and has therefore, considered the impact of distribution loss reduction in terms of increase in sales due to efficiency improvement.

Accordingly, the estimated energy requirement at distribution periphery, State Periphery and approved loss level for the Control Period are given in the Table below:

**Table 6.39: Energy Input Requirement at Distribution Level for the Control Period**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Distribution Sales (MUs)	9283.28	9914.54	10593.18
Loss level for Energy Input (MUs)	17.00%	16.00%	15.50%
Energy Input Required at T-D Interface (MUs)	11,184.67	11,803.03	12,536.30
Commercial Loss Reduction (%)	1.00%	0.50%	0.50%
Commercial Loss Reduction (Sales due to efficiency improvement) (MUs)	111.85	59.02	62.68
Total Sales with Efficiency Improvement (MUs)	9,395.12	9,973.56	10,655.86
Overall Distribution Loss (%)	16.00%	15.50%	15.00%
PTCUL Loss% (as per data from PTCUL)	1.84%	1.82%	1.80%
Energy Input at State Periphery (MUs)	11,394.33	12,021.83	12,766.09

#### **6.4.4 Power Purchase Cost**

##### **6.4.4.1 Sources of Power**

As discussed in Chapter 5 of this Order, the Petitioner has four primary sources of firm power, viz.

- Generating Stations of UJVN Ltd.
- Central Generating Stations (CGS)
- Share of 12% free power of the State Government of Uttarakhand
- Independent Power Producers (IPPs) and Other Generating stations in the State of Uttarakhand

In addition to the above sources, the Petitioner also procures power on short term basis from trading licensees/power exchange, etc.

The Commission has already approved the power procurement plan and source wise energy availability from long term sources for the Control period in Chapter 5 of this Tariff Order.



#### **6.4.4.2 Merit Order**

As discussed in Chapter 4, the Commission is only projecting the power purchase cost for first year of the Control Period and for reasons mentioned in Chapter 4, the Commission finds no relevance in approving the power purchase cost for FY 2014-15 and FY 2015-16. The Commission, in its previous Tariff Orders till FY 2012-13 has been approving the projected power purchase expenses for the ensuing year by applying the merit order principles on monthly basis except in its Tariff Order for FY 2009-10 in which the Commission approved the power purchase quantum and costs for FY 2009-10 on an annual basis. In the present Tariff Order also, the Commission is continuing with the above mentioned approach and has projected the power purchase expenses for FY 2013-14 by applying the monthly merit order principle. The Commission is of the view that this approach would help the Petitioner to plan its monthly power requirement scientifically and more accurately. However, the energy to be purchased from small hydro generating plants, firm commitments under power purchase agreements, if any, cogeneration plants and other non-conventional/renewable energy sources need to be excluded from the merit order as these are must run plants must purchase sources. In addition, purchases from NPCIL also need to be excluded from the merit order, as these plants are also must run plants. The Commission, however, recognizes that the actual off take from a generating station and associated costs for the Petitioner might be different from that determined in the merit order above. The Commission would, accordingly, review these differences at the time of carrying out the truing up for FY 2013-14 in future years, subject to prudence check.

#### **6.4.4.3 Additional Power Purchase to meet Projected Energy Requirement**

The Commission has projected energy requirement of the Petitioner and considering the firm sources of power available to the Petitioner has estimated the deficit quantum/additional energy requirement throughout FY 2013-14. The total estimated energy shortage to meet the projected energy requirement for FY 2013-14 works out to 1,320.59 MU. For meeting this additional energy requirement, the Petitioner would be required to purchase additional power from the market and other sources. The Commission has already approved power procurement through short term sources in Chapter 5 of this Tariff Order with appropriate directions for procurement of short term power.

#### **6.4.4.4 Power Purchase Cost from Generating Stations of UJVNL Ltd.**

The Commission has approved the tariff for ten major generating stations of UJVNL for FY 2013-14 vide its Order dated May 06, 2013 on the Business Plan and MYT Petitions of UJVNL Ltd. Accordingly, the power purchase cost for UPCL has been estimated from these generating stations based on UPCL's percentage share in these generating stations. Power Purchase Cost from other SHP's commissioned after 01.01.2002, has been considered based on the rates approved by the Commission in accordance with the UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2010. In case of SHP's owned by UJVNL Ltd. having capacity more than 1 MW and commissioned before 01.01.2002, power purchase cost has been considered based on the rates approved by the Commission vide its Order dated May 19, 2009. In case of SHP's with capacity below 1 MW and commissioned prior to 01.01.2002, power purchase cost has been considered on the principle of weighted average cost of power allocated to State from Central Generating Stations as per their applicable Orders.

In accordance with the GoU Notification No. 1632/I(2)/2009-04(3)/22/2008 dated October 26, 2009, while estimating the power purchase cost of the Petitioner, the Commission has considered rate of cess imposed by GoU for the purpose of Power Development Fund as 30 paise/unit. The above cess is, however, not applicable on the generation from Maneri Bhali-I, Dhalipur, Ramganga and Maneri Bhali-II Generating Stations, in accordance with the Government of Uttarakhand Notification No. 1632/I(2)/2009-04(3)/22/2008 dated October 26, 2009 read with Notification No. 2837/I/2004-05-13/2003 dated June 20, 2005 and Notification No. (6604/03)/567/IX-3-Urja/Power Fund/03, as their approved energy rate (tariff) for FY 2013-14 is more than 80 paise/unit and moreover, Maneri Bhali-II is a new generating station commissioned during March 2008 and, hence, it also does not fulfill the eligibility requirement that the station should be more than 10 years old at the time of notification of the PDF Act. In addition to the above, the Commission has also considered 10 paise per unit towards the royalty to the State Government for the purchase of power from UJVNL's generating stations excluding MB-I, Dhalipur and Ramganga and MB-II based on the notification no. 1933/I/2005-01(3)/1/03 dated 25.04.2005 on royalty.

#### **6.4.4.5 Power Purchase Cost from Central Generating Stations**

CERC has issued the Tariff Orders for the second control period, i.e. from FY 2009-10 to FY 2013-14 for NTPC and NHPC stations, from which UPCL procures power based on its allocation and, therefore, the Commission has, accordingly, considered the AFC as approved by the CERC for FY 2013-14. Further, while projecting the variable cost for FY 2013-14, the Commission has considered, an escalation rate of 5% and applied on the actual average variable charges including Fuel Price Adjustment (FPA) charges for the period April, 12 to December 2012. The Commission observed that NHPC has been billing for its generating stations based on the capacity charge rate and energy charge rate in accordance with the principles of CERC (Terms and Conditions of Tariff) Regulations, 2009. The Commission has, accordingly, considered the same mechanism while projecting the power purchase cost from NHPC stations based on the AFC approved by CERC for FY 2013-14. For new central generating stations likely to be commissioned in FY 2013-14, the Petitioner has projected a rate of Rs 4.50/kWh. The Commission, however, has considered a provisional rate of Rs 4/kWh for energy available from new CGS stations.

#### **6.4.4.6 Power Purchase cost from IPPs and UREDA Projects**

The cost of power from IPPs and UREDA projects has been considered based on the rates approved by the Commission, in accordance with the UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2010.

#### **6.4.4.7 Power Purchase Rate for Free Power**

The Commission in the past has been approving rate of free power considering average rate of power procurement by the Petitioner from firm sources. As regards, the rate of power purchase for free power, the Commission, in its Tariff Order dated March 18, 2008 had stipulated as under:

*"As of now, as per State Government's letter dated March 11, 2003, the rate applicable for utilisation of Free Power by UPCL is average pooled cost of power purchase from Central Generating Stations. The Government of India's Electricity (Removal of Difficulty) Third Order, 2005 issued vide its notification dated June 8, 2005 on the subject stipulates as follows:*

*"2. Disposal of free electricity received by a State Government from hydro generating stations – The State Government receiving free electricity from hydro power generating stations shall have*

*discretion to dispose off such electricity in the manner it deems fit according to the provisions of the Act.*

*Provided that if such electricity is sold by the State Government to a distribution licensee, the concerned State Commission shall have powers to regulate the price at which such electricity is procured by the distribution licensee.*

*As per the statutory framework, the Commission is empowered to regulate the price at which the UPCL will purchase free power from GoU."*

The State Government gets free power from all the large hydro generating stations in Uttarakhand except those owned by UJVN Ltd and in turn sells it to UPCL, the distribution licensee in the State. The total AFC of the Central Generating stations are recovered based on the balance generation, i.e. the total generation less free share, thereby, implying that in effect they do not bear the burden of giving free electricity. Hence, the total AFC is shared by the States having allocation in the generation of the generating station. This also indicates that the consumers in the State of Uttarakhand bears some portion of the cost and are also burdened additionally by way of cost of free power to UPCL. However, the impact of this grossed up rate as discussed above of CGS is marginal on the State consumers, as only 3-4% of total capacity of these CGS is actually allocated to the State by the MoP/Central Government.

The Commission, accordingly, in the interest of consumers of the State has revisited the methodology adopted by it for computation of rate of free power. The previous methodology no more hold good on account of steep price revisions in the rates of energy available from firm sources. Moreover, considering that fuel costs are increasing exponentially and the demand supply gap are likely to increase further in future rendering the distribution utilities to depend on infirm/short/medium term sources.

Further, the Commission is of the view that the free power rate should reflect a fair price considering the segment pertaining to dominant firm source from which maximum power is procured by the distribution utility in the State. For the State of Uttarakhand whose electricity demand is predominantly met through large hydro generating stations, the free power rate should reflect the tariff for electricity generated through large hydro generating stations. The Commission, therefore, has revised the methodology for computation of rate of free power and has considered free power rate equal to the average rate of power procured by the Petitioner from Large Hydro

generating stations which includes UJVNL main stations, Maneri Bhali-II, NHPC stations, THDC and SJVNL. Accordingly the rate of free power, by this principle for FY 2013-14 works out to be Rs 1.57/kWh as shown in the Table below:

**Table 6.40: Rate of Free Power for FY 2013-14**

S. No	Particulars	Quantum (MU)	Total Cost (Rs. Crore)	Average Cost (Rs./kWh)
1	UJVNL-Main Stations	3103.03	310.48	1.00
2	Maneri Bhali-II	1266.09	219.30	1.73
3	NHPC	624.14	196.20	3.14
4	Tehri-I	106.02	56.50	5.33
5	Koteshwar	39.99	19.55	4.89
6	SJVNL	40.16	13.73	3.42
	<b>Average Large LHPs</b>	<b>5179.44</b>	<b>815.75</b>	<b>1.57</b>

#### 6.4.4.8 Cost of Additional Power Purchase to meet Energy Requirement

As discussed in the above Para, the total estimated energy shortage to meet the projected energy requirement for FY 2013-14 works out to around 1,320.59 MU, which the Petitioner will be required to procure from open market and other sources. The Commission, for FY 2013-14 expects the Petitioner to tie up considerable amount of additional power requirement at competitive rates and has, therefore, considered the rate of such additional power purchase as Rs 4.07/kWh which is the UI rate at 49.85 Hz as specified by CERC through its Central Electricity Regulatory Commission (Unscheduled Interchange charges and related matters) (Second Amendment) Regulations, 2012 for estimating the total cost of additional power purchase to meet the energy requirement. The Commission is of the view that in order to bridge the rising energy shortage, the Petitioner needs to take some concrete steps in terms of advance tie up/agreements for purchase of power under short, medium and long term basis so that it does not have to depend on other volatile sources which are costlier and uncertain and can have an adverse impact on the overall power purchase cost.

#### 6.4.4.9 Unschedule Interchange (UI)

As regards UI, the Commission in its tariff Order dated April 11, 2012 stated as follows:

*"The Commission, re-iterates its views that UI overdrawal is not a means for planning of procurement of deficit energy and infact should be an option of last resort only and not by choice. Further, in light of Central Electricity Regulatory Commission (Unscheduled Interchange Charges and related matters) (Second Amendment) Regulations, 2012, the Commission is of the opinion that the Petitioner should restrict its overdrawals beyond 49.80 Hz as the costs of UI overdrawal beyond*

48.80 Hz is too costly. The Commission would further like to clarify that while truing up the power purchase costs for FY 2012-13, the Commission will consider the actual UI overdrawls upto the grid frequency of 49.80 Hz and the UI charges and penalty thereof, if applicable, for any overdrawl below grid frequency of 49.80 Hz shall not be allowed while truing up the ARR for the FY 2012-13. The Commission, therefore, directs the Petitioner to restrict the net drawal from the grid within its drawal schedules whenever the system frequency is below 49.80 Hz."

As a progressive step towards better management of deficit power, **the Commission hereby directs the Petitioner to restrict the net drawal from the grid within its drawal schedules whenever the system frequency is below 49.85 Hz.** The Commission would further like to clarify that while truing up the power purchase costs for FY 2013-14, the Commission will consider the actual UI overdrawls upto the grid frequency of 49.85 Hz and the UI charges and penalty thereof, if applicable, for any overdrawl below grid frequency of 49.85 Hz shall not be allowed while truing up the ARR for the FY 2013-14.

#### 6.4.4.10 Total Power Purchase Cost for FY 2013-14

Based on the above, the Commission approves the total power purchase cost for the Petitioner for FY 2013-14 as Rs. 2,841.71 Crore for purchase of 11,394.33 MU. The summary of the power to be procured from different generating stations by the Petitioner during FY 2013-14 and the corresponding costs are shown in the Table below:

**Table 6.41: Total Power Purchase Cost for FY 2013-14**

Source	Power Purchase (MUs)	Total Cost (Rs. Crore)	Average Rate (Rs/kWh)
UJVNL-Main Stations	3,103.03	310.48	1.00
Maneri Bhali-II	1,266.09	219.30	1.73
UJVNL-SHPs	63.82	15.31	2.40
Pathri	57.06	5.99	1.05
Mohamadpur	32.23	3.87	1.20
<b>UJVNL Total</b>	<b>4522.22</b>	<b>554.95</b>	<b>1.23</b>
<b>NHPC</b>			
Salal	37.19	3.73	1.00
T/Pur	17.63	4.26	2.41
Tanakpur free power	54.38	8.56	1.57
Chamera-I	84.20	13.50	1.60
Chamera-II	15.18	4.20	2.77
Chamera III	52.34	19.38	3.70
Uri	95.57	17.58	1.84
Dhauliganga	53.77	15.72	2.92

**Table 6.41: Total Power Purchase Cost for FY 2013-14**

Source	Power Purchase (MUs)	Total Cost (Rs. Crore)	Average Rate (Rs/kWh)
Dhauliganga free power	130.11	20.49	1.57
Dulhasti	103.47	51.61	4.99
Sewa-II	25.60	10.54	4.12
Parbati Stage-III	95.24	38.10	4.00
Uri-II	43.96	17.58	4.00
<b>NHPC Sub-Total</b>	<b>808.64</b>	<b>225.26</b>	<b>2.79</b>
<b>THDC</b>			
Tehri-I	106.02	56.50	5.33
Koteshwar	39.99	19.55	4.89
Free Power - Tehri I	387.15	60.97	1.57
Free Power - Koteshwar	130.00	20.48	1.57
<b>THDC Sub-Total</b>	<b>663.16</b>	<b>157.50</b>	<b>2.37</b>
<b>NTPC</b>			
Anta	108.06	56.23	5.20
Auraiya	155.51	97.80	6.29
Dadri Gas	183.29	101.65	5.55
Unchahar-I	260.88	108.06	4.14
Unchahar-II	127.79	58.13	4.55
Unchahar-III	102.01	48.13	4.72
Rihand-1	331.60	92.71	2.80
Rihand-2	297.39	78.40	2.64
Singrauli	796.59	162.24	2.04
Rihand III	219.70	84.94	3.87
Dadri II	87.36	44.69	5.12
Jhajhar	19.83	10.64	5.37
Kahalgaon	171.17	74.25	4.34
<b>NTPC Total</b>	<b>2861.17</b>	<b>1017.86</b>	<b>3.56</b>
<b>NPC</b>			
NAPP	74.58	20.21	2.71
RAPP	119.50	44.84	3.75
<b>NPC Total</b>	<b>194.07</b>	<b>65.04</b>	<b>3.35</b>
<b>Vishnu prayag (free power)</b>	<b>219.35</b>	<b>34.55</b>	<b>1.57</b>
<b>SJVNL</b>	<b>40.16</b>	<b>13.73</b>	<b>3.42</b>
<b>Sasan</b>	<b>287.80</b>	<b>48.93</b>	<b>1.70</b>
<b>Others-IPPs</b>	<b>477.17</b>	<b>186.43</b>	<b>3.91</b>
<b>Firm Energy Available</b>	<b>10,073.74</b>	<b>2304.23</b>	<b>2.29</b>
<b>Additional purchase for meeting deficit</b>	<b>1,320.59</b>	<b>537.48</b>	<b>4.07</b>
<b>Total Power Purchase for meeting State's requirement</b>	<b>11,394.33</b>	<b>2,841.71</b>	<b>2.49</b>

The Commission, further, directs the Petitioner to seek prior approval of the Commission, in case the variation in power purchase quantum or total power purchase cost in any quarter

exceeds by more than 5% of the approved power purchase quantum and cost for the respective quarter worked out on pro-rata basis from the total approved quantity and cost for FY 2013-14 as indicated in the Table below, failing which, the Commission may disallow power purchases so made while truing up the ARR for the FY 2013-14:

**Table 6.42: Quarterly Power Purchase Quantum & Cost approved for FY 2013-14**

Particulars	April 13-June 13		July-13 to Sept-13		Oct-13 to Dec-13		Jan-14 to March 14		FY 2013-14	
	Quantum (MU)	Cost (Rs. Crore)	Quantum (MU)	Cost (Rs. Crore)	Quantum (MU)	Cost (Rs. Crore)	Quantum (MU)	Cost (Rs. Crore)	Quantum (MU)	Cost (Rs. Crore)
Power Purchase	2803.06	647.53	3030.22	613.18	2805.43	774.35	2755.62	806.64	11394.33	2841.71

#### **6.4.5 Transmission Charges payable to PGCIL and PTCUL**

##### **6.4.5.1 Inter-State Transmission Charges payable to PGCIL**

The Petitioner in its Petition has projected PGCIL charges for FY 2013-14 on the following basis:

- Inter-state Charges have been projected on “per MU basis”, i.e. power projected to be procured from outside the State for each year of the Control Period is multiplied by the ratio of actual PGCIL charges for FY 2011-12 and quantum of power procured from outside the state in that particular year.
- For projecting ULDC and NRLDC charges, an escalation of 10% has been considered in each year over the actual charges of FY 2011-12

The Commission for the purpose of approval of PGCIL charges has considered the actual data for FY 2012-13 and computed PGCIL charges on per unit basis. The per unit charges so derived have been escalated by 5% and multiplied by the Power Purchase quantum approved to be imported through PGCIL network for FY 2013-14. The Commission did not consider the data for FY 2011-12 as it appeared that the PGCIL charges for FY 2011-12 included a component of arrears also payable after issuance of CERC Orders as the charges which were of Rs. 125.93 Crore for FY 2010-11 increased to Rs. 211.02 Crore for FY 2011-12. However, the same for FY 2012-13 (for the period April, 2012 to December, 2012) was Rs. 112.98 Crore which when annualized for the complete year of FY 2012-13 works out to Rs. 150.64 Crore. Hence, the Commission has not accepted the Petitioner’s claims in this regard. Accordingly, considering the ISTC for FY 2012-13 (for the period April, 2012 to December, 2012) the Inter-State Transmission charges approved for FY 2013-14 works out to Rs 163.91 Crore as against Rs 243.58 Crore claimed by the Petitioner. Further, as discussed



earlier the Commission is not approving the power purchase cost for FY 2014-15 and FY 2015-16 and has, therefore, not computed the transmission charges for these years.

#### **6.4.5.2 Intra-State Transmission Charges Payable to PTCUL**

While projecting intra-state transmission charges payable to PTCUL for FY 2013-14, the Petitioner has projected the same at Rs. 175.49 Crore by escalating the actual transmission charges for FY 2011-12 by 10%. The Commission has determined annual fixed charges for State Transmission Utility (PTCUL) as Rs. 195.63 Crore for FY 2013-14 vide its Order dated May 06, 2013 in accordance with the aforesaid order, these charges are payable by the Petitioner and are therefore, included in its ARR for FY 2013-14.

### **6.4.6 Cost of Assets & Financing**

#### **6.4.6.1 Capital Cost of Original Assets**

The Petitioner has submitted the value of Gross Fixed Assets (GFA) as on 08.11.2001 at Rs. 508.00 Crore as per the value recognized by the Commission in its Tariff Orders issued from time to time in its petition for true up of FY 2010-11 and FY 2011-12. However, where petitioner is claiming additional cost on account of finalization of transfer scheme the Petitioner has submitted the value of GFA as on 08.11.2001 at Rs. 1058.18 Crore and the same value is reflected in the provisional Annual Accounts for FY 2011-12. The Petitioner has requested the Commission to recognize the actual value of GFA as on 08.11.2001 on the basis of finalization of the Transfer Scheme and allow depreciation, accordingly, on the value of final GFA as detailed in initial paragraphs of Section 6.

For reasons dealt in the previous Paras of Truing Up, there is no change in the factual position of the Transfer Scheme as of now and hence, the Commission is not revisiting this issue. The Commission, therefore, has considered the original value of the Petitioner's GFA as on November 09, 2001 as Rs. 508 Crore.

#### **6.4.6.2 Capitalisation of Assets**

In its submissions for the Control Period, the Petitioner has submitted the details of capitalisation done during the previous years and the capital works planned for the Control Period under various schemes as discussed in detail in Section 2 and Section 5 of this Order.

As discussed in Chapter 5, the total Capitalisation approved by the Commission for the first Control Period is shown in the Table below:

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**Table 6.43: Approved Capitalisation for the first Control Period (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Capitalisation	339.92	350.64	355.77

**6.4.7 Financing of Capital Assets**

Regulation 22 of UERC Tariff Regulations, 2011, specify that:

*“(1) For a project declared under commercial operation on or after 1.4.2013, debt-equity ratio shall be 70:30. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as normative loan. Where actual equity employed is less than 30%, the actual equity would be used for determination of Return on Equity in tariff computations.*

*(2) In case of Generating Company, Transmission Licensee, Distribution Licensee, or SLDC where investments have been made prior to 1.4.2013, Debt: Equity Ratio shall be as approved by the Commission in the previous Orders.”*

As detailed in Section 5.5, the Commission has approved the financing of Capitalisation for each year of the Control Period. The Commission has considered financing through grants on pro-rata basis based on the Petitioner’s submission and the balance financing requirement has been worked out in line with the Commission’s earlier approach and as per the UERC Tariff Regulations, 2011 considering the debt-equity ratio of 70:30 for the Control Period. The Commission shall reconsider the means of financing during the APR and truing up proceedings while approving the scheme wise capitalisation of the Petitioner. Accordingly, the Commission has determined the debt and equity components as given below:

**Table 6.44: Approved Means of Finance for the first Control Period (Rs. Crore)**

Particulars	FY 2013-14				FY 2014-15				FY 2015-16			
	Grant	Loan	Equity	Total	Grant	Loan	Equity	Total	Grant	Loan	Equity	Total
Opening Value	242.43	394.61	940.28	1,577.33	300.65	591.80	1024.79	1917.25	390.56	774.32	1103.02	2267.89
Additions in the year	58.22	197.19	84.51	339.92	89.91	182.52	78.22	350.64	106.90	174.21	74.66	355.77
Less: Deletions during the year												
Closing Value	300.65	591.80	1024.79	1917.25	390.56	774.32	1103.02	2267.89	497.46	948.52	1177.68	2623.66

#### **6.4.8 Interest and Finance Charges**

The Petitioner has estimated interest and finance charges based on existing and new loans proposed for funding capital expenditure. For existing loans, the Petitioner has considered interest separately for each loan based on the arrangement with the funding agency from which the loan has been taken. For any loan amount that is to be received under the existing scheme during the Control Period has been covered under existing loans by the Petitioner. The details of the interest on loan as estimated by the Petitioner have been discussed in Section 2 of this Order. The Commission has worked out the Interest and Finance Charges considering the loan amount corresponding to the assets capitalised in each year based on the approved means of finance. Interest rates for estimating interest for the Control Period FY 2013-14 to FY 2015-16 has been considered as the weighted average rate of interest calculated on the basis of the actual loan portfolio corresponding to the asset capitalized at the beginning of the year. However, any variation in the interest due to change in rate of interest shall be considered while undertaking true up based on the Audited Accounts of the financial year.

The Regulations provides for treating repayment for each year equal to the depreciation allowed for that year. However, in case of distribution company most of the assets created are either old assets or are created out of grants. Accordingly, depreciation allowed to UPCL would work out lower than the actual repayment as per the loan schedule. Hence, the Commission has considered the repayment of loans based on the approved sanctions for different schemes and for normative loans 10 year repayment period has being assumed for computation of interest expense for the Control Period.

Based on the loans and repayment considered and interest rates adopted by the Commission, the interest for the Control Period has been estimated, the details of which are indicated in the Table given below:

**Table 6.45: Approved Loans for the first Control Period (Rs. Crore)**

Particulars	Approved Loans FY 2013-14				Approved Loans FY 2014-15				Approved Loans FY 2015-16			
	Opening Balance	Addition	Repayment	Closing Balance	Opening Balance	Addition	Repayment	Closing Balance	Opening Balance	Addition	Repayment	Closing Balance
APDRP	3.96	0.00	0.19	3.77	3.77	0.00	0.25	3.52	3.52	0.00	0.27	3.25
District Plan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PMGY	2.71	0.00	0.27	2.44	2.44	0.00	0.27	2.17	2.17	0.00	0.27	1.90
State Plan	1.90	0.00	0.65	1.25	1.25	0.00	0.50	0.75	0.75	0.00	0.50	0.25
MNP	46.47	0.00	4.23	42.25	42.25	0.00	4.23	38.02	38.02	0.00	4.23	33.79
AREP	23.60	0.00	8.98	14.62	14.62	0.00	8.98	5.63	5.63	0.00	5.63	0.00
RGGVY	5.33	0.00	1.07	4.26	4.26	0.00	1.07	3.19	3.19	0.00	1.07	2.11
<b>Sub Total</b>	<b>83.98</b>	<b>0.00</b>	<b>15.39</b>	<b>68.58</b>	<b>68.58</b>	<b>0.00</b>	<b>15.30</b>	<b>53.28</b>	<b>53.28</b>	<b>0.00</b>	<b>11.98</b>	<b>41.30</b>
Others	191.12	197.19	89.46	580.25	580.25	182.52	107.71	655.05	655.05	174.21	125.13	704.12
<b>Total</b>	<b>275.10</b>	<b>197.19</b>	<b>104.86</b>	<b>648.83</b>	<b>648.83</b>	<b>182.52</b>	<b>123.02</b>	<b>708.33</b>	<b>708.33</b>	<b>174.21</b>	<b>137.11</b>	<b>745.42</b>
<b>Interest</b>				<b>54.16</b>				<b>66.80</b>				<b>78.99</b>

**6.4.8.1 Interest on Security Deposit**

The Petitioner has claimed interest on consumer's security deposits for the Control Period based on average balance of each year by considering the interest rate @ 9.50% per annum during the Control Period. The Commission had sought the workings of the same by the Petitioner.

The Petitioner has considered the interest rate of 9.50% per annum only, while the Commission noted that the Bank Rate has now changed to 8.50%. **Therefore, the Commission has decided to allow Interest on Consumer Security Deposit for the Control Period at the revised interest rate of 8.50% and directs the Petitioner to compute and pay the interest to its consumers, accordingly, from FY 2013-14.** The Commission has considered the additions in security deposit for each year of the control period based on the claims of the petitioner. The following Table shows the working of Interest on Consumer Security Deposits for the Control Period:

**Table 6.46: Interest on Consumer Security Deposit approved for the Control Period (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Opening Balance of Security Deposit	405.10	431.60	460.53
Estimated Addition during the year	26.50	28.94	31.61
Closing Balance of Security Deposit	431.60	460.53	492.14
Average Balance of Security Deposit	418.35	446.07	476.34
Interest Rate considered	8.50%	8.50%	8.50%
<b>Interest on Security Deposit</b>	<b>35.56</b>	<b>37.92</b>	<b>40.49</b>

**6.4.8.2 Government Guarantee Fee**

The Petitioner has claimed an amount of Rs. 2.5 Crore as guarantee fee payable to GoU for each year of the Control Period from FY 2013-14 to FY 2015-16 in lieu of the guarantee extended by the State Government against L/c opened in PNB for payment of electricity bills and also towards REC Old loan. A Guarantee fee @ 1.00% p.a. is payable to the Government on the outstanding loans and amount of L/c by the Petitioner.

The Commission validated the Petitioner's claim, in accordance, with the approach adopted in the previous Tariff Orders and has worked out the Guarantee Fee for the Control Period as given in the Table below:

**Table 6.47: Calculation of Guarantee Fees approved for the Control Period (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Letter of Credit	35.00	35.00	35.00
REC Old loans	200.00	184.71	167.87
<b>Total</b>	<b>235.00</b>	<b>219.71</b>	<b>202.87</b>
<b>Government Guarantee Fees @ 1.00%</b>	<b>2.35</b>	<b>2.20</b>	<b>2.03</b>

Further, the Commission has not reduced the amount of interest capitalised as the Commission has considered only those loans which have been utilised for creation of assets and not the total loans as taken by the Petitioner and the interest on balance loans utilised for capital expenditure pending capitalisation have been assumed to be in CWIP. The summary of Interest and Finance Charges approved by the Commission for the Control Period is given in the Table below:

**Table 6.48: Interest and Finance Charges for the Control Period (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
APDRP	0.36	0.33	0.31
District Plan	-	-	-
PMGY	0.30	0.27	0.24
State Plan	0.11	0.07	0.03
MNP	5.11	4.62	4.13
RGGVY	0.58	0.45	0.32
AERP	-	-	-
Others	47.72	61.06	73.95
<b>Sub-Total (A)</b>	<b>54.16</b>	<b>66.80</b>	<b>78.99</b>
REC Old Loan	26.92	25.51	23.97
Guarantee Fee	2.35	2.20	2.03
Interest on Security Deposit	35.56	37.92	40.49
<b>Total Interest Charges</b>	<b>118.99</b>	<b>132.42</b>	<b>145.47</b>
Capitalisation	-	-	-
<b>Net Interest and Finance Charges</b>	<b>118.99</b>	<b>132.42</b>	<b>145.47</b>

#### 6.4.9 Depreciation

Regulation 29 of the UERC Tariff Regulations, 2011 stipulates as follows:

*“The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.*

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

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

*:*

*:*

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

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

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

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

The Petitioner submitted that Depreciation has been calculated for the Control Period as per the rates provided in MYT Regulation, 2011. The Petitioner has claimed depreciation on the average of the opening and closing value of assets. The submission by the Petitioner for estimating

Depreciation for the Control Period has already been discussed in Section 2 of this Order.

It has been the practice of the Petitioner to capitalise the assets on the last day of the Financial Year. Nothing has been brought on record by the Petitioner to show that the asset is capitalised when it is put to use. Hence, the Commission has adopted the similar approach as adopted by it in the previous Tariff Orders of allowing depreciation on the opening GFA.

The Commission asked UPCL to confirm that cumulative depreciation for all the assets is less than 90% of GFA, as assets cannot be depreciated beyond 90% of GFA in accordance with UERC (Terms and Conditions for determination of Tariff), Regulations, 2011. UPCL in its reply confirmed that depreciation values in true up petition have been calculated in accordance with the UERC (Terms and Conditions for determination of Distribution Tariff) Regulations 2004 and therefore depreciation for all assets is less than 90%. Pro-rata depreciation on assets capitalised during the year would not be admissible in case the asset is capitalised at the year end. Hence, to validate the same, pre-requisite would be the capitalisation policy as well as the fixed asset register showing the date of additions made in the assets during the year. **The Petitioner is once again directed to take note of the above pre-requisite and submit the same along with the next filing and also claim depreciation based on the rates specified in the Regulations for each class of asset.**

In the absence of complete Fixed Asset Register, the Commission at this stage has considered average rate of 5.20% as submitted by UPCL and applied the same on the opening GFA for each year of the control period. The depreciation rate and accordingly the depreciation expenses will be trued up by applying the asset wise depreciation rate in accordance with the provisions of UERC Tariff Regulations, 2011 at the time of final truing up. The summary of Depreciation Charges for the Control Period for FY 2013-14 to FY 2015-16 as approved by the Commission is shown in the Table below:

**Table 6.49: Calculation of Depreciation Fees approved for the Control Period (Rs. Crore)**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Opening GFA	1,577.33	1,917.25	2,267.89
Grant	242.43	300.65	390.56
Depreciable Opening GFA	1334.89	1,616.60	1,877.33
Depreciation Rate	5.20%	5.20%	5.20%
<b>Depreciation</b>	<b>69.46</b>	<b>84.11</b>	<b>97.68</b>

#### 6.4.10 Return on Equity

As per UERC Tariff Regulations, 2011 the return of equity shall be computed on opening

equity of the financial year as mentioned below:

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

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

*(2) Return on equity shall be computed on at the rate of 15.5% for Generating Stations, Transmission Licensee and SLDC and at the rate of 16% for Distribution Licensee on a post-tax basis.*

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

It has been observed from the audited balance sheet for FY 2010-11 that entire cash generated from the operating activities has been utilized in creation of assets. The cash generated from operation during FY 2010-11 was Rs. 220.98 Crore which was fully utilized for creation of fixed assets worth Rs. 448.20 Crore. Balance amount was funded through loans, deposits and transfer from CWIP. Cash generated from operations can be either in the form of profits, non-cash expenditure like depreciation, etc. or the unpaid current liabilities. The petitioner's accounts for FY 2010-11 reveals that it is running into losses and depreciation allowed to it is a very small amount, hence, the only source available for generating cash from operations is the unpaid current liability for which expense has been booked but is unpaid.

It is strange to observe the petitioner's practice of creating long term assets out of current liabilities as no prudent management would create long term assets from the current liabilities which are of short term. In case the petitioner has to pay these liabilities it will have to either liquidate its assets or resort to external borrowings. Both the options would not be in the interest of the corporation. Further, with holding any payment and utilizing it elsewhere can also attract punitive action which can be in the form of penalty or surcharge and the Commission has already taken a view that no penalty or surcharge due to the inefficiency of the petitioner would be allowed to be a pass through in tariffs. **The management of the petitioner's company is, therefore, directed to look into the issue and take appropriate remedial action for correcting this practice.**

As per details available with the Commission, the petitioner has created assets worth Rs.



627.00 Crore out of internal resources till FY 2012-13. The Commission in the past has been treating it as fund employed out of internal resources and allowing return and interest on the same in the normative debt equity ratio of 70:30. As on 31.03.2012 the equity in the balance sheet of the petitioner was Rs. 577 Crore which mainly comprised of the CPSU's dues inherited by the petitioner from UPPCL forming part of the transfer scheme. Hence, the actual equity addition subsequent to formation of the company is far less than the internal resources of Rs. 627.00 Crore generated for creation of assets. **In this regard, the petitioner is directed to submit the source of such internal resources from FY 2001-02 onwards within 3 months of the date of order.**

Regulation 22(3) of UERC (Term and conditions for determination of Tariff) Regulations, 2011 specifies as under:

*"The premium raised by the Generating Company, or the Transmission Licensee or the Distribution Licensee or SLDC while issuing share capital and investment of internal resources created out of free reserve, if any, shall also be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting capital expenditure."*

Hence, pending receipt of information on the source of the internal resources utilized for creation of fixed assets, the Commission based on its previous approach has worked out the Return on Equity on opening eligible equity base for each year of the Control Period on the basis of approved means of finance as detailed in Section 6.4.2 at the rate of 16% in accordance with UERC Tariff Regulations, 2011. The Commission will take a final view on the treatment of internal resources while carrying out the final truing up for FY 2011-12 alongwith the APR of FY 2013-14. The Return on Equity approved by the Commission is shown in the Table below:

**Table 6.50: Return on Equity approved by the Commission (Rs. Crore)**

Sl. No.	Particulars	FY 2013-14	FY 2014-15	FY 2015-16
1	Opening Share Capital	159.27	243.78	322.00
2	Addition	84.51	78.22	74.66
3	Closing Share Capital (a+b)	243.78	322.00	396.66
4	Rate of Return	16.00%	16.00%	16.00%
5	Total Return on Equity (a X b)	25.48	39.01	51.52

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

The submission of the Petitioner and the approach adopted by the Commission for approving the various components of O&M expenses for the Control Period is discussed below.

#### **6.4.11.1 Employee Expenses**

For the purpose of projecting Employee Expenses for the Control Period, the Petitioner has considered four main components namely net existing employee costs, net employee costs for new recruitment, training and development cost and retirement expenses. Thereafter, the Petitioner has considered the following for projecting the employee expenses for the Control Period from FY 2013-14 to FY 2015-16:

(i) For Existing employees:

- (a) The Petitioner has considered escalation factor equivalent to CPI Inflation, i.e. 10.40% which is the average increase in CPI for immediately preceding three years
- (b) For basic pay and grade pay, the Petitioner has considered an annual increment of 3%.
- (c) Dearness allowance has been computed by considering the rates of Dearness allowance as 72% of respective year's projected basic pay plus grade pay.
- (d) Employer's contribution towards pension and gratuity is payable at 19.08% of (Basic pay+grade pay and Dearness Allowance) for employees recruited before FY 2004-05.
- (e) Employer's contribution towards employees provident fund payable at 12% of Basic Salary and Dearness Allowance.
- (f) Capitalization of employee expenses considered at 16.49% of total employee expenses based on five year average of Employee costs capitalized over Employee Costs from FY 2007-08 to FY 2011-12.

(ii) Employment Cost for new Recruitment

- (a) For projecting the costs of new employees, the Petitioner has considered that recruitment against both existing vacancies and additional posts will be completed during FY 2013-14, other than Technician Grade (Electrical)-II vacancies within sanctioned posts, which will be filled during FY 2015-16.
- (b) Capitalization of employee expenses has been considered at 16.49% of total employee expenses as explained above

(iii) Training and Development Cost

- (a) The Petitioner has considered the expenses projected to be incurred on training and development at the rate of 1.25% of the total employee cost.

## (iv) Retirement Cost

- (a) To determine retirement expenses, the Petitioner has considered retirement during FY 2012-13 and also during the Control Period and the average salary for each grade of employee has been worked out taking current year, i.e. FY 2012-13 into consideration.

Based on the above, the total employee expenses projected by the Petitioner for the Control Period is given in Table below:

**Table 6.51: Projected Employee Expenses for the Control Period (Rs. Crore)**

Particulars	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
<i>Salaries</i>	121.41	125.05	128.80	132.67
<i>Additional Pay / Dearness Allowance (DA)</i>	87.42	90.04	92.74	95.52
<i>Other Allowances &amp; Relief</i>	13.62	15.04	16.60	18.33
<i>Interim Relief / Wage Revision</i>	0.84	0.93	1.03	1.13
<i>Honorarium/Overtime</i>	0.00	0.00	0.00	0.00
<i>Statutory bonus/ Ex-gratia</i>	1.49	1.65	1.82	2.01
<b>Total-Employees' Cost</b>	<b>224.78</b>	<b>232.70</b>	<b>240.99</b>	<b>249.66</b>
<i>Medical Expenses Reimbursement</i>	4.09	4.52	4.99	5.50
<i>Travelling Allowance(Conveyance Allowance)</i>	0.00	0.00	0.00	0.00
<i>Leave Travel Assistance</i>	0.00	0.00	0.00	0.00
<i>Earned Leave Encashment</i>	13.36	13.76	14.17	14.59
<i>Payment Under Workman's Compensation And Gratuity</i>	0.17	0.18	0.20	0.22
<i>Subsidised Electricity To Employees</i>	0.00	0.00	0.00	0.00
<i>Any Other Item</i>	21.59	23.84	26.32	29.05
<i>Staff Welfare Expenses</i>	0.14	0.15	0.17	0.18
<b>Total-Other Costs</b>	<b>39.34</b>	<b>42.44</b>	<b>45.84</b>	<b>49.56</b>
<b>Apprentice And Other Training Expenses</b>	<b>0.34</b>	<b>0.37</b>	<b>0.41</b>	<b>0.46</b>
<i>Provident Fund Contribution</i>	4.18	4.30	4.43	4.56
<i>Provision for PF Fund</i>	0.00	0.00	0.00	0.00
<i>Any other items (EPF, GIS-General Group Insurance Scheme ex-gratia grant, Linked GPF Insurance Scheme, Pension, Gratuity)</i>	33.71	37.22	41.09	45.37
<b>Total-Contribution To Terminal Benefits</b>	<b>37.89</b>	<b>41.52</b>	<b>45.52</b>	<b>49.93</b>
<b>Total-Existing Employees' Costs</b>	<b>302.35</b>	<b>317.05</b>	<b>332.77</b>	<b>349.61</b>
<b>Less: Employee Expenses Capitalised (for existing employees)</b>	<b>49.87</b>	<b>52.30</b>	<b>54.89</b>	<b>57.67</b>
<b>Net Employee expenses (existing)</b>	<b>252.48</b>	<b>264.75</b>	<b>277.88</b>	<b>291.94</b>
<b>Total New recruitment expenses</b>	<b>0.00</b>	<b>23.86</b>	<b>24.57</b>	<b>34.72</b>
<b>Less: Employee Expenses Capitalised (for new recruitment)</b>	<b>0.00</b>	<b>3.93</b>	<b>4.05</b>	<b>5.73</b>
<b>Net Employee expenses (new recruitment)</b>	<b>0.00</b>	<b>19.92</b>	<b>20.52</b>	<b>28.99</b>
<b>Training &amp; Development expenses</b>	<b>3.78</b>	<b>4.26</b>	<b>4.47</b>	<b>4.80</b>
<b>Retirement expenses</b>	<b>2.32</b>	<b>2.39</b>	<b>2.46</b>	<b>2.54</b>
<b>Total</b>	<b>258.58</b>	<b>291.32</b>	<b>305.32</b>	<b>328.27</b>

The Petitioner submitted that it has considered Gratuity and Pension expenditure separately for retiring employees for FY 2012-13 onwards. This is to include the additional impact on total employee cost on account of the retirement benefits for retirements taking place from FY 2012-13 onwards. Gratuity and pension expense of UPCL for retirements during FY 2012-13 to FY 2015-16 has been computed as 19.08% of inflation-adjusted total yearly basic pay plus grade (plus DA) of the retiring employees as shown in the table below. The retirement expenses have been projected as Rs.2.39 Crore, Rs 2.46 Crore and Rs. 2.54 Crore for FY 2013-14, FY 2014-15 and FY 2015-16 respectively.

It was further observed that additional employee expense on account of recruitment of 458 employees in FY 2015-16 have been considered by the Petitioner from FY 2013-14 itself under employee expense. The Commission sought justification on this from the Petitioner. In reply, the Petitioner submitted that the net recruitment cost for FY 2013-14 after subtracting UPNL expenses and excluding recruitment cost for the 458 employees against sanctioned posts to be recruited in FY 2015-16 (considering designation wise average salary ) as calculated in FY 2012-13 is Rs 23.16 Crore. This amount has been escalated by 3% to arrive at FY 2013-14 recruitment cost of Rs. 23.86 Crore, which has been considered as a part of FY 2013-14 employee cost projections. The Petitioner submitted that since there is no new recruitment taking place in FY 2014-15 hence, the recruitment cost of Rs. 23.86 (for FY 2013-14) has been escalated by 3% to arrive at recruitment cost (cumulative) for FY 2014-15, which works out as Rs 24.57 Crore (as in the model). The Petitioner submitted that 458 employees against sanctioned posts have been proposed to be recruited in FY 2015-16. Recruitment cost (cumulative) considered for FY 2015-16 includes Rs. 25.31 Crore (Rs 24.57 in FY 2014-15 escalated by 3%) and Rs. 9.41 Crore (recruitment cost of 458 employees at average salaries in FY 2012-13 which is Rs. 8.61 Crore, which has been subsequently escalated i.e.  $[8.61 \times (1+3\%)^3]$  to arrive at the value for FY 2015-16). Therefore, recruitment cost has been calculated only starting in FY 2013-14.

During the Technical Validation Session, the Commission had observed that Gratuity and Pension claimed by the Petitioner has resulted in double accounting. The Commission had directed the Petitioner to submit the justification for claiming the pension and gratuity liability towards the retiring employees when the same has been taken over by Government of Uttarakhand. The petitioner accepted the reasons given by the Commission against this claim and withdrew its claim of retirement expenses included in the employee cost under a separate head from FY 2013-14

onwards. However the Petitioner further submitted that as per the Government Order dated February 2, 2013, the Petitioner vide its Office Memo dated April 4, 2012 have passed the orders that the employees of UPCL / UPPCL / erstwhile UPSEB who retired between 01.01.1996 to 19-07-2010 will be given enhanced pension due to applicability of upgraded third time scale. This enhanced pension will be allowed and paid by the petitioner company from its own funds for the period from July 20, 2010 to March 31, 2013 on a consolidated basis and on monthly basis from April 1, 2013. The Petitioner requested the Commission to consider the same while approving the employee cost. Since, the petitioner has not claimed any amount on this head, the Commission is not allowing the same. However, the same will be considered on cash basis in the year in which payment is made by the petitioner during the truing up exercise.

For estimating the employee expenses for the Control Period, the Commission first analysed the employee cost for existing employees of last five years for the period FY 2007-08 to FY 2011-12 based on the actual employee expenses as submitted in the Audited Accounts. However, the employee expenses for FY 2007-08 and FY 2008-09 were substantially lower than the employee expenses for FY 2009-10 to FY 2011-12 on account of implementation of Sixth Pay Commission recommendation during the latter period. Hence, the Commission analysed the employee cost for existing employees of three years from FY 2009-10 to FY 2011-12. However, on analysis of the employee expenses, the Commission observed that the employee expenses for FY 2012-13 as estimated in accordance with the provisions of UERC Regulations, 2011 based on the average of actual three years employee expenses is working out to be lower than the actual annualized employee expenses for FY 2012-13 based on the MTB upto October, 2012. Therefore, for projecting Gross Employee Expenses and Capitalisation of Employee Expenses for FY 2012-13 and Control Period for FY 2013-14 to FY 2015-16, the Commission has considered the actual employee expenses for FY 2011-12 as base year for projecting the employee expenses for the Control Period after adjusting for the arrears paid towards the implementation of Sixth Pay Commission in FY 2011-12.

Further, the Commission has worked out the growth factor based on the opening and closing number of employees. The Petitioner has proposed addition of 1332 in FY 2013-14, however, for making such substantial recruitment, the recruitment process has not yet begun. Thus, the Commission has spread the recruitment of 1332 employee over the Control Period. As regards 572 employees proposed to be recruited in FY 2013-14, UPCL has not received sanction for the same, thus these positions are not considered as recruitment in the control period by the Commission. The

Commission based on the sanction of GoU and also considering the status of recruitment in FY 2013-14 will reconsider reviewing the same . As regards recruitment of 458 Technician Grade-II, it is understood that the position are already occupied on contract basis from UPNL and UPCL is bearing the cost for it, so the additional cost due to this recruitment will be offset by the reduction in cost borne by UPCL of contractual UPNL employees at present. Hence, these recruitments are not considered as addition while computing the growth factor. If the actual addition to the number of employees is lower than the number of employees addition considered in this Order, the impact of same shall be adjusted while carrying out the truing up and will not be considered as reduction in Employee expenses on account of controllable factors.

Based on the above, the Growth Factor as per the Regulations works out as under:

**Table 6.52: Gn Factor approved for FY 2013-14 to FY 2015-16**

Particulars	FY 2013-14	FY 2014-15	FY 2015-16
Opening no. of Employees	4024	4257	4504
Employees recruited	444	444	444
Retirement	211	197	178
Closing No. of Employees	4257	4504	4770
Gn	5.79%	5.80%	5.91%

The Commission has computed the net employee expense for the Control period after deducting the capitalisation of employee expenses for the Control period. For projecting the capitalisation of employee expenses for the Control Period, the Commission has considered the average employee expenses capitalised as percentage of gross expenses during the last five years from FY 2007-08 to FY 2011-12 which works out to 16.49%. Further, the Commission has considered the average increase in CPI for last three years as 8.75%. The gross employee cost for FY 2013-14 accordingly, works out to Rs. 270.48 Crore against Rs. 309.62 Crore approved by the Commission for FY 2012-13. The Commission examined the Monthly Trial Balance of the Petitioner Company as on November, 2012 submitted by the Petitioner. The gross employee expenses as on November, 2012 were Rs. 159.53 Crore which when annualized worked out to Rs.239.29 Crore for complete FY 2012-13. This also includes a component of Pay Commission's arrears and from this, the expense transferred to CWIP will have to be adjusted. Accordingly, after making these adjustments based on the past trends, the net employee cost for FY 2012-13 would be around Rs. 190.00 Crore and against this the Commission has allowed net employee expense of Rs. 225.88 Crore for FY 2013-14. The following Table shows the summary of the projected and approved employee expenses for FY

2013-14 to FY 2015-16:

**Table 6.53: Net Employee expenses for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	Projected	Approved	Projected	Approved	Projected	Approved
Net Employee expenses	291.32	225.88	305.32	259.89	328.27	299.31

The Commission also directs the Petitioner to expedite its recruitment plan as the Commission understands that it is facing shortage of manpower because of which it has to place reliance on the contractual personnels who have no accountability to the Petitioner Company and as a result day to day functions including metering and billing of the Petitioner is being affected.

#### 6.4.11.2 Repairs and Maintenance (R&M) Expenses

For the Control Period the Petitioner has projected R&M Expenses in accordance with UERC Tariff Regulations, 2011. For determining the value of the constant 'K' taken by the Petitioner, two factors have been taken into account which will affect future R&M projections. Three year weighted average (FY 2009-10 to FY 2011-12) of the actual/provisional R&M expenses to Gross Fixed Asset (GFA), which is 2.47% and, an average of 8% projected growth in consumer base of the Petitioner have been considered. Accordingly the value of 'K' used by the Petitioner for projections is 2.67%.

The Petitioner has considered WPI inflation at 7.43% (as discussed in A&G expenses sub-section). The Petitioner submitted that owing to shortage of funds, it was not able to carry out adequate repair and maintenance work in previous years resulting in lower actual R&M expenses than what it should have been in actuals. Therefore, the Petitioner expects increase in spending on repair and maintenance starting this year.

The details of total R&M expenses projected by Petitioner for FY 2012-13 and for the Control Period (FY 2013-14 to FY 2015-16) are shown in the table below:

**Table 6.54: Projected R&M Expenses for the Control Period (Rs. Crore)**

Components	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Plant and Machinery	27.36	32.04	38.81	47.63
Building	3.15	3.69	4.47	5.49
Civil Works	0.42	0.49	0.60	0.73
Hydraulic Works	0.00	0.00	0.00	0.00
Lines, Cables Net Works etc.	57.18	66.97	81.11	99.54
Vehicles	0.01	0.01	0.01	0.01
Furniture and Fixtures	0.01	0.01	0.02	0.02
Office Equipments	0.23	0.27	0.33	0.40
Station Supplies	0.00	0.00	0.00	0.00
Other Credits to R&M Charges	0.00	0.00	0.00	0.00
<b>Total</b>	<b>88.36</b>	<b>103.49</b>	<b>125.34</b>	<b>153.83</b>

UPCL in addition to the K factor has also considered projected growth in consumer's base. This is not in accordance with the Regulation and further creation of asset due to increase in consumer base has already been factored in the gross asset base during the control period, hence, this has not been considered. For projecting the R&M expenses, the Commission has considered the average of actual R&M expenses for last three years, i.e. FY 2009-10 to FY 2011-12 as percentage of GFA approved by the Commission for the corresponding years, which works out to 4.98% (K factor). This is applied on the opening GFA for each year from FY 2013-14 to FY 2015-16 which is further escalated by the average increase in WPI for last three years worked out as 7.77% to project the R&M expenses for the first Control Period.

The following Table shows the summary of the projected and approved R&M expenses for FY 2013-14 to FY 2015-16:

**Table 6.55: R&M expenses for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	Proposed	Approved	Proposed	Approved	Proposed	Approved
R&M expenses	103.49	91.27	125.34	119.56	153.83	152.41

#### 6.4.11.3 Administrative and General (A&G) Expenses

For the Control Period the Petitioner has projected A&G expenses on the basis of two main components namely existing expenses and new initiatives, and 'Provisions'. Existing A&G expenses have been projected by applying an escalation factor equal to the WPI inflation of 7.43% (which is the average increase in WPI for the immediately preceding three year period). The A&G expenses capitalisation considered by the Petitioner is 23.60% of gross A&G expenses based on five year average from FY 2007-08 to FY 2011-12.



The 'Provision' made by the Petitioner includes administrative costs for activities such as increase in collection centres, call centres, one-time cost for consumer survey, data center administration cost and IT facility management cost (after one year of 'go-live').

The petitioner has projected a huge increase in the A&G expenses, which were Rs. 8.85 Crore in FY 2012-13 and are projected to be Rs. 29.34 Crore in FY 2013-14, i.e. an increase of 232%. In justification of the same the Petitioner submitted that the increase in Administrative expenses from Rs 8.85 Crore in FY 2012-13 to Rs 29.34 Crore in FY 2013-14 is on account of testing of LT and HT meters starting in FY 2013-14. According to clause 3.1.3 (1) of 'Uttarakhand Electricity Regulatory Commission (The Electricity Supply Code) Regulations, 2007 (applicable April 17, 2007 onwards), the Petitioner was required to test HT meters every year and LT meters every five years, which has not taken place on a regular basis till date. Therefore, from FY 2013-14 onwards, the Petitioner proposes to start HT meter testing every year and LT meter testing every 10 years (since the cost of conducting LT meter testing every 5 years is significantly high because of the large LT consumer base).

The cost of testing of LT and HT meters every year has been estimated as Rs. 900.00 for LT meter and for Rs. 2000.00 for HT meter which has been computed by the petitioner considering the following:

- Only service charge for testing meters has been considered.
- Testing will not be outsourced and therefore, testing charge per meter has been taken to be much lower compared to market (outsourced charges) rates which per LT meter is Rs. 900 and for HT meter is Rs. 2000 (FY 2008-09 rates). These charges have been escalated by WPI accordingly for FY 2013-14 through FY 2015-16 to adjust for inflation.
- 10% of projected LT consumers for FY 2013-14 through FY 2015-16 and all HT consumers (forecast) for the same time period have been considered for meter testing. Year-wise estimated cost have been computed by multiplying the numbers of projected consumers (i.e. meters that will be tested) by the testing charge per meter for LT and HT meters respectively

As regards the details of expenses covered under Cost of provisioning for call centres and collection centres, the Petitioner submitted the details of 'Provision/New Initiatives' component

under Administrative and General expenses.

- These components are only running costs and hence have been included under Administrative and General expenses.
- A&G expenses for increase in collection centers is based on the cost of outsourcing of bill collection and includes the collection cost only.
- Running cost for call centers have been taken as 40% of initial set-up cost of Rs. 3.07 (R-APDRP Part A expenses) to account for the salary of customer care employees and other changes in the initial set-up.
- One-time cost of Rs. 1.08 Crore in FY 2013-14 for consumer survey to be borne by UPCL
- Facility management cost for four years after one year of 'Go-Live' is Rs. 32.92 Crore (R-APDRP Part A expenses), which has been divided equally over the period of four years from FY 2014-15 through FY 2017-18 and hence the yearly cost for FY 2014-15 and FY 2015-16 is Rs. 8.23 Crore
- Data center running cost is Rs. 12.71 Crore , which is 20% of data center set-up cost of Rs. 63.53 (R-APDRP Part A expenses).

The details of total A&G expenses projected for FY 2012-13 and for the Control Period (FY 2013-14 to FY 2015-16) are shown in the table below:

**Table 6.56: Projected A&G Expenses for the Control Period (Rs. Crore)**

Components	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
Administrative Expenses (Lease/Rent, Insurance, Consultancy Charges ,etc.)	8.85	29.34	33.01	37.29
Other Charges (Printing & stationery, electricity charges, water charges, etc.)	13.26	14.24	15.3	16.44
Legal Charges	0.73	0.79	0.85	0.91
Auditor's Fee	0.09	0.10	0.11	0.12
Material Related Expenses (Freight, Vehicle, Octroi, etc.)	0.00	0.00	0.00	0.00
<b>Total A&amp;G Expenses</b>	<b>22.94</b>	<b>44.47</b>	<b>49.27</b>	<b>54.76</b>
Less: A&G Expenses Capitalised	5.41	10.5	11.63	12.92
Net A&G Expenses	17.53	33.97	37.64	41.84
Provision Cost (call centres, increase in collection centres, etc.)	13.93	15.18	22.36	22.39
<b>Total A&amp;G Expenses</b>	<b>31.46</b>	<b>49.16</b>	<b>60.00</b>	<b>64.23</b>

For estimating the Administrative and General expenses for the Control Period, the

Commission first analysed the A&G expenses of last five years for the period FY 2007-08 to FY 2011-12 based on the actual expenses as submitted in the Audited Accounts. However, the Commission observed that projected A&G expenses based on the average of actual five years is working out to be lower than the actual A&G expenses for FY 2011-12. Therefore, for projecting A&G expenses for the Control period, the Commission has considered the average of actual Gross A&G expenses for last three years, i.e. FY 2009-10 to FY 2011-12. The Gross A&G expenses arrived for FY 2011-12 considering the average of last 3 years and the escalation factor approved by the Commission for FY 2011-12 has been escalated with the average increase in WPI for last three years of 7.77% in accordance with UERC Tariff Regulations, 2011 to estimate the A&G expenses for FY 2012-13 and the Control Period.

The Commission has computed the net A&G expense for the Control period after deducting the capitalisation of A&G expenses for the Control period. For projecting the capitalisation of A&G expenses for the Control Period, the Commission has considered the average A&G expenses capitalised as percentage of gross expenses during the last three years from FY 2009-10 to FY 2011-12 which works out to 24.92%.

The Commission is not allowing the meter testing charges claimed by the petitioner under A&G expenses as the Petitioner had submitted that the activity would not be outsourced and carried in house by it and the Commission has already allowed the cost of existing as well as new recruitment proposed by the petitioner under the employee expenses who would also carry out such works. Further, overheads are already factored in the base A&G expenses. Moreover, meter testing equipments as claimed by the petitioner has already been considered by the Commission under capital expenditure for the Control Period and cost of financing on the same has also been allowed.

As regards A&G expenses claimed by the Petitioner for increase in collection centers, the Commission is of the view that the consumer base of UPCL has been increasing at the growth rate of 7-8% annually and similar trends are expected during the Control Period. Thus, the increase in the cost of collection is factored in the escalation allowed and need not be considered as provision to A&G expenses.

As regards Running cost for call centers which have been taken as 40% of initial set-up cost of Rs. 3.07 Crore by the Petitioner, the Commission is of the view that the Petitioner has

not been able to justify its assumption of considering 40% of the costs, thus the Commission has considered the running cost of call centers as 10% of the set-up cost. The Commission shall review the same during the APR process when the Petitioner is in a position to provide actual monthly running cost details to determine the running cost for call centers.

As regards one-time cost of Rs. 1.08 Crore in FY 2013-14 for consumer survey, the Petitioner has submitted that the said expenses are to be borne by the Petitioner as per the R-APDRP Part A Sanctioned Scheme. However, the Commission observed that such cost is not mentioned in the Scheme document, hence, this cost has not been approved.

As regards Facility management cost for four years after one year of 'Go-Live' is Rs. 32.92 Crore (R-APDRP Part A expenses), the Commission has considered the awarded cost based on the submission of the Petitioner of Rs. 4.52 Crore divided equally over the period of four years as per the methodology adopted by the Petitioner from FY 2015-16 through FY 2018-19 and hence the yearly cost for FY 2015-16 has been worked out to Rs. 1.13 Crore. The Commission has considered one year delay as the scheme has not been commissioned in FY 2012-13 as estimated by the petitioner and thus there is delay of one year in completion of the scheme and the incidence of facility management cost on the petitioner would start from FY 2015-16, i.e. after one year of "Go-Live" which is expected by FY 2014-15.

As regards Data center running cost of Rs. 12.71 Crore, which is 20% of data center set-up cost of Rs. 63.53 (R-APDRP Part A expenses), the Commission is of the view that the Petitioner has not been able to justify its assumption of considering 20% of the costs, thus the Commission has considered the running cost of data centers as 5% of the set-up cost. The Commission shall review the same during the APR process when the Petitioner is in a position to provide actual monthly running cost details to determine the running cost for data centers. **The Commission directs the petitioner to separately maintain an account for the provisions allowed by the Commission. The Commission would write back the amount of provisions remaining unutilized with the petitioner during the truing up exercise for the control period. Here the Commission would also like to caution the petitioner that the A&G expenses are controllable in nature and the Petitioner is expected to exercise prudence and propriety while incurring expenses under this head.**

The following Table shows the summary of the projected and approved Provisions made in

A&G expenses for FY 2013-14 to FY 2015-16:

**Table 6.57: A&G expenses Provisions for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	Proposed	Approved	Proposed	Approved	Proposed	Approved
Increase in collection centres:	0.17	-	0.19	-	0.22	-
Call Centres (Customer Care Center)	1.23	0.31	1.23	0.31	1.23	0.31
Consumer Survey Cost to be borne by UPCL (For approx 209661 consumers)	1.08	-	-	-	-	-
Facility Management Cost	-	-	8.23	-	8.23	1.13
Data Center Cost	12.71	3.18	12.71	3.18	12.71	3.18
<b>Total Provision</b>	<b>15.18</b>	<b>3.48</b>	<b>22.36</b>	<b>3.48</b>	<b>22.39</b>	<b>4.61</b>

The following Table shows the summary of the projected and approved A&G expenses for FY 2013-14 to FY 2015-16:

**Table 6.58: Net A&G expenses for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	Proposed	Approved	Proposed	Approved	Proposed	Approved
Net A&G expenses	49.16	23.25	60.00	24.79	64.22	27.57

#### 6.4.11.4 O&M Expenses

The overall O&M expenses claimed by the Petition have been detailed in Section 2 of this Order. The total O&M expenses claimed and approved for FY 2013-14 to FY 2015-16 based on the discussions above, are given in the following Table:

**Table 6.59: Approved O&M expenses for FY 2013-14 to FY 2015-16 (Rs. Crore)**

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	Proposed	Approved	Proposed	Approved	Proposed	Approved
Employee expenses	291.32	225.88	305.32	259.89	328.27	299.31
R&M expenses	103.49	91.27	125.34	119.56	153.83	152.41
A&G expenses	49.16	23.25	60.00	24.79	64.22	27.57
<b>Total O&amp;M expenses</b>	<b>443.97</b>	<b>340.40</b>	<b>490.67</b>	<b>404.23</b>	<b>546.32</b>	<b>479.29</b>

#### 6.4.12 Interest on Working Capital

Regulation 34(2) of UERC Tariff Regulations, 2011 states that interest on Working Capital should be calculated as under:

“(3) Distribution:

a) The Distribution Licensee shall be allowed interest on the estimated level of working capital

*for the financial year, computed as follows:*

*(i) One month of the amount of Operation and Maintenance expenses for such financial year; plus*

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

*(iii) Two months equivalent of the expected revenue from sale of electricity at the prevailing tariffs; minus*

*(iv) Amount held as security deposits under clause (a) and clause (b) of sub-section (1) of Section 47 of the Act from consumers and Distribution System Users; minus*

*(v) One month equivalent of cost of power purchased, based on the annual power procurement plan."*

In accordance with the provisions of the Regulations, the Petitioner has estimated Working Capital requirement for each year of the Control Period from FY 2013-14 to FY 2015-16 considering the working capital interest rate of 13.25%.

As per the Regulations, the Commission has computed the net Working Capital Requirement of the Petitioner after deducting security deposits & credit extended by power suppliers only for FY 2013-14. Since, the Commission is not calculating the power purchase cost for FY 2014-15 and FY 2015-16, hence, it would not be possible to determine the amount of credit extended by Generator suppliers which is one of the component in determining the working capital requirement. Accordingly, the Commission has not calculated the working capital requirement as well as interest on the same for FY 2014-15 and FY 2015-16. The Commission has considered the SBAR as on date of filing of Petition, i.e. December 31, 2012 which is 14.50%, as the rate at which interest on working capital would be allowed in accordance with UERC Tariff Regulations, 2011, and, accordingly, the interest on working capital projected by the Petitioner and approved by the Commission is shown in the Table below:

**Table 6.60: Interest on Working Capital approved by the Commission (Rs. Crore)**

Particulars	FY 2013-14	
	Proposed	Approved
O&M expenses for one month	37.00	28.37
Maintenance Spares	66.60	51.06
Receivables (2 months)	805.70	625.56
<b>Sub-Total</b>	<b>909.29</b>	<b>704.99</b>
Less:		
Adjustments for security deposits & credit by power suppliers	754.99	654.92
<b>Net Working Capital</b>	<b>154.30</b>	<b>50.06</b>
Rate of Interest on Working Capital	14.50%	14.50%
<b>Interest on Working Capital</b>	<b>22.37</b>	<b>7.26</b>

#### 6.4.13 Bad & Doubtful Debts

**Regulation 32 of UERC Tariff Regulations, 2011 stipulates as follows:**

*“Bad and doubtful debts*

*(1) The Commission may allow a provision for bad and doubtful debts upto one percent (1%) of the estimated annual revenue of the distribution licensee, subject to actual writing off of bad debts by it in the previous years.*

*Provided that where the amount of such provisioning for bad and doubtful debts exceeds five (5) per cent of the receivables at the beginning of the year, no such appropriation shall be allowed which would have the effect of increasing the provisioning beyond the said maximum.”*

The Commission during the Technical Validation Session and various other communications had asked the Petitioner to submit the status, details of the appointment of CA firm for the purpose of analyzing the Provisions for bad and doubtful debt. The Petitioner has submitted that the CA firms have recently started the assignment which would take some time to finalise.

As discussed in Chapter 4, in the Compliance report, the Petitioner has submitted that the work of audit of receivables outstanding as on 31-03-2012 has been awarded to three firms of Chartered Accountants in the month of January, 2013. The Petitioner submitted that the audit work has been targeted to be completed within five months from the date of award.

The Commission in its Tariff Order for FY 2011-12 dated 24.05.2011 had directed the petitioner to carry out an audit of its receivables and also identify and classify the same and submit the report to the Commission within six month of the issuance of the order. The Commission on non-compliance by UPCL of this direction again reiterated this direction in its Tariff Order for FY 2012-13. UPCL vide its letter dated 08.01.2013 submitted the compliance status of this direction wherein it mentioned that during the internal discussion it was noticed that the audit exercise would be very lengthy and expensive and it was not clear whether the same would yield any useful or favorable result and requested the Commission to review the directions in this regard. However, in the month of January, 2013 it has awarded the work of audit to three firms and the said work is proposed to be completed within five months. From the submission of the petitioner it is evident that it is deliberately not complying with the directions issued by the Commission from time to time and by doing so is flouting the authority of the Commission. Having submitted before the Commission that the exercise would not yield any favorable result and now UPCL going ahead with the audit after a considerable delay of more than 18 months is unimaginable and unacceptable. Further, the Commission has discussed this issue in truing up section of FY 2011-12 and therefore, it is not reiterating the same again.

The Commission has allowed a total provision of Rs. 333.74 Crore till FY 2008-09 including the opening balance of provision for bad and doubtful debts inherited from UPPCL in the Transfer Scheme. The total arrears as on 31.03.2012 in the account of the licensee were of Rs. 2026.35 Crore. Thus, based on the provisions available with the Petitioner, it is evident that 16% of the receivables have already been provided by the Commission. Further, in accordance with the tariff Regulations, 2011 a provision for bad and doubtful debts can be allowed subject to actual writing off of bad debts by it in the previous years. Further, the Regulation provides the ceiling of 5% of the receivables at the beginning of the year. As already discussed above since the provision on arrears for FY 2012-13 is around 16%, there seems no reason to allow further provision unless the Petitioner exhausts the existing provisions.

UPCL submitted that it has written off the bad debts of Rs. 10.96 Crore during FY 2011-12. However, on being asked to submit the details of the same, UPCL submitted that it does not have the details. UPCL has submitted that as per fundamentals of accounting and costing (matching principle and principle of conservatism) every business should provide that portion of debtors



which is likely to be bad and not recoverable as an expense in the same year in which sales revenue is recognized.

The Petitioner should also recognize that as per prudent practices, every business should also ensure that the amount of debtors do not increase to an alarming level. It can be seen that over a period of 10 years, the arrears of UPCL has increased by about Rs. 1400 Crore, meaning an annual average increase of Rs. 140 Crore per annum. Further, every prudent management would ensure to recover the dues and prevent them from becoming bad. However, despite Commission's directions in the regard in the previous Tariff Orders there has been no improvement on the part of the Petitioner.

Hence, in accordance with the Regulations, the Commission is not allowing any provision towards bad debts.

#### **6.4.14 Non-Tariff Income**

As per Regulation 86 of UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011, the indicative heads to be considered in Non-Tariff are as follows:

*"The indicative list of various heads to be considered for Non-Tariff Income shall be as under:*

- (a) Income from rent of land or buildings;*
- (b) Income from sale of scrap;*
- (c) Income from statutory investments;*
- (d) Interest on delayed or deferred payment on bills;*
- (e) Interest on advances to suppliers/contractors;*
- (f) Rental from staff quarters;*
- (g) Rental from contractors;*
- (h) Income from hire charges from contractors and others;*
- (i) Income from advertisements, etc.;*
- (j) Miscellaneous receipts;*
- (k) Interest on advances to suppliers;*
- (l) Excess found on physical verification;*
- (m) Prior period income.*

The Non Tariff Income submitted by the Petitioner is detailed in Section 2 of this Order. The Petitioner submitted that Delayed payment surcharge is charged on the consumers who do not

make timely payment of their electricity bills and due to delay in making payments, there is a shortfall of cash available with the distribution company to meet its working capital requirement. The distribution company has to fund such a shortfall either through borrowings or internal accruals, therefore, delay in payment by a consumer involves additional costs which should be allowed to the distribution company.

The Petitioner submitted that the Commission allows working capital on normative basis which is based on two months receivable cycle. However, delay in the payment by a consumer beyond a period of two months is not accounted for while approving working capital. Therefore, the distribution company should be compensated with the additional cost for the period of delay. Further, the Petitioner has also submitted that the working capital allowed by the Commission is on normative basis, assuming consumers are paying on time and it does not take into account the period of delay for recovery of payment from the consumers who do not pay bills timely.

In this regard the Petitioner referred to the Hon'ble ATE Judgment on Appeal No.153 of 2009 (in the matter of NDPL v/sDERC) dated July 30, 2010 wherein the Hon'ble ATE has concluded that the delayed payment surcharge should not be considered as a non-tariff income reiterated as follows:

*"The normative working capital compensates the distribution company in delay for the 2 months credit period which is given to the consumers. The late payment surcharge is only if the delay is more than the normative credit period. For the period of delay beyond normative period, the distribution company has to be compensated with the cost of such additional financing. It is not the case of the Appellant that the late payment surcharge should not be treated as a non-tariff income. The Appellant is only praying that the financing cost is involved due to late payment and as such the Appellant is entitled to the compensation to incur such additional financing cost. Therefore, the financing cost of outstanding dues, i.e. the entire principal amount, should be allowed and it should not be limited to late payment surcharge amount alone. Further, the interest rate which is fixed as 9% is not the prevalent market Lending Rate due to increase in Prime Lending Rate since 2004-05. Therefore, the State Commission is directed to rectify its computation of the financing cost relating to the late payment surcharge for the FY 2007-08 at the prevalent market lending rate during that period keeping in view the prevailing Prime Lending Rate."*

The Petitioner further submitted that accordingly, DERC in its Order on 'True-up for FY 2010-11, Aggregate Revenue Requirement for FY 2012-13 to FY 2014-15 and Distribution Tariff

(Wheeling and Retail Supply) for FY 2012-13 for TPDDL' issued in July 2012 has also not included the delayed payment surcharge and financing cost of the principal amount as non-tariff income. The relevant portions of the Order as submitted by the Petitioner are reproduced below:

*"3.168 The Petitioner had collected Late Payment Surcharge (LPSC) of Rs 17.44 Cr in FY 2010-11 from its Consumers. As the Petitioner charges LPSC @ 18% per annum (1.5% per month), the principle amount on which LPSC has been charged will be Rs 96.89 Cr.*

*3.169 The Commission in its MYT Order dated Feb 23, 2008 had approved funding of working capital @ 9.5% considering SBI PLR of 12.25% prevalent at the time of issuing MYT Order. As prevailing SBI PLR as on April 1, 2010 was 12.25%, the Commission has allowed the financing cost for LPSC @ 9.5%. The financing cost approved by the Commission is shown below:*

**Table 6.61: Funding of LPSC (Rs. Crore)**

Principle amount on which LPSC was charged	FY 2010-11
LPSC Collected (@18%)	17.44
Principle amount on which LPSC was charged	96.89
Interest rate for funding of principle of LPSC	9.50%
<b>Interest approved on funding of principle amount of LPSC</b>	<b>9.20</b>

3.170 .....

*3.171 Hence, the Commission has approved the amount of Non Tariff Income as summarised below:*

**Table 6.62: Trued-up non-tariff income by Commission (Rs. Crore)**

Particulars	FY 2010-11
Non-tariff income as per audited accounts	134.82
Less:	
Transfer from Capital Gains	0.38
Transfer from consumer contribution for capital works	12.01
Provision for doubtful debts/advances	16.18
Interest/Short-term capital gain	1.58
Service line charges to be deferred in future years	3.77
Income from other business	0.40
<b>Financing cost of LPSC</b>	<b>9.20</b>
Material component of street light maintenance Charges	3.36
Add:	
Interest on Consumer Security Deposit	9.79
<b>Total Non-Tariff Income</b>	<b>97.73</b>

The Petitioner further referred to another Judgment of the Hon'ble ATE in Appeal No 223 of 2006 (in the matter of M.P Electricity Consumer's society v/s Madhya Pradesh Poorva/Madhya/Paschim Kshetra Vidyut Vitaran Companies, MPERC, GoMP) wherein it was concluded that delayed payment surcharge should not be included as revenue in the ARR as shown

in the extract below:

*“13. On a consideration of contentions of all parties, we are inclined to agree with the decision of the Commission to not include delayed surcharge revenue in the ARR in view of the fact that the working capital amount has been reduced to the bare minimum, 100% collection is not happening as of now, and therefore, to meet its cash requirements, the Discoms will have to borrow from Banks to compensate for the outstanding payments from consumers.”*

The Petitioner requested that in light of the above, delayed payment surcharge should not be considered as a part of the non-tariff income.

In line with the Petitioner submissions, the Commission has considered the non tariff income with an escalation of 5% for the Control Period. However, as per Regulation 86 of UERC Tariff Regulations, 2011 interest on delayed or deferred payment is included in the Non-Tariff Income, wherein, 2 month receivables have already been factor. Any delay in collecting the dues would be reckoned as inefficiency of the utility and cannot be allowed. Thus as per the provisions of the Regulations, the Commission has considered interest on delayed payment surcharge as part of Non Tariff Income.

Further, as discussed in Truing up Section, the Commission has considered the amount of “Miscellaneous Charges from Consumers” as Revenue from sale of power to consumers and has not included the same under Non-Tariff Income. The summary of Non Tariff Income as projected by the Petitioner and as approved by the Commission for the Control Period is given in Table below:

**Table 6.63: Non-Tariff Income approved by the Commission (Rs. Crore)**

Particulars	FY 2013-14		FY 2014-15		FY 2015-16	
	Proposed	Approved	Proposed	Approved	Proposed	Approved
<b>Miscellaneous income from consumers</b>						
Misc. charges from consumers	205.97	-	205.97	-	205.97	-
Delayed payment surcharge	-	9.83	-	10.33	-	10.84
<b>Sub-Total (A)</b>	<b>205.97</b>	<b>9.83</b>	<b>205.97</b>	<b>10.33</b>	<b>205.97</b>	<b>10.84</b>
<b>Other Miscellaneous Charges</b>						
Rebate	52.36	52.36	54.98	54.98	57.72	57.72
Income from Misc. receipts	4.36	4.36	4.58	4.58	4.81	4.81
Other	0.15	0.15	0.15	0.15	0.16	0.16
<b>Sub-Total (B)</b>	<b>56.87</b>	<b>56.87</b>	<b>59.71</b>	<b>59.71</b>	<b>62.70</b>	<b>62.70</b>
<b>Non tariff Income</b>	<b>262.84</b>	<b>66.70</b>	<b>265.68</b>	<b>70.04</b>	<b>268.67</b>	<b>73.54</b>

#### 6.4.15 Annual Revenue Requirement for FY 2013-14

The Petitioner has projected ARR as shown in Section 2 of this Order. However, based on the various elements of the ARR as discussed and approved in this Chapter, the Commission approves the ARR for FY 2013-14 as summarized in the Table below:

**Table 6.64: ARR for the Control Period from FY 2013-14 (Rs. Crore)**

Particulars	FY 2013-14	
	Proposed	Approved
Power Purchase Expenses	3,646.54	2841.71
Recovery from UJVN Ltd. on account of truing up for FY 2008-09 to FY 2010-11		-2.83
Transmission Charges-PGCIL	419.03	163.91
Transmission Charges-PTCUL		195.63
O&M expenses	443.97	340.40
Interest charges (including Guarantee Fee and Int. on SD)	143.57	118.99
Depreciation	207.47	69.46
Interest on Working Capital	22.37	7.26
<b>Gross Expenditure</b>	<b>4,882.95</b>	<b>3,734.53</b>
Bad & Doubtful Debts	96.68	0.00
Return on Equity	117.64	25.48
<b>Net Expenditure</b>	<b>5,097.28</b>	<b>3,760.01</b>
<b>Less: Non Tariff Income</b>	<b>262.84</b>	<b>66.70</b>
Add: Impact of truing up for FY 2010-11 and FY 2011-12 alongwith carrying cost		239.30
<b>Net Annual Revenue Requirement</b>	<b>4,834.44</b>	<b>3,932.60</b>

#### 6.5 Revenue at Existing Tariffs and Revenue Gap

By applying the existing tariff rates applicable for different categories of consumers, the Commission has estimated the total revenue at existing tariffs for FY 2013-14. Further, the Commission has considered additional revenue of Rs. 44.68 Crore on account of Revenue from efficiency gains (commercial loss reduction at average tariff).

The summary of total revenue estimated by the Commission for FY 2013-14 is given in following Table:

**Table 6.65: Revenue at Existing Tariffs for FY 2013-14**

S No	Category	Sale	Revenue	Average Billing Rate
		(MU)	Rs. Crore	Rs./Unit
1	RTS-1: Domestic	1,878.23	542.13	2.89
2	RTS-2: Non Domestic	1,068.46	500.69	4.68
3	RTS-3: Public Lamps	81.34	32.63	4.01
4	RTS-4: Private Tube Wells	198.00	27.37	1.38
5	RTS-5: Government Irrigation System	163.94	66.20	4.04
6	RTS-6: Public Water Works	396.49	157.31	3.97
7	RTS-7: Industry	5,289.73	2,304.43	4.36
	LT Industry	297.43	130.55	4.39
	HT Industry	4,992.31	2,173.88	4.35
8	RTS-8: Mixed Load	197.49	73.41	3.72
9	RTS-9: Railway Traction	9.59	4.50	4.69
	<b>Sub-Total</b>	<b>9,283.28</b>	<b>3,708.67</b>	<b>3.99</b>
	Efficiency Improvement	111.85	44.68	3.99
	<b>Total</b>	<b>9,395.12</b>	<b>3,753.36</b>	<b>3.99</b>

## 6.6 Revenue Gap for FY 2013-14

The revenue at existing tariffs along with additional revenue on account of efficiency gains leaves a revenue gap of Rs. 179.25 Crore for FY 2013-14 on the basis of audited/provisional accounts after considering the impact of truing up for the FY 2010-11 and FY 2011-12 alongwith the carrying cost. The summarized ARR, Revenue and resultant gap as projected by the Petitioner and now approved by the Commission for FY 2013-14 is shown in the Table below:

**Table 6.66: Summarised ARR and Revenue Surplus/(Gap) for FY 2013-14 (Rs. Crore)**

S.No.	Particulars	Projection	Approved
1	Net Annual Revenue Requirement	4,834.44	3,932.60
2	Revenue at Existing Tariff	3,747.76	3,753.36
3	<b>Revenue Surplus / (Gap) for the FY 2011-12</b>	<b>(1,086.68)</b>	<b>(179.25)</b>

## **7. Tariff Rationalisation, Tariff Design and Related Issues**

### **7.1 Additional Surcharge on account of Re-determination of Tariff for FY 2009-10**

Pursuant to the Hon'ble Appellate Tribunal of Electricity Judgment dated January 31, 2011, in Appeal Nos. 41, 42 and 43 of 2010, setting aside the Tariff Order for FY 2009-10 and directing the Commission to re-determine the tariff for FY 2009-10 on the basis of the Regulations, the Commission had re-determined the Tariff for FY 2009-10, in its Order dated May 24, 2011, along with the ARR and Tariff Determination for FY 2011-12. The Commission in its Order dated May 24, 2011 re-determined the tariffs for FY 2009-10 for the cross-subsidised categories, namely, Lifeline & Snowbound, Domestic, Private Tube Wells, Government Irrigation System, Public Lamps and Public Water Works. The Commission also determined a total amount of Rs. 21.51 Crore recoverable on the account of re-determined tariffs from the above mentioned cross-subsidised categories for FY 2009-10. As regards the recovery towards revised tariffs during FY 2009-10 from these consumer categories, the Commission in its Order dated May 24, 2011 opined that the recovery of entire amount in one single year would result into significant increase in retail tariffs of some of the category of consumers and hence, the Commission allowed the deferred recovery of additional surcharge from these consumer categories in three years in the proportion of 20%, 40% and 40% in year 1, 2 and 3 respectively, beginning from FY 2011-12. Accordingly, the Commission determined the amount to be recovered in FY 2011-12 at Rs. 4.30 Crore. The Commission, for the second year, i.e. FY 2012-13, decided to continue with the recovery mechanism as approved in its Order dated May 24, 2011 and the amount recovered in FY 2012-13, including carrying cost was Rs. 9.74 Crore. The Commission has considered recovery of the balance amount of Rs. 9.74 Crore in FY 2013-14 alongwith the carrying cost. The following Table summarises the category-wise additional surcharge applicable for FY 2013-14:

**Table 7.1 : Amount to be recovered in FY 2013-14 towards Re-Determined Tariff for FY 2009-10 (Rs. Crore)**

Particulars	Additional Surcharge for FY 2013-14
	Rs./Month
Life line and Snow Bound Consumers	Rs. 1 / Month
Domestic	Rs. 4/connection for metered consumers upto 4 kW and unmetered consumers, For others: Rs. 8/connection & Rs. 5/kW for single point bulk supply
Private Tube Wells	Rs. 6/BHP
Government Irrigation System	Rs. 12/kW, Rs. 10/kVA
Public Lamps	Rs. 20/kW
Public Water Works	Rs. 20/kW

The additional surcharge given in the Table above shall be payable from May 1, 2013 and the Petitioner should realise the surcharge given above alongwith the charges approved in **Annexure 1** for FY 2013-14. **The Petitioner is, however, directed to maintain separate records of category-wise revenue billed towards additional surcharge during FY 2013-14 and also submit the actual figures for the entire FY 2011-12, FY 2012-13 and first half of FY 2013-14 alongwith the Annual performance review for FY 2013-14, which will be used by the Commission to adjust any excess/shortfall in recovery from these categories alongwith the carrying cost of deferred recovery.**

## **7.2 Re-determination of Tariff for FY 2010-11**

The Hon'ble Appellate Tribunal for Electricity (APTEL) in its judgment dated February 27, 2013 issued in Appeal No. 152 of 2011 filed by Kumaon Garhwal Chamber of Commerce and Industry on the issue of cross subsidy and re-determination of tariff for FY 2010-11 stated as follows:

### *“30. Summary of Our Findings*

*(a) Tariff Order as per the directions of the State Government: The judgment of the Tribunal dated 31.2.2011, in Appeal No.41 of 2010 setting aside the tariff order for FY 2009-10 on the ground that the same was based on the policy direction would also be applicable to the impugned order in this Appeal as the same was also based on the policy directives of the State Government. According to the learned Counsel for the Uttarakhand State Commission, the State Commission would re-determine the tariff while truing-up the expenses and revenues for the FY 2010-11 in line with the judgment of the*



*Tribunal dated 31.1.2011 and that UPCL has already filed the truing up application. In view of the submissions made by the learned Counsel for the State Commission, we deem it appropriate to direct the State Commission to re-determine the tariff for FY 2010-11 while truing up the expenses in accordance with the ratio decided by this Tribunal in the judgment dated 31.1.2011”.*

The Commission vide its letter no. UERC/6/TF-132/12-13/2013/1647 dated March 4, 2013 directed the Petitioner to submit its response/ written submission in the matter alongwith all the data on actual cost of supply, sales, revenues, cross subsidy from different categories of consumers for FY 2010-11 by March 8, 2013. In compliance with the directions issued by the Commission, the Petitioner vide its submission dated March 7, 2013 provided the relevant information and submitted the following observations to be considered while re-determining the tariffs for FY 2010-11:

- Actuals of expenses and revenues for FY 2010-11 should be considered while re-determining the tariffs for FY 2010-11.
- In case tariff of any category(s) is / are reduced due to re-determination of tariff, the tariff of other categories should be enhanced in a manner that the total revenue is equivalent to the total expenses for FY 2010-11.
- In case tariff is changed from the tariff as determined by the Commission vide its previous orders, UPCL will be required to revise the bills of the consumers (15,25,696 consumers) for the period from April, 2010 to March, 2011. There will be great deal of difficulty in revising the bills of all the consumers for the whole year. Besides this, there may be lot of social problems for increasing the bills of the consumers with retrospective effect and there is likely to be discontent in the consumers and may lead to agitations which may create serious administrative problems. Accordingly, it is submitted that the impact of tariff revision may be implemented w.e.f. 01-04-2013.
- The level of cross subsidy may be maintained  $\pm 20\%$  as per the provisions of National Tariff Policy.

### **7.2.1 Commission's Approach**

In view of the Hon'ble Appellate Tribunal for Electricity Judgment dated 27 February, 2013 issued in Appeal No. 152 of 2011 filed by Kumaon Garhwal Chamber of Commerce and Industry, the Commission has decided to re-determine the tariff for FY 2010-11 alongwith the MYT and Tariff

Petition for FY 2013-14. The impact of the re-determined tariff for FY 2010-11 shall be recovered as additional surcharge from respective categories or allowed as rebate to the respective categories, as the case may be alongwith the approved tariffs for FY 2013-14, in lines with the methodology adopted by the Commission for re-determination of tariff for FY 2009-10, in its Order dated May 24, 2011 for FY 2011-12, as per the Hon'ble ATE Judgment dated January 31, 2011 in Appeal Nos. 41, 42 and 43 of 2010.

The Petitioner has submitted that the actual expenses and revenue for FY 2010-11 should be considered while re-determining the tariffs for FY 2010-11. The Commission has been carrying out the truing up for previous years based on provisional/audited accounts in its subsequent year's Tariff Order and allows recovery of the gap or adjustment of surplus in the ensuing year's ARR. Continuing with the same approach, the Commission as discussed in Chapter 6 of the Order, has carried out the truing up of expenses for FY 2010-11 and has considered the revenue gap while determining the total revenue gap for FY 2013-14.

The Hon'ble ATE in its Judgment has directed the Commission to re-determine the tariffs already determined in the Order for FY 2010-11 in accordance with the existing regulations and regulatory principles without considering the GoU Policy Directions. Thus, the Commission has decided to re-determine the tariffs for FY 2010-11, based on the average cost of supply keeping in view the mandate of the Act to reduce the cross subsidies in a phased manner. As per the Hon'ble ATE Judgment, the Commission is required to re-determine the tariffs for FY 2010-11 in accordance with the existing regulations and regulatory principles. In this regard, it is important to note the provisions of Tariff Policy issued by Ministry of Power, Govt. of India, which stipulates as follows:

*"8.3 Tariff design: Linkage of tariffs to cost of service It has been widely recognised that rational and economic pricing of electricity can be one of the major tools for energy conservation and sustainable use of ground water resources.*

*In terms of the Section 61 (g) of the Act, the Appropriate Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.*

*The State Governments can give subsidy to the extent they consider appropriate as per the provisions of section 65 of the Act. Direct subsidy is a better way to support the poorer categories of consumers than the mechanism of cross-subsidizing the tariff across the board. Subsidies should be targeted effectively and in transparent manner. As a substitute of cross-subsidies, the State Government has*

*the option of raising resources through mechanism of electricity duty and giving direct subsidies to only needy consumers. This is a better way of targetting subsidies effectively.*

*Accordingly, the following principles would be adopted:*

- 1. In accordance with the National Electricity Policy, consumers below poverty line who consume below a specified level, say 30 units per month, may receive a special support through cross subsidy. Tariffs for such designated group of consumers **will be at least 50% of the average cost of supply (emphasis added)**. This provision will be re-examined after five years.*
- 2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the SERC would notify roadmap within six months with a target that latest by the end of year 2010-2011 tariffs are within  $\pm 20\%$  of the average cost of supply (emphasis added). The road map would also have intermediate milestones, based on the approach of a gradual reduction in cross subsidy."*

As per the provisions of Tariff Policy, the Regulatory Commission has to reduce the cross subsidies with respect to average cost of supply in a gradual manner. The Commission in its Tariff Order for FY 2010-11 has computed the cross subsidies for various consumer categories with respect to estimated cost of supply for various categories in accordance with the Policy Directions issued by the Govt. of Uttarakhand.

As Hon'ble ATE has directed the Commission to re-determine the tariffs for FY 2010-11 considering the existing regulations and regulatory principles and without taking into consideration the directions issued by the State Government, the Commission is bound to re-determine the tariffs for FY 2010-11 in such a manner that the cross subsidy with re-determined tariffs for FY 2010-11 at average cost of supply is reduced/retained as compared to cross subsidy at re-determined tariffs for FY 2009-10 with respect to Average Cost of Supply.

With regards to UPCL's suggestion that the level of the cross subsidy may be maintained at  $\pm 20\%$  as per the provisions of National Tariff Policy, the Commission would like to clarify that in case the tariffs for FY 2010-11 are re-determined for all the categories and if the cross-subsidy is reduced to be within  $\pm 20\%$  of average cost of supply, it will lead to huge tariff shock to the subsidised categories, which is to be avoided as far as possible as per the mandate of the Tariff Policy which also stipulates for gradual reduction in cross subsidies. In this regard, it is also

important to note the full Bench judgment of Hon'ble ATE in the case of SIEL Ltd Vs Punjab State Electricity Regulatory Commission and Ors. (2007) APTEL 931, which reads as follows:

*“107. The cross-subsidies have to be brought down by degrees without giving Tariff shock to the consumers. Though it is desirable that cross subsidies are reduced through every Tariff Order but in a given situation, it may not be possible. As long as cross subsidy is not increased and there is a roadmap for its gradual reduction in consonance with Section 61(g) of the Act of 2003 and the National Tariff Policy, the determination of Tariff by the Commission on account of existence of cross subsidy in the Tariff cannot be flawed.”*

The Hon'ble ATE in its various judgments including judgment dated January 27, 2009 passed in Appeal No. 98 of 2008 has opined that the Commission cannot raise the tariffs so as to give tariff shock to any class of consumers.

With this background, the Commission for re-determining the tariffs for FY 2010-11 has first compared the level of cross subsidy with respect to Average Cost of Supply as approved in the Tariff Order for FY 2010-11 with the level of cross subsidy with respect to Average Cost of Supply at re-determined tariffs for FY 2009-10 as given in the following Table:

**Table 7.2: Comparison of Cross Subsidy given in the Tariff Order for FY 2010-11 vis-a-vis Cross Subsidy at Re-determined Tariffs for FY 2009-10**

Category	FY 2009-10 Redetermined Tariff				FY 2010-11 Tariff Order				Increase in ABR
	ABR	ACoS	ABR/ACoS	Cross Subsidy	ABR	ACoS	ABR/ACoS	Cross Subsidy	
	Rs./kWh	Rs./kWh	%	%	Rs./kWh	Rs./kWh	%	%	
Domestic	2.35	3.29	71.43%	-28.57%	2.46	3.68	66.85%	-33.15%	4.68%
Lifeline & Snowbound	1.60	3.29	48.63%	-51.37%	1.60	3.68	43.48%	-56.52%	0.00%
Non-Domestic	3.97	3.29	120.67%	20.67%	4.23	3.68	114.95%	14.95%	6.55%
PTW	0.80	3.29	24.32%	-75.68%	1.05	3.68	28.53%	-71.47%	31.25%
GIS	3.25	3.29	98.78%	-1.22%	3.35	3.68	91.03%	-8.97%	3.08%
Public Lamps	3.25	3.29	98.78%	-1.22%	3.35	3.68	91.03%	-8.97%	3.08%
PWW	3.25	3.29	98.78%	-1.22%	3.04	3.68	82.61%	-17.39%	-6.46%
Industries									
LT-Industrial	3.70	3.29	112.46%	12.46%	4.17	3.68	113.32%	13.32%	12.70%
HT-Industrial	3.68	3.29	111.85%	11.85%	4.18	3.68	113.59%	13.59%	13.59%
Railway Traction	4.17	3.29	126.75%	26.75%	4.18	3.68	113.59%	13.59%	0.24%
Mixed Load	2.80	3.29	85.11%	-14.89%	3.22	3.68	87.50%	-12.50%	15.00%

As observed from the above Table, the tariffs approved in the Tariff Order for FY 2010-11 has resulted in increase in cross subsidy for some of the subsidised categories, i.e. Domestic, Lifeline & Snowbound, GIS, Public Lamps and PWW and similarly for some of the subsidising categories, i.e. LT Industrial and HT Industrial as compared to cross subsidy approved while Re-determining

Tariff for FY 2009-10 as against the principle of gradual reduction in cross subsidy. The reason for increase in cross subsidy for these categories with respect to average cost of supply was primarily due to the fact that the Commission in its Tariff Order for FY 2010-11 had computed the cost of supply for these consumer categories in accordance with the Policy Directions issued by GoU. Accordingly, the same cannot be compared with cross subsidy approved in subsequent Tariff Orders for FY 2011-12 and FY 2012-13 in which the tariffs have been determined based on Average Cost of Supply.

In view of the above, the Commission has re-determined the tariffs for FY 2010-11 for the categories for which the cross subsidy for FY 2010-11 is higher than cross subsidy at re-determined Tariff for FY 2009-10.

The re-determined average tariffs for FY 2010-11 and the level of cross subsidy in FY 2010-11 as compared to average tariffs and level of cross subsidy as re-determined for FY 2009-10 is given in the following Table:

**Table 7.3 : Comparison of Cross Subsidy with Re-determined Tariffs for FY 2010-11 vis-a-vis Cross Subsidy at Re-determined tariff for FY 2009-10**

Category	FY 2009-10 Redetermined Tariff				FY 2010-11 Re-Determined Tariff			
	ABR	ACoS	ABR/ACoS	Cross Subsidy	ABR	ACoS	ABR/ACoS	Cross Subsidy
	Rs./kWh	Rs./kWh	%	%	Rs./kWh	Rs./kWh	%	%
Domestic	2.35	3.29	71.43%	-28.57%	2.63	3.68	71.47%	-28.53%
Lifeline & Snowbound	1.60	3.29	48.63%	-51.37%	1.79	3.68	48.64%	-51.36%
Non-Domestic	3.97	3.29	120.67%	20.67%	4.23	3.68	114.95%	14.95%
PTW	0.80	3.29	24.32%	-75.68%	1.05	3.68	28.53%	-71.47%
GIS	3.25	3.29	98.78%	-1.22%	3.64	3.68	98.91%	-1.09%
Public Lamps	3.25	3.29	98.78%	-1.22%	3.64	3.68	98.91%	-1.09%
PWW	3.25	3.29	98.78%	-1.22%	3.64	3.68	98.91%	-1.09%
Industries								
LT-Industrial	3.70	3.29	112.46%	12.46%	4.13	3.68	112.23%	12.23%
HT-Industrial	3.68	3.29	111.85%	11.85%	4.11	3.68	111.68%	11.68%
Railway Traction	4.17	3.29	126.75%	26.75%	4.18	3.68	113.59%	13.59%
Mixed Load	2.80	3.29	85.11%	-14.89%	3.22	3.68	87.50%	-12.50%

As observed from the above Table, the Commission, in order to either reduce or retain the Cross Subsidy for Domestic, Lifeline & Snowbound, PTW, GIS, Public Lamps and PWW categories, while re-determining the tariffs, has increased the tariffs for FY 2010-11 as compared to the tariffs approved in the Order for FY 2010-11. Similarly, the Commission in order to either reduce or retain the Cross Subsidy for LT-Industrial and HT-Industrial categories, while re-determining the tariffs,

has reduced the tariffs for FY 2010-11 as compared to the tariffs approved in the Order for FY 2010-11.

The Commission is of the view that the impact of such re-determined tariffs for these categories for FY 2010-11 should ideally have been collected as additional surcharge for subsidized categories and refunded as rebate for subsidizing categories during FY 2013-14 in addition to the tariff approved for FY 2013-14. However, some of these categories of consumers like lifeline/domestic consumers, consumers residing in snowbound areas, have limited paying capacity.

The Commission, is of the opinion that allowing the entire amount in one single year in addition to the tariff increase for FY 2013-14 due to increase in average cost of supply would result in significant increase in the retail tariffs of some of the category of consumers, as for some of the subsidized categories, 40% of additional revenue on account of re-determined tariffs for FY 2009-10 is also to be recovered during FY 2013-14.

Hence, the Commission following the similar approach as adopted for recovery of re-determined tariffs for FY 2009-10, has decided to allow the deferred recovery of additional surcharge from subsidized categories of consumers whose tariffs have been re-determined as per Hon'ble ATE's judgment in three years in the proportion of 20%, 40% and 40% in year 1, 2 and 3 respectively, beginning from FY 2013-14 instead of allowing recovery in a single year to avoid tariff shock to any of these consumer categories. As the amount of rebate to be allowed to subsidising categories (LT-Industrial and HT-Industrial) as per re-determined tariffs for FY 2010-11 should be met out of additional revenue for recovery of additional surcharge from subsidized categories based on re-determined tariffs, the Commission has allowed rebate to subsidising categories in three years in the proportion of 20%, 40% and 40% beginning from FY 2013-14. The Commission is of the view that recovery of the amount/adjustment of rebate should be on the basis of fixed charges which can either be on per connection or connected load basis. However, for three categories, i.e. GIS, Public Lighting and PWW, as the impact on fixed charges of additional surcharge works out to be very high, the Commission has allowed the recovery of additional surcharge for these categories on per unit basis. As this Order is made effective from May 1, 2013, the additional surcharge payable/Rebate to be allowed for these consumer categories during 11 months of FY 2013-14 towards re-determined tariff for FY 2010-11 is given in the following Table:

**Table 7.4 : Re-determination of tariffs for FY 2010-11 and Calculation of Amount to be recovered during FY 2013-14**

Recovered during FY 2010-11							
S. No	Category	Avg. Tariff Approved in TO for FY 2010-11	Re-Determined Avg. Tariff for FY 2010-11	Sales in FY 2010-11	Total Amount	Total amount to be recovered in FY 2013-14	Addl. Surcharge/Rebate for FY 2013-14
		Rs./kWh	Rs./kWh	MU	Rs. Crore	Rs. Crore	Rs./month
A.	Additional Surcharge from Subsidised Categories						
1	Lifeline & Snowbound Consumers	1.60	1.79	37.00	0.70	0.14	Rs. 1/connection
2	Domestic	2.46	2.63	1,447.84	24.61	4.92	Rs. 2/connection for metered consumers upto 4 kW and unmetered consumers, For others: Rs. 4/connection & Rs. 2/kW for single point bulk supply
3	GIS	3.35	3.64	112.97	3.28	0.66	Rs. 0.04/kWh
4	Public Lamps	3.35	3.64	53.858	1.56	0.31	Rs. 0.04/kWh
5	PWW	3.04	3.64	276.366	16.58	3.32	Rs. 0.08/kWh
	Sub-Total (A)				46.74	9.35	
B.	Rebate to be allowed to Subsidising Categories						
1.	LT-Industrial	4.17	4.13	234.96	-0.94	-0.19	Rebate of Rs. 1/kW or Rs 1/kVA per month
2.	HT-Industrial	4.18	4.11	3962.76	-27.74	-5.55	Rebate of Rs. 4/kVA per month (Based on billable demand)
	Sub-Total (B)				-28.68	-5.74	
	Net Additional Recovery (A) - (B)				18.06	3.61	

The additional surcharge/rebate to be allowed, given in the Table above, shall be payable from May 1, 2013 and the Petitioner should realise the surcharge/pass on the rebate given above alongwith the charges approved in **Annexure-1** for FY 2013-14. **The Petitioner is, however, directed to maintain separate records of category-wise revenue billed towards additional surcharge and rebate allowed during FY 2013-14 and submit the same alongwith the ensuing year's tariff Petition, which will be used by the Commission to adjust any excess/shortfall in recovery from these categories alongwith the carrying cost of deferred recovery/rebate.**

Out of total net additional revenue of Rs. 18.06 Crore on account of re-determination of tariff for FY 2010-11, the net additional recovery of Rs. 3.61 Crore is estimated during FY 2013-14 which has been considered by the Commission while designing the tariffs for FY 2013-14. Balance amount would be allowed to be recovered/ paid as rebate in next 2 years and thus, additional revenue accruing therefrom, would be adjusted in the ARR of the respective years.

## **7.3 Tariff Rationalisation and Tariff Design for FY 2013-14**

### **7.3.1 General**

Before proceeding with the exercise of determining the category-wise tariffs to meet the approved Annual Revenue Requirement of the Petitioner for FY 2013-14, as elaborated in Section 6 of this Order, the Commission considers it appropriate to first of all take a view in this Section on the tariff rationalisation measures suggested by the Petitioner and the concerns voiced by other stakeholders.

### **7.3.2 Petitioner's Proposals**

The Tariff Proposal and key alterations as proposed by the Petitioner have been discussed in Section 2 of this Order. The Petitioner submitted that the tariff proposal has been formulated by the Petitioner with an attempt to keep the impact on the consumers to the minimum possible and at the same time not deferring a large portion of recovery of the tariff in the coming years. The Petitioner also submitted that Section 61(g) of the Electricity Act, 2003 states that the appropriate Commission should be guided by the objective that the tariff progressively reflects the efficient and prudent cost of Supply of electricity.

Some of the key alteration proposed by the Petitioner in retail tariffs for FY 2013-14 is as follows:

#### **7.3.2.1 Continuous Supply Surcharge**

The Petitioner submitted that the Continuous supply surcharge for consumers in the HT Industry category as specified in the Retail Tariff Order of the Petitioner for FY 2012-13 is 15%. The Petitioner has proposed to increase the Continuous supply Surcharge from existing level of 15% to 20%.

#### **7.3.2.2 Uninterrupted supply to HT Industrial Consumers**

The Petitioner submitted that it proposes that its high value HT industrial consumers whose process are of non-continuous nature be provided uninterrupted (24x7) supply for which, the Petitioner has proposed to introduce a scheme of express/independent feeders. The Petitioner submitted that currently only industries eligible for Continuous supply of power (continuous process industries) are provided 24x7 uninterrupted supply. However, the Petitioner has received



many requests for providing uninterrupted supply to those industries which are not covered under the above eligibility criteria for continuous supply (continuous process industries). Therefore, the Petitioner intends to give the option of uninterrupted supply to those consumers who are willing to avail this option. The basic conditions of giving uninterrupted supply to such HT industrial consumers proposed by the Petitioner are as follows:

- HT industrial consumers who wish to participate in this scheme should approach the Petitioner with a written request.
- These types of consumer should be connected on express/independent feeders.
- If the consumer is currently not connected on the express/independent feeder but now wishes to connect to one, then all the capital expenditure involved in getting connected on the express/independent feeder will be borne by the consumers.
- If one or more consumers are connected on the same feeder then consent of all those connected consumers will be needed for conversion to express feeder.
- The Petitioner has proposed surcharge for the same at 25%.

### 7.3.2.3 Temporary Supply

The Petitioner has proposed changes in Part (A) of Temporary Supply Rate Schedule which are as follows:

**Table 7.5: Temporary Supply Existing & Proposed Fixed Charges**

Description	Existing Fixed Charge	Proposed Fixed Charge
(1) For Illumination/ public address/ ceremonies for load up to 15 kW	Rs. 1050/day	Rs. 1600/day
(2) Temporary shops set up during	Rs. 65/day	Rs. 100/day
(3) Other Temporary shops/Jhuggi/Jhopris for load up to 1 kW		
3.1) Rural	Rs. 95/month/ Connection	Rs. 150/month/ connection
3.2) Urban	Rs. 190/month/ Connection	Rs. 300/month/ connection

### 7.3.2.4 Shifting of (i) Government/Municipal Hospitals and (ii) Government/Government Aided Educational Institutions

The Petitioner submitted that it proposes to shift (i) Government/Municipal Hospitals and (ii) Government/Government Aided Educational Institutions under RTS-2 (1.1) to RTS-2 (2.2), i.e.

under Other Non Domestic Consumers. The Petitioner further submitted that it proposes to retain Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act in RTS-2 (1.1) as in the existing rate schedule in the Retail Tariff Order for FY 2012-13. The Petitioner further submitted that it proposes to clarify that all places of worship, i.e. Mandir, Masjid, Gurudwara, Church will be included under rate schedule RTS-2 (1.1).

#### **7.3.2.5 Fixed Charges**

The Petitioner submitted that it has proposed Fixed charges in Rs./kW/month for all domestic consumers except for lifeline and unmetered consumers.

The Petitioner further submitted that it has proposed Fixed charges in Rs./kVA/month from Rs./kW/month (as in existing tariff rates) for the following slabs/categories:

- (1) 'RTS-2 Non-Domestic: 1.2 Above 25 kW'; and 3. Single Point Bulk Supply above 50 kW';
- (2) 'RTS-6: Public Water Works'
- (3) 'RTS-7: LT & HT Industry 1.2. LT Industries (above 25kW & upto 75 kW)'

### **7.3.3 Commission's Views on Tariff Rationalisation Measures**

Several respondents have appreciated the tariff rationalisation measures taken by the Commission in the previous Tariff Orders. The Commission believes that tariff rationalisation is a dynamic and continuous process and is essential to accommodate the socio-economic and technological changes taking place in the environment over a period of time. There are number of suggestions given by the Respondents in this regard. The following Sections consist of the tariff rationalisation measures suggested by the Petitioner and respondents and the Commission's view on the same.

#### **7.3.3.1 Continuous Supply**

The Commission, in its Tariff Order dated October 23, 2009, had approved continuous supply surcharge @ 10% of the Energy Charge for consumers opting for supply during restricted hours (continuous). Further, all the consumers had this option to opt for continuous supply irrespective of whether they were on dedicated independent feeder or on mixed feeder. In accordance with the above provision, even if a single consumer in mixed feeder opted for continuous supply, its benefit got extended to all the consumers on that mixed feeder. This was a

sort of discrimination amongst the consumers who had opted for continuous supply on mixed feeder and those who had not opted for continuous supply on mixed feeder as both enjoyed the benefit of continuous supply irrespective of the fact that they were paying any continuous supply surcharge or not. On the other hand, if the supply of the mixed feeder was required to be cut during rostering, the supply of continuous supply consumer was also required to be unintentionally cut.

The Commission in order to rectify this anomaly had taken a view in its Tariff Order dated April 10, 2010 that the option of continuous supply should be made available only to consumers who are connected on a dedicated independent feeder or industrial feeder provided that all the industrial consumers on such feeder opt for continuous supply option. The Commission was also of the view that considering the supply shortage position, this option was to be provided only to the continuous process industries requiring continuous supply due to continuous nature of their process. In this connection, the Commission would like to highlight Regulation 3(2) of UERC (Release of new HT & EHT Connections, Enhancement and Reduction of Loads) Regulation, 2008, which provides that loads for all HT consumers having continuous processes, irrespective of load applied for, shall be released through independent feeder only. The Commission in its Tariff Order dated April 10, 2010 had, therefore, decided that with effect from May 1, 2010, the option of continuous supply shall remain available only to continuous process industries operating twenty four hours a day and for seven days in a week without any weekly off. Further, this option was only to be available to continuous process industries connected through an independent feeder or industrial feeder provided that all the industrial consumers on such feeder opted for continuous supply option and for availing such an option, they were required to pay 15% extra energy charges at revised tariff with effect from May 1, 2010 or from the date of connection, whichever is later till 31st March 2011 irrespective of actual period of continuous supply option. Further, the Commission in its Tariff Order dated April 10, 2010 also decided that the load shedding should be applicable for all the consumer categories except continuous process industries availing continuous supply option and, hence, the Commission abolished the mechanism of allowing utilisation of power upto 15% of contracted load by industrial consumers who have not opted for continuous supply.

During the current public hearing proceedings, there was a request from certain industrial consumers to reintroduce the mechanism of allowing utilisation of power upto 15% of contracted load by industrial consumers who have not opted for continuous supply during load shedding period, and levy a penalty in case such consumers exceed the limit of 15% of the contracted load

during the period. This mechanism was operational till FY 2009-10. However, this mechanism was resulting into a discrimination amongst various categories of consumers as some consumers who were fed from a feeder in which even one continuous consumer existed and which remained ON during load shedding period, were allowed to use power upto 15% of contracted load without any penalty and they could might as well use power above 15% of contracted load during that period by paying penalty in accordance with provisions of the Order. While there were other consumers who were not getting power at all during those restricted hours even if they were willing to pay the penalty since their feeder was not eligible to be put ON during load shedding period. Moreover, the penalty mechanism lead to a number of disputes related to days of applicability of penalty, awareness/communication of date and time of scheduled load shedding by the Petitioner, clock drifting in consumer meter, amount of penalty etc. Considering the demand supply shortage situation in the State and projected energy deficit during FY 2013-14 as discussed in Chapter 5 and 6 of the Order, the Commission is of the view that the load shedding should be applicable for all the consumer categories except continuous process industries availing continuous supply option and further, in order to avoid any billing disputes in this regard, the Commission is not reintroducing this concept of utilisation of power upto 15% of contracted load by industrial consumers during load shedding hours and penalty thereof.

In its Tariff Order for FY 2011-12 dated May 24, 2011, and Tariff Order for FY 2012-13 dated April 11, 2012, the Commission decided to continue with the same provisions for Continuous Supply as approved in its Order dated April 10, 2010.

Several Industrial Consumers as well as members of State Advisory Committee have objected to the increase in Continuous Supply Surcharge of 20% proposed by the Petitioner.

It is seen that even in a restricted supply scenario, entire requirement is not met from long term sources and there is still a sizable estimated energy deficit for FY 2013-14, as discussed in Chapter 5 and 6 of the Order, the Commission has decided to continue with the provisions of continuous supply as approved in its Order dated April 11, 2012. Considering the views of stakeholders, the Commission has not increased the continuous supply surcharge and has retained the same at 15% of energy charges. Thus, the option of continuous supply shall remain available only to continuous process industries operating twenty four hours a day and for seven days in a week without any weekly off. Further, this option will only be available to continuous process

industries connected through an independent feeder or industrial feeder provided that all the industrial consumers on such feeder opt for continuous supply option and for availing such an option, they need to pay 15% extra energy charges at revised tariff with effect from May 1, 2013 or in case of new consumers from the date of connection, till March 31, 2014 irrespective of actual period of continuous supply. However, in case of re-arrangement of supply through independent feeder, the Continuous Supply Surcharge shall be applicable from the date of energisation of aforesaid independent feeder till 31st March 2014, irrespective of actual period of continuous supply option.

In this regard, the Commission would like to clarify certain key issues, pertaining to application conditions for existing and new continuous supply consumers in order to avoid any misinterpretation of the conditions, and the same are discussed as under:

- Consumers who are existing Continuous Supply Consumers shall continue to remain Continuous Supply Consumers and they need not to apply again for seeking continuous supply option. However, in case of any pending dispute with UPCL in the matter of continuous supply on certain feeders, those consumers will have to apply afresh, for availing the facility of continuous supply, by May 31, 2013;
- The new applicants for continuous supply of power (including those who are applying afresh as per above) need to apply for seeking the continuous supply option latest by May 31, 2013. UPCL shall provide the facility of continuous supply within 7 days from the date of application, subject to fulfilment of Conditions of Supply as mentioned in Clause 6 under Tariff Schedule of RTS-7; However, in case of re-arrangement of supply through independent feeder, UPCL shall provide the facility of continuous supply from the date of completion of work of independent feeder subject to fulfilment of Conditions of Supply.
- The existing consumers availing continuous supply option, who wish to discontinue the continuous supply option granted to them earlier, will have to communicate, in writing, to UPCL latest by May 31, 2013 and they shall continue to pay continuous supply surcharge alongwith the tariff approved in this Order till May 31, 2013. Further, in this regard, if due to withdrawal by one consumer from availing continuous supply option on a particular feeder, supplying to other continuous supply consumers as well, the

status of other continuous supply consumers in that feeder is affected, then UPCL shall inform all the affected consumers in writing, well in advance;

- The option for seeking or discontinuing the facility of continuous supply, shall be available to a consumer only once in the entire financial year and that too latest by May 31, 2013, in case of existing consumers and at the time of making an application for new connection, in case of new consumers;
- UPCL shall not change the status of a continuous supply feeder to a non-continuous supply feeder;
- UPCL/PTCUL shall take up augmentation, maintenance and overhauling works on top priority, specially in the sub-stations where circuit breakers, other equipments, etc. are in dilapidated condition and, thereby, shall ensure minimisation of interruptions of the continuous supply feeders;
- UPCL/PTCUL shall carry out periodical preventive maintenance of the feeders supplying to continuous supply consumers. The licensees shall prepare preventive maintenance schedule, in consultation with continuous supply consumers, well in advance, so that such consumers can plan their operations, accordingly.

#### **7.3.3.2 Uninterrupted Supply to HT Industrial Consumers**

The Commission has examined the Petitioner's proposal of providing uninterrupted supply to those industries which are not covered under the continuous process industries. As discussed above, the Commission, in its Tariff Order dated October 23, 2009, had approved continuous supply surcharge @ 10% of the Energy Charge for consumers opting for supply during restricted hours (continuous). Further, all the consumers had this option to opt for continuous supply irrespective of whether they are on dedicated independent feeder or on mixed feeder. However, considering the demand supply shortage situation in the State, the Commission in its Tariff Order dated April 10, 2010 decided that the option of continuous supply shall be provided only to the continuous process industries requiring continuous supply due to continuous nature of their process.

The Commission would like to re-iterate that in the prevalent mechanism, continuous supply option is available only to continuous process industries operating twenty four hours a day

and for seven days in a week without any weekly off by virtue of the nature of their process/industries.

As discussed in Section 5 and 6 of the Order, the demand supply shortage situation in the State has marginally improved but shortage is likely to continue in FY 2013-14 also. Under such scenario, in case the Petitioner's proposal is accepted and the option of continuous supply is extended to all HT Industrial consumers connected through dedicated feeder or express feeder upon payment of surcharge irrespective of whether their process is of continuous nature or not, it will lead to discrimination amongst the consumers of various categories. Further, under the prevailing demand supply shortage scenario, if the Petitioner's proposal is accepted and the Petitioner is unable to source additional power for supplying uninterrupted power to the HT Industrial consumers who have opted for it, the Petitioner may increase the load shedding for other consumer categories in order to supply continuous /uninterrupted power to such HT Industrial consumers, which will not be in the interests of consumers at large. Further, the Continuous Supply Surcharge applicable for continuous process industries is 15% and in case higher surcharge is approved for supply of continuous/uninterrupted power to non continuous HT Industrial consumers connected through dedicated feeder or express feeder upon payment of surcharge, it will lead to discrimination amongst the consumers of same category.

In view of the above, the Commission at this stage does not accord its approval to the Petitioner's proposal of supplying uninterrupted power to HT Industrial consumers which are not continuous process industries operating 24 hours a day for 7 days of a week without any weekly off.

#### **7.3.3.3 *Fixed Charges, Minimum charges and Minimum Consumption Guarantee***

It is a well-accepted economic principle that the fixed costs of the Utility should be recovered to a certain extent through fixed charges to ensure revenue stability. At the same time, the Commission recognises that if the entire fixed cost is recovered through fixed charges, then the Utility shall have no incentive to bother about sales and, hence, quality of supply may suffer. Historically, the fixed recovery has been done through a mix of minimum charges and fixed charges. Levy of Minimum Consumption Guarantee Charges (MCG) is a way of ensuring minimum revenue to the Utility from the consumers, however, if the consumption exceeds specified units, then no MCG charges are levied on the consumers and, entire charges recovered by the Utility are

through energy/fixed charges.

The fixed charge component reflecting the fixed cost of providing the service to the consumer and the energy charge component reflecting the cost of energy actually consumed should ideally be taken in the two-part tariff structure.

Section 45(3) of the Electricity Act, 2003 also provides for levy of fixed charges. The relevant Section is reproduced below:

*"The charges for electricity supplied by a distribution licensee may include:*

*(a) a fixed charge in addition to the charge for the actual electricity supplied;*

*....."*

Further, the licensee is incurring fixed cost directly attributable to individual consumers such as meter reading, bill preparation, bill distribution and collection, which should ideally be allocated to and recovered from each consumer. One of the guiding factors mentioned in Section 61 of the Electricity Act, 2003 for specifying terms and conditions of tariffs is that the tariff has to be gradually cost reflective. Considering that levy of higher fixed charges should not impinge the consumers adversely, the Commission, in its Tariff Order dated March 18, 2008, introduced a nominal fixed charge for all the categories as a progression towards designing the tariff structure linked to cost structure. Further, in its subsequent Tariff Orders for FY 2009-10, FY 2010-11, FY 2011-12 and FY 2012-13, considering the level of proportion of fixed costs, as percentage of total costs of UPCL and level of revenue recovery from fixed charges, the Commission marginally increased the fixed charges for most of the categories to marginally increase the revenue recovery from fixed charges and at the same time avoiding tariff shock to any consumer category.

The Commission in its Tariff Order dated March 18, 2008 mentioned that ideally, the fixed charges should be levied on the basis of contracted/sanctioned load for all the categories. However, for domestic category, considering data on sanctioned load which had number of consumers having fraction of load (<1 kW) and also considering the quality of metering and billing data, the Commission introduced the fixed charges on per connection basis. The Commission in its Tariff Order dated October 23, 2009, specified different fixed charges for domestic consumers having contracted/sanctioned load upto 4 kW and consumers having contracted/sanctioned load above 4 kW.



The Commission in its Tariff Order dated March 18, 2008 had re-introduced the Minimum Consumption Guarantee (MCG) Charges for the industrial category and in its Tariff Order dated October 23, 2009 re-introduced the Minimum Consumption Guarantee (MCG) Charges for the Non-Domestic Category. The Commission in its Order dated April 11, 2012 has introduced MCG for metered PTW category also.

Some of the stakeholders including State Advisory Committee members submitted that the MCG burdens the consumers with additional charges and results in wasteful consumption of electricity. They also represented that the MCG on seasonal industry should be abolished as it encourages unnecessary wastage of electricity by consumers during off season. Some of the stakeholders also represented that due to demand supply shortage situation, load shedding is being carried out by UPCL and hence, MCG shall either be abolished or reduced. Some of the stakeholders also suggested that due to certain unforeseen circumstances, the industry may be closed for few months or for some days in a month and MCG is levied for those months, however, when the industry starts operating, the MCG charges paid should be adjusted from subsequent months in case the cumulative consumption till that months exceed the cumulative monthly prorated minimum annual guaranteed consumption instead of adjustment being done at the end of the year.

Though the Commission in its Tariff Order dated March 18, 2008 had mentioned that it may review the continuation of the MCG charges in subsequent Tariff Orders. However, as no substantial improvement has been achieved by UPCL with respect to metering and billing issues, the Commission has decided to continue with the levy of MCG charges for Industrial Consumers and Non-Domestic consumers having contracted load of more than 25 kW and for PTW Consumers.

The Commission would like to clarify that the MCG is only applicable for the consumers having very low load factor, in the range of 10-15% or 3-4 hours/day usage of electricity. The MCG charges would actually be recovered from consumers having abnormally low consumption of electricity with respect to their sanctioned/contracted load. While for other consumers having reasonable level of consumption with respect to the load, the MCG charges gets subsumed in energy charges.

The Commission would further like to clarify as per prevalent mechanism, the Minimum Consumption Guarantee is specified in terms of units of electricity consumption/kW/month and

not on the basis of charges/kW/month. The minimum consumption guarantee charges are computed by considering the applicable base energy charges for the relevant category of consumer alongwith the specified MCG and adjusted only towards the energy charges. Further, the minimum consumption guarantee is specified on monthly basis as well as on annual basis.

Considering the views expressed by the stakeholders, the Commission has decided to reduce the MCG for Non-domestic and LT Industry consumers by 20% to give some relief to the consumers. The Commission has reduced the Minimum consumption guarantee charge as summarized below:

**Table 7.6: Minimum Consumption Guarantee - Existing & Revised**

Description	Existing Charge	Revised Charge
Non-domestic consumers	75 kVAh /kW /month & 900 kVAh/ kW/ annum	60 kVAh /kW /month & 720 kVAh/ kW/ annum
LT Industries (upto 25 kW)	75 kWh/ kW/month & 900 kWh /kW/ annum	60 kWh/ kW/month & 720 kWh /kW/ annum
LT Industries (above 25kW & upto 75 kW)	75 kVAh/ kW/month 900 kVAh /kW/ annum	60 kVAh/ kVA/month 720 kVAh /kVA/ annum

Further as per the prevalent mechanism, in case cumulative actual consumption, from the beginning of financial year, exceeds the units specified for annual minimum consumption guarantee (MCG), no further billing of monthly MCG is done and in such cases, differential paid, in excess of actual billing is adjusted in the bill for the month of March. This mechanism has been elaborated through example in the Tariff Schedule.

For PTW consumers, the Commission has modified the Minimum Consumption Guarantee mechanism having provision of 100 kWh/BHP/Month and 1200 kWh/BHP/Annum as MCG and has now provided Minimum Consumption Charges as Rs. 100/BHP/month and Rs. 1200/BHP/annum for the PTW category.

In order to marginally increase the revenue from Fixed/Demand Charges, the Commission has marginally increased the Fixed Charges/Demand Charges for most of the categories in this Order.

Considering the suggestion of the Petitioner, the Commission has approved the Fixed Charges in Rs./kVA/Month instead of Rs./kW/Month (as per existing tariff schedule) as the energy charges of these categories are anyway specified in Rs./kVAh. For

- (1) 'RTS-2 Non-Domestic: 1.2 Above 25 kW'; 'RTS-2 Non-Domestic: 3. Single Point Bulk Supply above 50 kW';
- (2) 'RTS-6: Public Water Works'
- (3) 'RTS-7: LT & HT Industry 2. LT Industries (above 25kW & upto 75 kW)'

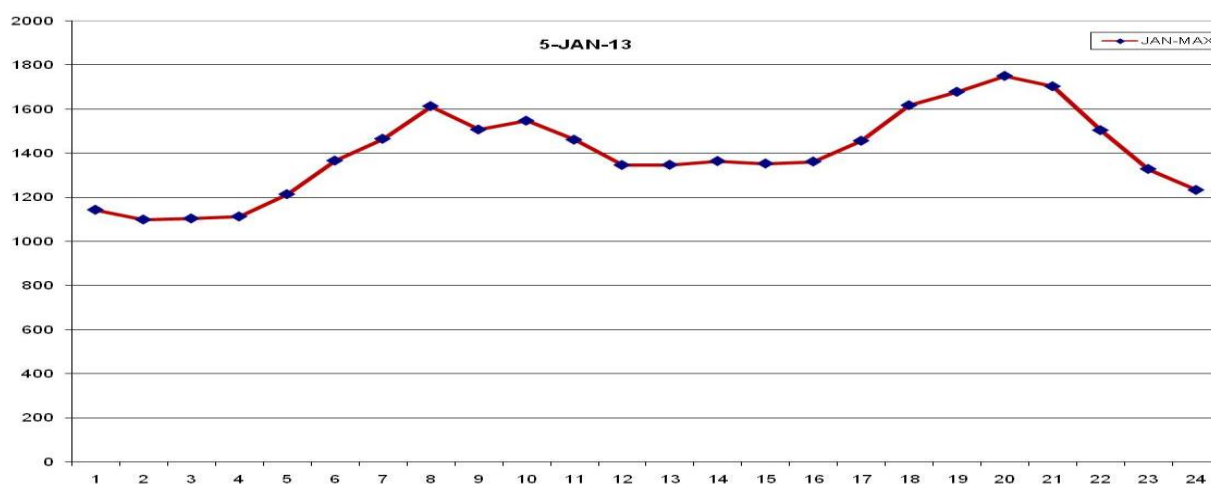
#### 7.3.3.4 *Time of Day Tariff*

The Commission in its Tariff Order for FY 2010-11 dated April 10, 2010 approved the peak hour rate as 50% higher than the normal hour rate for Industrial Category. Further, in case of HT industries, the Commission has specified the peak hour rate as 50% higher than the normal hour rate applicable for highest load factor slab, i.e. consumers with load factor above 50% for all the HT industrial consumers. The Commission kept the rebate during off peak hours to 10% to incentivise the shift in consumption from peak hours to off peak hours.

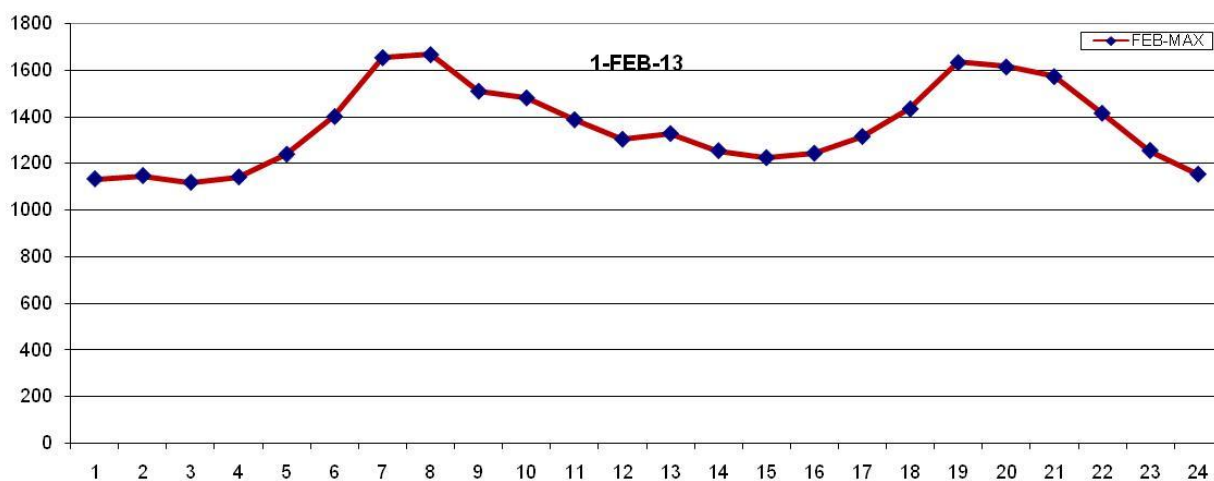
Some of the industrial consumers have raised the issue of the exorbitantly high peak hour rate coupled with long duration of peak hours as high as 8 hours/day during winter season spanning for almost six months, i.e. from October to March in a financial year. Further, it has been suggested by various consumers that morning peak hours, as envisaged in the tariff needs to be reviewed, since in no other hill State, except Uttarakhand, the morning peak hours have been specified for charging higher energy charges.

The Commission, in each of its tariff determination exercise, has been analysing the shift from the peak hours to normal and off-peak as well as the consumption pattern during the peak and off-peak hours. The Commission has analysed the unrestricted load curves of winter months to assess the peak hour period during these months. The load curves for the days having highest peak load in each of the months of winter seasons, i.e. January 2013 to March 2013 and October 2012 to December 2012 have been examined and the same are graphically presented below:

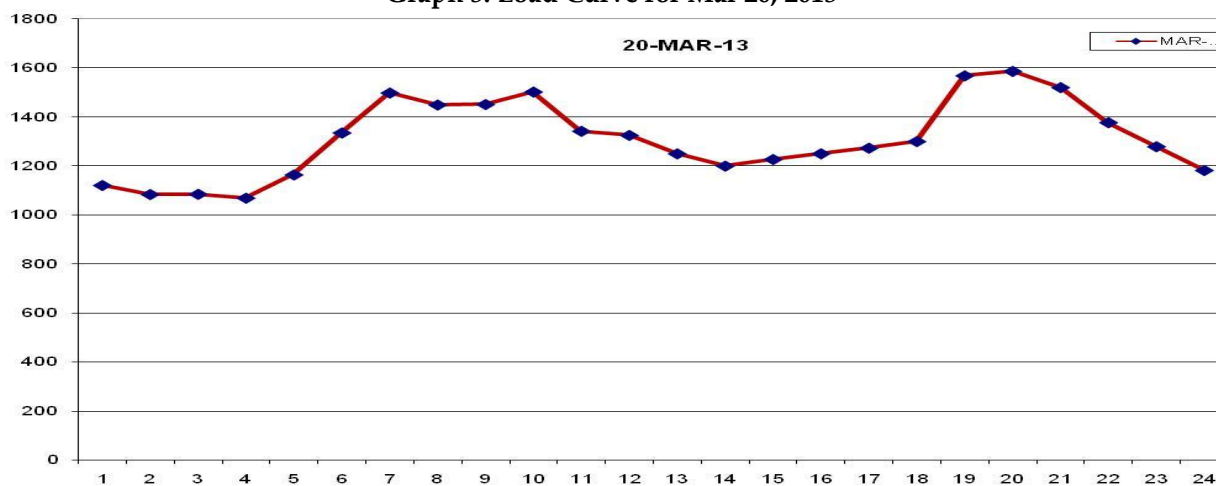
**Graph 1: Load Curve for Jan 5, 2013**



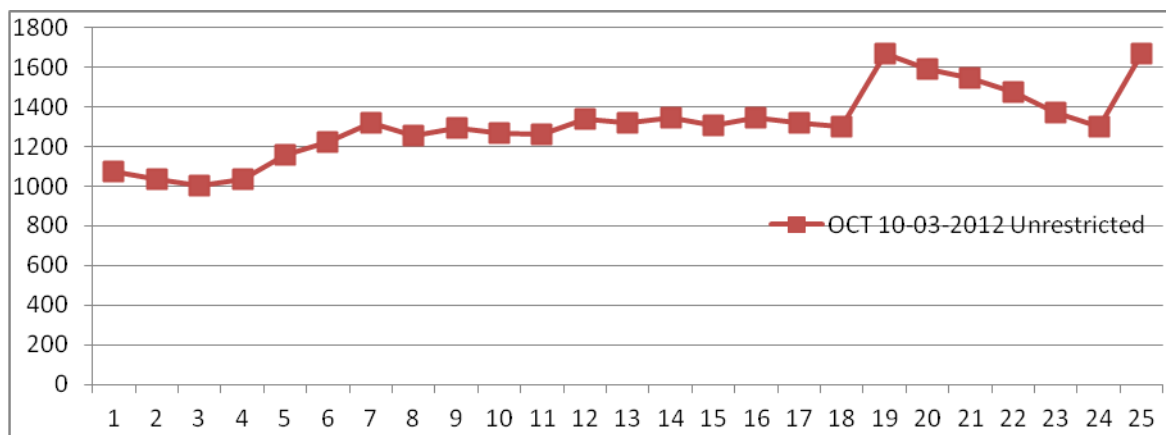
**Graph 2: Load Curve for Feb 1, 2013**



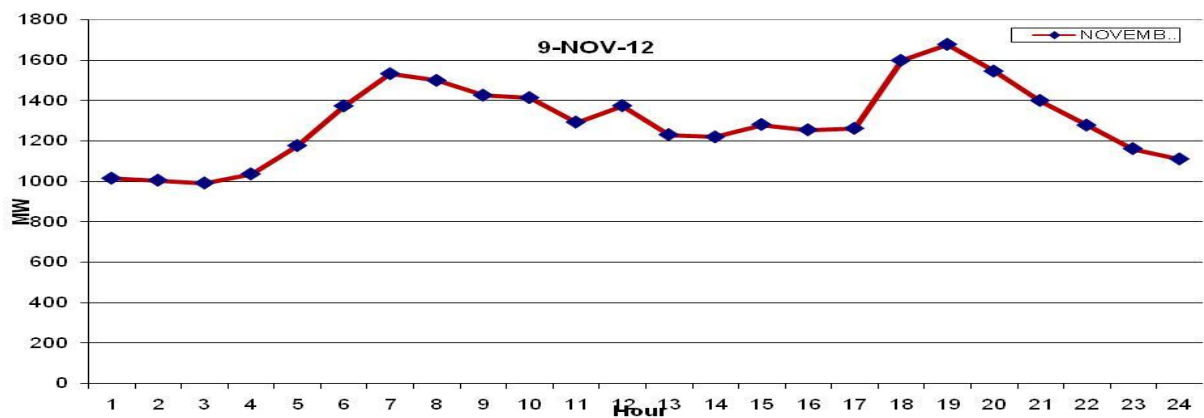
**Graph 3: Load Curve for Mar 20, 2013**



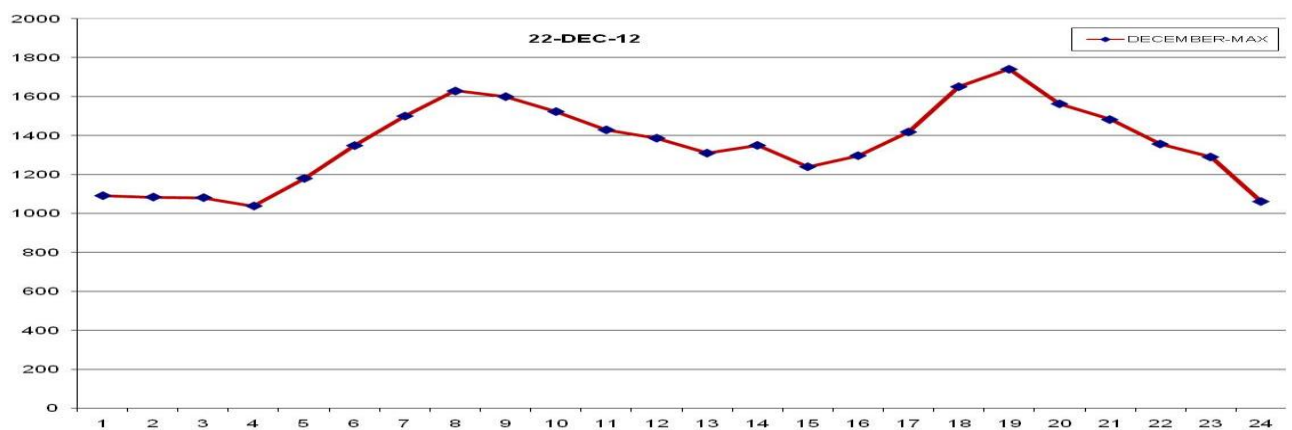
Graph 4: Load Curve for October 03, 2012



Graph 5: Load Curve for November 9, 2012



Graph 6: Load Curve for December 22, 2012



It has been observed from the above graphical presentations that during all the months covered under winter season, i.e. October to March in a Financial year, both morning as well as

evening peak demand exists in the State. Infact, in the months of February, the morning peak demand has been found to be even higher than the evening peak demand. Further, because of the unprecedented sales growth over the past years, the demand-supply gap in the State has even worsened and based on the monthly Merit Order Despatch worked out for estimating month-wise power purchase requirement of the Petitioner, the Commission has found that there is likely to be a deficit in all winter months of FY 2013-14. The Commission feels the need for DSM and having ToD tariff as a measure for ensuring curtailment of morning as well as evening peaks. Considering all these aspects, the Commission in the present Order is continuing with the same Peak, Normal and Off Peak hour duration for ToD metering slots including percentage of peak hour surcharge and peak hour rebate as approved in the earlier Tariff Orders for FY 2010-11, FY 2011-12 and FY 2012-13.

#### **7.3.3.5 Slab system for Domestic Category**

The Commission introduced the three slabs for Domestic Category for billing energy charges for Domestic Category in the Tariff Order for FY 2010-11 dated April 10, 2010.

Some of the stakeholders suggested that considering the huge demand supply gap situation in the State and in order to incentivise the reduction in non essential consumption, the consumers with higher load and consuming more power should pay either higher average tariff or should reduce their consumption. The Commission agrees that higher individual domestic consumption needs to be discouraged and cross-subsidisation to such consumers need to be progressively reduced.

The Commission considering the views of the stakeholders has, therefore, modified the structure for the domestic category as per the following slabs with increasing tariff for consumption in higher slabs:

- Slab 1 : Upto 100 units per month
- Slab 2 : 101-200 units per month
- Slab 3 : 200-400 units per month
- Slab 4 : More than 400 units per month

### 7.3.3.6 Sub-Category for Small Non Domestic Consumers

Several stakeholders representing small Non Domestic Consumers submitted that the tariff of Non Domestic Category applicable for very small commercial consumers such as small tea vendors, small restaurants in rural and hilly areas, small shops, etc is very high and the tariff for such consumers should be reduced.

Based on the analysis of Average Billing Rate and Average Cost of Supply for Non-Domestic Consumers, it is observed that on overall basis, Non-Domestic Category is cross-subsidising category and the Commission in its Tariff Orders has been reducing the Cross Subsidy. The Commission is of the view that though the overall Non Domestic Category is cross subsidizing category, however, the tariff for small non domestic consumers could be lower vis-à-vis other larger establishments. Considering the requests made by such consumers, the Commission has decided to create a sub-category under Non Domestic Category for Consumers having contracted Load upto 4 kW and consuming upto 50 units per month with a slightly lower tariff.

### 7.3.3.7 Categorisation of HT Industries and Load Factor based Tariff

The Commission has considered the stakeholders/industries responses and observed that some of the consumers have again raised the issue of load factor based tariff for HT Industries. Some of the stakeholders submitted that the load factor based tariff for HT Industries is discriminatory as well as against the provisions of the Act, Tariff Policy and the Commission's Tariff Regulations.

The Commission would like to highlight Section 62(3) of the Act, which empowers the Appropriate Commission, while determining the tariff, to differentiate according to the consumer's load factor, power factor, voltage, total consumption of electricity etc. Section 62(3) of the Act is reproduced below:

*"The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the **consumer's load factor**, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required" (emphasis added).*

Regulation 93(2) of UERC (Terms and Conditions for Determination of Tariff) Regulations, 2011, specifically empowers the Commission to design load factor based tariffs for any category of consumers and is reproduced below:

*“The Commission, shall not, while determining the tariff, show undue preference to any consumer of electricity but may differentiate according to consumer’s load factor, voltage, total consumption of electricity during any specified period or time at which the supply is required or the geographical position of any area, the nature of supply and the purpose for which the supply is required. ”*

The Commission would like to highlight that it had first introduced the load factor based tariff for the steel industries in its Order dated August 24, 2004. The Commission had recorded the rationale for load factor based tariff in Para 4 of the said Order, which is reproduced below:

*“4. Tariff Design for Power Intensive Units 4.1 Approach*

*(1) The tariff for any consumer category should reflect the cost of supply, which comprises of power purchase cost and all other costs that the licensee incurs. For realizing the additional cost of power required to be purchased for meeting their demand from the PIUs themselves, the charges realizable from them will have to be linked to their consumption levels.*

*(2) The power consumption of any unit is a function of its contracted load and the extent of its utilization, which in turn get reflected in the demand charges and energy charges respectively. Both these elements of tariff need to increase with consumption beyond a threshold level.*

*(3) The Two Part Tariff suffers from a drawback that it inherently tends to encourage high consumption as the same reduces the effective per unit composite rate. This inevitable distortion is more pronounced with higher consumption levels. To correct this, tariff also needs to increase in a manner so as to achieve a near uniform composite rate. To do this demand and energy charges would have to increase with every small increase in contracted demand or load utilization percentage. Although theoretically possible, such an approach would make the tariffs too complex, incomprehensible and will pose serious problems in implementation.*

*(4) There is, therefore, a trade of between the simplicity of the tariff structure and precision in correcting the above distortion. The Commission’s attempt has been to strike a balance between the two by choosing a uniform rate of demand charge and three rates of energy charges linked to the consumption levels represented by the Load Factor.*



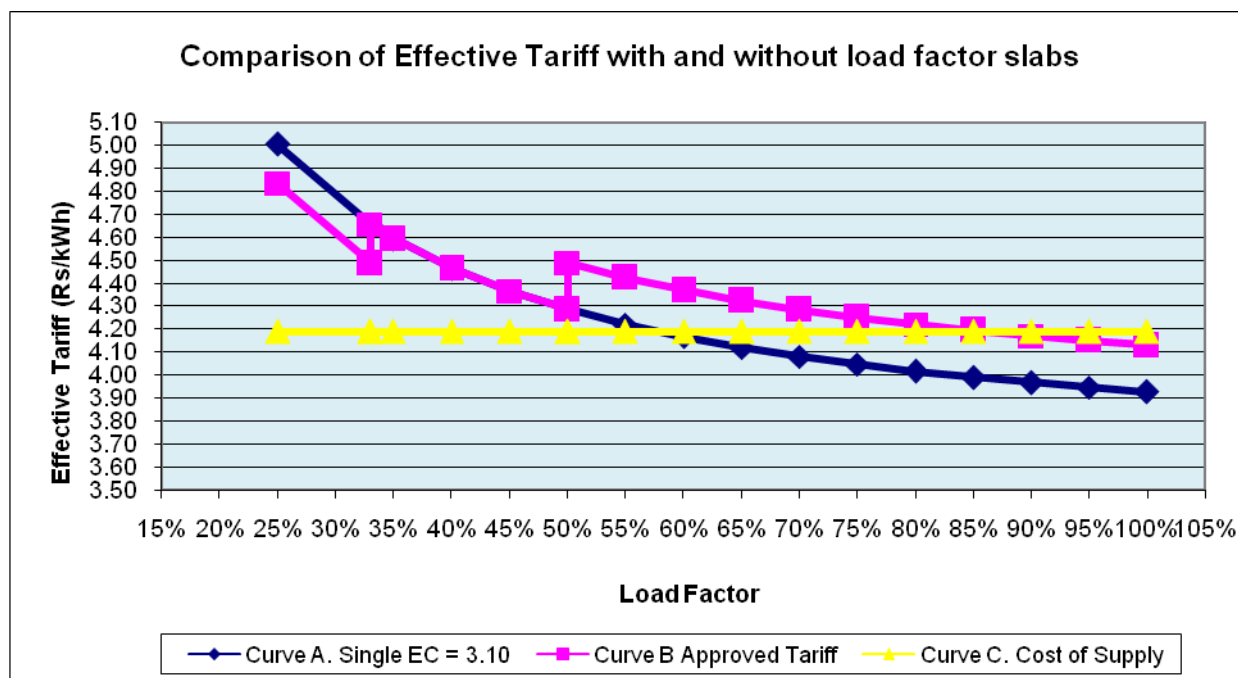
*(5) The Commission has avoided sharp increases in energy charges and has relied more on demand charges to be levied on such consumers. This approach is likely to be helpful in discouraging overuse and wastage by consumers induced by high minimum charges as substantial part of the minimum charge gets subsumed in the demand charges and the temptation to use extra energy gets limited to the balance minimum charge.*

*(6) Accordingly while the demand charges have been increased for all Power Intensive Units, the energy charge has not been changed upto a maximum load factor of 33%, where after it increases in stages."*

The above reasoning can be easily explained by taking an example with the figures of approved tariff (Demand Charges Rs. 270/kVA/month and Energy Charges in three slabs of Rs. 3.05, 3.30 & 3.60/kVAh in current Tariff Order for FY 2013-14, where Average Cost of Supply has been taken as Rs. 4.19/kWh (Refer Curve C in the graph) and average tariff from HT industrial consumers including ToD surcharge and rebate has been designed to be Rs. 4.58/kWh. It is evident that in case of single energy charge (i.e. Rs. 3.30/kVAh of middle slab and demand charge of Rs. 270/kVA/month), without any load factor slabs, the effective tariff of an intended cross-subsidising consumer goes down steeply with increasing load factor, thereby reducing the quantum of cross-subsidy charged from it (Curve A in the graph). After a threshold level of load factor, this structure leads to an undesirable anomaly that the effective tariff becomes lower than the Cost of Supply and the consumer instead of being subsidising consumer becomes subsidised consumer. Thus, this structure apart from leading to the abovesaid anomaly is highly inequitable amongst the consumers of same category with consumers having low load factor being loaded with much higher tariff and making up for the loss due to lower tariff, even below the cost of supply paid by consumers having high load factor consumers. The Table & Graph below shows these anomalies of consumers getting cross-subsidised after a particular load factor and wide range of tariffs over different load factors with the single rate structure. Increase of subsidy with increasing load factor is not only incorrect but also highly undesirable.

**Table 7.7 : Effective Tariff & Cross-subsidy for HT Industry having contracted load 1 kVA**

Load Factor	Consumption (kVAh)	Demand Charge (Rs./kVA)	Energy Charge (Rs./kVah)		Total Amount		Effective Tariff (Rs./kWh)		Cost of Supply	Cross Subsidy %	
			Single EC of Rs.3.30 /kVah	Approved Tariff	Single EC of Rs.3.30/kVah	Approved Tariff	Single EC of Rs.3.30 /kVah	Approved Tariff		Single EC of Rs.3.30 /kVah	Approved Tariff
(1)	(2)	(3)	(4)	(5)	(6)=(3)+(4)	(7)=(3)+(5)	(8)=(6)/(2)x 0.9575	(9)=(7)/(2)x 0.9575	(10)	(11)=(8-10)/(8)	(12)=(9-10)/(10)
25%	180.00	270.00	670.94	639.12	940.94	909.12	5.01	4.84	4.19	19.46%	15.42%
33%	237.60	270.00	885.65	843.64	1,155.65	1,113.64	4.66	4.49	4.19	11.15%	7.11%
35%	252.00	270.00	939.32	939.32	1,209.32	1,209.32	4.59	4.59	4.19	9.66%	9.66%
40%	288.00	270.00	1,073.51	1,073.51	1,343.51	1,343.51	4.47	4.47	4.19	6.60%	6.60%
45%	324.00	270.00	1,207.70	1,207.70	1,477.70	1,477.70	4.37	4.37	4.19	4.22%	4.22%
50%	360.00	270.00	1,341.89	1,341.89	1,611.89	1,611.89	4.29	4.29	4.19	2.32%	2.32%
55%	396.00	270.00	1,476.08	1,560.10	1,746.08	1,830.10	4.22	4.43	4.19	0.76%	5.61%
60%	432.00	270.00	1,610.27	1,701.92	1,880.27	1,971.92	4.17	4.37	4.19	-0.54%	4.31%
65%	468.00	270.00	1,744.45	1,843.75	2,014.45	2,113.75	4.12	4.32	4.19	-1.64%	3.21%
70%	504.00	270.00	1,878.64	1,985.58	2,148.64	2,255.58	4.08	4.29	4.19	-2.58%	2.27%
75%	540.00	270.00	2,012.83	2,127.40	2,282.83	2,397.40	4.05	4.25	4.19	-3.39%	1.45%
80%	576.00	270.00	2,147.02	2,269.23	2,417.02	2,539.23	4.02	4.22	4.19	-4.11%	0.74%
85%	612.00	270.00	2,281.21	2,411.06	2,551.21	2,681.06	3.99	4.19	4.19	-4.74%	0.11%
90%	648.00	270.00	2,415.40	2,552.88	2,685.40	2,822.88	3.97	4.17	4.19	-5.30%	-0.45%
95%	684.00	270.00	2,549.59	2,694.71	2,819.59	2,964.71	3.95	4.15	4.19	-5.80%	-0.95%
100%	720.00	270.00	2,683.78	2,836.54	2,953.78	3,106.54	3.93	4.13	4.19	-6.25%	-1.40%

**Graph : Effective HT Industrial Tariff**

Accordingly, the Commission decided to keep lower energy charge for industries having low load factor and increase it after defined steps so that effective tariff remains within a small band around the desired tariff for a wide range of load factor (Curve B in the above graph). Ideally, to reduce the band width the number of slabs should be large. However, this poses practical problem of complexity in billing and comes at the cost of difficulty in understanding the bills. To strike a balance between complexity in tariff structure and band size of effective tariff, the Commission decided to have three slab structure. Thus, although it appears from the tariff structure that the consumers with higher load factor are paying higher tariff, actually their effective tariff is being brought closer to others and not made higher by staggered rates.

Further, as discussed in Chapter 3 of the Order, some of the stakeholders submitted that the principle applied for the categorisation of the industry on the basis of load factor should be on the principle of higher the load factor, lower the tariff as prevalent in other States. They further expressed that the higher load factor implies that the consumer consumes nearly as much as it has contracted for and has paid demand charge, accordingly, and the Utility stands to benefit by higher load factor because the utility is able to sell the electricity which it has arranged for meeting the demand of the consumer. They further opined that if the load factor is lower, the utility would find itself having contracted higher power from generating companies than it would be able to sell to the consumers and in this process may suffer loss. Some of the stakeholders also submitted that the higher tariff for higher load factor is not in line with Section 63 of Electricity Act, 2003 and the tariff principles incentivising low load factor is likely to cause no demand side management, inefficient/unplanned utilization of resources and inefficient recording of electricity consumption.

The Commission does not agree with the views of the stakeholders that higher load factor implies that the Utility stands to benefit because the Utility is able to sell the electricity which it has arranged for meeting the demand of the consumer. The Commission would like to clarify that there is diversity in time of usage of electricity by different consumers and, hence, the actual simultaneous maximum demand of all the consumers put together shall always be less than the summation of their contracted loads. Further, nowhere, the Utility makes the power purchase arrangement equivalent to the contracted demand of its consumers. Further, increasing or decreasing the contracted load, and, hence, the load factor, on paper would not influence the consumption pattern of consumers and, hence, their simultaneous maximum demand, which is the basis for contracting power from different sources by the licensee rather than the contracted

load/load factor of consumers. Therefore, the argument that if the load factor increases, the Utility is able to sell the electricity which it has arranged is totally incorrect. As discussed in Section 6 of the Order, currently there is huge demand supply gap and, hence, UPCL has to purchase additional power to meet the peak demand. Further, the utilisation of the contracted capacity from firm sources by UPCL is more than 90% and with the increase in load factor of consumers, the energy requirement of the Utility will further increase, which the Petitioner will have to purchase at marginal price, i.e. the Petitioner will have to purchase costlier power to meet the increase in energy requirement at higher load factor. Thus, to have cost reflective tariffs, the energy charges should increase with load factor.

Further, as regard to the practice adopted with respect to load factor billing in other States, the Commission is of the view that the cross-subsidies in some of these States are so high that even with these rebates and very high load factors, the effective tariff remains above cost of supply. In Uttarakhand, as the cross-subsidies are very low, the tariff needs to be corrected at different load factors to ensure that steepness of the effective tariff curve does not reduce the cross-subsidies to very low level or make them negative (subsidised). Infact, the slab based tariff specifying higher rate for higher slab of consumption is applicable in almost all States of the country, including Uttarakhand, even for the subsidised domestic category. In some of the States for domestic category, the slab based tariff is non-telescopic similar to the existing tariff structure for HT industries in Uttarakhand, which in a way is nothing but load factor based tariff under which consumer with higher consumption pays higher rates. Further, there is a practical difficulty in implementing slabs of tariffs for excess consumption only, due to ToD tariffs in vogue. Apportionment of various slabs of consumption for different time slots would be very complicated and would result in disputes between licensee and consumers as consumer would like to book cheapest slab (1st slab) against peak hour consumption and highest slab (last slab) against off-peak hour consumption. The licensee, on the other hand, would like to book 1st slab against off-peak consumption and last slab under peak hour consumption. Thus, this structure would unnecessarily complicate the billing process and would also lead to disputes. Due to these reasons, the Commission is not implementing slab based tariff for HT industrial consumers.

In view of the above, the Commission is continuing with the existing load factor based tariff structure for HT Industry.

#### **7.3.3.8 Voltage Rebate**

Some of the stakeholders requested the Commission to increase the level of rebate at various voltage levels and suggested that the rebate of 7.5% should be applicable for receiving supply at 132 kV.

The Commission observed that as per the prevalent tariff structure, the voltage rebate at 33 kV is 1.5% and voltage rebate at 132 kV is 2.5%. The Commission is of the view that the difference in voltage rebate at 33 kV and voltage rebate at 132 kV considering the loss levels at these voltages, appears to be on the lower side. At the same time, the voltage rebate of 7.5% at 132 kV as proposed by stakeholders is very high.

Considering the request made by the stakeholders and considering the fact that at present the difference in voltage rebate at 33 kV and voltage rebate at 132 kV is in lower side, the Commission has decided to increase the rebate for receiving supply at 132 kV and above from the current level of 2.5% on the Rate of Charge to 5% of the Rate of Charge.

#### **7.3.3.9 Reduction in Minimum load of one-ton furnace**

As per the existing Rate Schedule, the supply to Induction and Arc Furnaces shall be made available only after ensuring that the loads sanctioned are corresponding to the load requirements of tonnage of furnaces. The minimum load of 1 Tonne furnace shall in no case be less than 600 kVA and all loads will be determined on this basis. No supply will be given for loads below this norm.

Some stakeholders suggested that the Commission had approved minimum 600 kVA/tonne of induction furnace, in its First Tariff Order for FY 2003-04 which was based on the design/technical specification of the furnaces manufactured then and should be reviewed as there has been tremendous development and improvement in the furnace technology during last 10 years. In this regard, the stakeholders have suggested that ceiling of minimum load requirement of one ton should be reduced from 600 kVA to 400 kVA.

Based on the above, the Commission has decided to revise the minimum load for 1 Tonne furnace from 600kVA to 500 kVA. Hence, the minimum load of 1 Tonne furnace shall in no case be less than 500 kVA and all loads will be determined on this basis. No supply will be given for loads below this approved minimum ceiling of 500 kVA/tonne.

### **7.3.3.10 Demand Charges for HT Industry**

Several HT Industries including State Advisory Committee members represented that levy of Demand Charges for HT Industries may be linked to number of hours of supply by UPCL. They also submitted that both Demand Charges and MCG are applicable for HT Industries but UPCL is unable to ensure continuous power supply and load shedding has increased over a period of time.

The Commission agrees with the views of the stakeholders, that due to demand supply shortage situation, the load shedding has increased over a period of time as UPCL has been unable to tie-up in advance and make arrangements for procurement of requisite power on medium term or long term basis. The Commission is of the view that as the Fixed/Demand Charges for all other categories except HT Industry are marginal as compared to Demand Charges for HT Industry and, hence, there is a need to link the Demand Charges of HT Industry to minimum number of hours of supply in the month. Considering the stakeholders views and prevalent demand supply shortage situation, the Commission has decided to levy the Demand Charges as approved for HT Industry, provided the minimum average supply of 18 hours per day during the month is provided by UPCL to HT Industrial Consumers. For the months, in which the UPCL is unable to ensure minimum average supply of 18 hours per day during the month to HT Industrial Consumers, the Demand Charges applicable for HT Industry shall be 80% of the approved Demand Charges for HT Industry.

### **7.3.3.11 Charitable Institutions**

With regard to one of the objection regarding charging domestic tariff to some of the Charitable Institutions, firstly, the Commission would like to clarify that the separate tariff sub-category for Educational Institutions, Hospitals and Charitable Institutions, under Non-Domestic consumer category, was introduced by the Commission in its first Tariff Order for FY 2003-04 and since then, the Charitable Institutions have never been covered under the Domestic consumer category and have always been covered under the Non-Domestic consumer category. This arrangement continued without change till Tariff Order of FY 2009-10, wherein the Petitioner submitted that Educational Institutions, Charitable Institutions and Hospitals covered under RTS-2 (i) (non-domestic category) are billed on concessional tariff despite the fact that few consumers in this category are of commercial in nature. The Petitioner, therefore, suggested that the following consumers should only be covered under RTS-2 (i) framework:

- Government/Municipal Hospitals;

- Government Educational Institutions/ Other educational institutions getting Government grant of atleast 70% of their annual expenditure &
- Charitable Institutions registered under the provision of Income Tax Act, 1961 and whose income is exempted from tax under this Act.

The Commission, with a view to segregate the consumers which are purely commercial in nature, as well as to restrict the benefit of lower tariff only to the deserving consumers, had accepted the suggestion of the Petitioner including introduction of condition of registration of charitable institutions under the provisions of the Income Tax Act, 1961.

As per the present Rate Schedule of the Commission, Charitable Institutions, which are registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act, are covered under the sub-category of Non-Domestic under the RTS-2: Non-Domestic (1.1), for which the Commission has approved energy charges significantly lower than that of Other Non-Domestic Users.

However, the benefit of such lower energy charges is available to only those Charitable Institutions which are registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act. The residual Charitable Institutions like Dharmshalas, Orphanages, etc., which though may be philanthropic and charitable in nature but not registered under the Income Tax Act, 1961 are be covered under the sub-category of other Non-Domestic Users and, accordingly, have to pay higher Energy Charges.

Uttarakhand, having many places of pilgrimage, has a number of Charitable Institutions. However, the Commission has got only two objections in respect of removing the condition of registration under Income Tax Act, 1961, citing it to be a cumbersome process.

The Commission has observed the relevant Sections of the Income Tax Act, 1961 and would like to highlight that Section 11 and Section 12 of the Income Tax Act, 1961 covers '*Income from Property held for Charitable or Religious purpose*' and '*Income of Trusts or Institutions from Contributions*' respectively, whereas, Section 12A of the Income Tax Act, 1961 lists the conditions for applicability of Section 11 and 12, which is reproduced as under:

***“Conditions for applicability of sections 11 and 12***

12A. (1) The provisions of section 11 and section 12 shall not apply in relation to the income of any trust or institution unless the following conditions are fulfilled, namely: –

(a) the person in receipt of the income has made an application for registration of the trust or institution in the prescribed form and in the prescribed manner to the Commissioner before the 1st day of July, 1973, or before the expiry of a period of one year from the date of the creation of the trust or the establishment of the institution, whichever is later and such trust or institution is registered under section 12AA:

**Provided** that where an application for registration of the trust or institution is made after the expiry of the period aforesaid, the provisions of sections 11 and 12 shall apply in relation to the income of such trust or institution, –

(i) from the date of the creation of the trust or the establishment of the institution if the Commissioner is, for reasons to be recorded in writing, satisfied that the person in receipt of the income was prevented from making the application before the expiry of the period aforesaid for sufficient reasons;

(ii) from the 1st day of the financial year in which the application is made, if the Commissioner is not so satisfied:

**Provided further** that the provisions of this clause shall not apply in relation to any application made on or after the 1st day of June, 2007;

(aa) the person in receipt of the income has made an application for registration of the trust or institution on or after the 1st day of June, 2007 in the prescribed form and manner to the Commissioner and such trust or institution is registered under section 12AA;

(b) where the total income of the trust or institution as computed under this Act without giving effect to the provisions of section 11 and section 12 exceeds the maximum amount which is not chargeable to income-tax in any previous year, the accounts of the trust or institution for that year have been audited by an accountant as defined in the Explanation below sub-section (2) of section 288 and the person in receipt of the income furnishes along with the return of income for the relevant assessment year the report of such audit in the prescribed form duly signed and verified by such accountant and setting forth such particulars as may be prescribed

(c) \*\*\*



- (2) *Where an application has been made on or after the 1st day of June, 2007, the provisions of sections 11 and 12 shall apply in relation to the income of such trust or institution from the assessment year immediately following the financial year in which such application is made."*

It is evident from the provisions of the Income Tax Act, 1961 that even the Income Tax Act, 1961 which may be considered as the most appropriate legislation, with regard to classification of income, has made registration a mandatory requirement to allow exemption of income from property as well as income in the form of contributions of an organisation, which is charitable in nature. Further, the Commission has found that the conditions for getting registration as well as the process under the Income Tax Act, 1961 are fairly simple and not very cumbersome as stated by the objectors.

As already discussed in previous Tariff Orders, the Commission's intent has been to provide the benefit of lower tariff to the legitimate consumers only. In view of the above, the Commission considers it appropriate, that the issue of charitable etc., nature of an organisation need to be determined in accordance with the provisions of the Income Tax Act, 1961 for availing the benefit of lower tariff applicable for Charitable Institutions. Therefore, the Commission finds no reason to depart from the present condition mentioned in its Rate Schedule under RTS-2: Non-Domestic Category for Charitable Institutions.

#### **7.3.3.12 Places of Worship**

Some of the stakeholders suggested that the tariff applicable under Non Domestic Tariff, for places of worship, i.e. Mandir, Masjid, Gurudwara, Church, etc. is on higher side and the tariff for places of worship should be reduced by creating separate category considering the fact that the places of worship does not operate on commercial principles.

The Commission is of the view that creating a separate category for places of worship will be against the principles of tariff rationalisation and will be against the objective of reducing number of categories and sub-categories. However, considering the request made by the stakeholders, the Commission has decided to include the places of worship, i.e. Mandir, Masjid, Gurudwara, Church, etc. under Domestic Category. The Commission in this regard would like to clarify that this will be applicable only for places of worship on stand -alone basis and not for the places of worship which have other facilities such as Dharamshala, community hall, dormatries etc. attached with it.

### **7.3.3.13 Single Point Bulk Supply for Domestic, Non Domestic and Mixed Load Categories**

As per prevalent Rate Schedule, Domestic/Non-domestic- Buildings/Malls/Cooperative Group Housing Societies/ Colonies having total load above 50 kW can avail connection at a single point with single point metering for further distribution.

Regulation 3(10) of Uttarakhand Electricity Regulatory Commission (Release of new LT Connections, Enhancement and Reduction of Loads) Regulations, 2013 issued on January 2013, stipulates that “No Single Point Bulk Supply connection shall be released on LT”.

In order to ensure consistency in the accordance with the provisions of Uttarakhand Electricity Regulatory Commission (Release of new LT Connections, Enhancement and Reduction of Loads) Regulations, 2013, the Commission amends the condition for availing single point Bulk Supply. Thus, Single Point Bulk Supply connections can be availed only if total load is above 75 kW.

The Commission would like to clarify that the Tariff of “Single Point Bulk Supply” under Domestic category shall only be applicable for Residential Colonies/Residential Multistoreyed Buildings including common facilities (such as Lifts, Common Lighting and Water Pumping system) of such Residential Colonies/Residential Multistoreyed Buildings. In case these Residential Colonies/Residential Multistoreyed Buildings also have some shops or other commercial establishments, the tariff of Mixed Load shall be applicable for such societies/colonies.

### **7.3.4 Treatment of Revenue Gap**

As concluded in Chapter 6 of the Order, the revenue at existing tariffs leaves a revenue gap of Rs. 179.25 Crore to meet the ARR for FY 2013-14, post adjustment of the revenue surplus and gap determined after final truing up of expenses and revenue based on the audited accounts for FY 2010-11 and provisional truing up of expenses and revenues for FY 2011-12.

The average increase to bridge the entire revenue gap of Rs. 179.25 Crore on annual basis works out to around 4.78% or around 19.08 paise/kWh. Several respondents from various consumer categories have opposed the increase in tariff of around 50% proposed by the Petitioner and submitted that the tariffs were increased recently in April, 2012. During the public process, most of the consumers have opined that the tariff increase should be reasonable and in the range of 5% to 7%. In this context, the Commission would like to highlight that as per the provisions of existing Regulations, tariff determination is an annual exercise wherein licensee’s expenses and

revenues for the ensuing year are determined and the gap, if any, between the expenses and revenues are recovered by increasing the tariffs. Further, to ensure quality and reliable supply by the licensee, the Commission has to ensure that all the legitimate expenses are allowed to be recovered.

The consumers should also recognize the fact that in the era of rising prices, licensee's costs are also bound to increase. Many of the consumers, while raising objection against tariff hike, cited that they are already burdened with price increase in other commodities, including fuel prices. It must be appreciated that the same price rise is also affecting the Petitioner in the same way. Infact, the hike in fuel prices are increasing the power purchase cost of the Petitioner, which consists of more than 80% of the total cost.

As per the provisions of Tariff Policy, the Commission has to reduce the cross subsidies with respect to average cost of supply in a gradual manner. The Commission would like to highlight that the estimated average cost of supply after adjusting additional surplus and gap on account of Truing up of FY 2010-11 and FY 2011-12, on total sales of the Petitioner, including additional sales on account of efficiency gain for FY 2013-14 works out to Rs. 4.19/kWh.

As the tariffs for FY 2013-14 approved in this Order will be applicable from May 1, 2013, i.e. for 11 months, the average tariff increase required to bridge the entire revenue gap works out to 5.21%. The approved tariff will be applicable only from May 1, 2013 and will be effective till revised by the Commission.

### **7.3.5 Cross Subsidy**

The Commission for FY 2013-14 has determined the category-wise tariffs in accordance with the existing regulations and regulatory principles. As per the provisions of Tariff Policy, the Regulatory Commission has to reduce the cross subsidies with respect to cost of supply in a gradual manner. The Commission in its Tariff Order for FY 2012-13 dated April 11, 2012 has also computed the cross subsidies at average cost of supply and observed that the cross-subsidies for different category of subsidising consumers were within the range of 20% of average Cost of Supply as specified in the Tariff Policy to be attained by FY 2010-11. However, the tariffs for some of the consumer category getting cross-subsidised were less than 80% of the average cost of supply.

Moving forward in the direction of reducing the cross subsidies, the Commission in its Tariff

Order for FY 2012-13 dated April 11, 2012 had increased the tariffs of subsidised categories in higher proportion with marginal increase in tariffs of subsidising categories. In this Tariff Order also, the Commission has continued its endeavour to reduce the cross subsidies for subsidised consumers with respect to average cost of supply in a gradual manner and at the same time avoiding tariff shock to any consumer category. Going forward in future years also, the Commission would continue its attempt to reduce the cross-subsidy for subsidised categories with respect to average cost of supply and would reduce the cross subsidies in the next 2-3 years to adhere to the provisions of Tariff Policy. However, during this transition phase to achieve the cross-subsidy levels for subsidised categories within the limits as specified under the Tariff Policy, the subsidising consumers should not have any grievance as their tariffs are already within the range of  $\pm 20\%$  of the average cost of supply.

### ***7.3.6 Category-wise Tariff Design***

The Commission has designed the category-wise tariffs for full recovery of approved Annual Revenue Requirement for FY 2013-14. The category-wise tariffs approved by the Commission are discussed below and are also shown in the Approved Rate Schedule placed at Annexure-1. These rates shall be effective from May 1, 2013 and shall continue to be applicable till further revised by the Commission.

#### ***7.3.6.1 RTS-1: Domestic Tariff***

The Commission, recognizing the fact that the lifeline consumers were one of the most disadvantaged consumers, had in its first Tariff Order for FY 2003-04 had approved a tariff of Rs. 1.50/kWh for such consumers when the average cost of supply was Rs. 2.28/kWh. The tariffs for them have not increased since then, although the average cost of supply approved for FY 2003-04 of Rs. 2.28/kWh has increased to Rs. 4.19/kWh, i.e. by about 83%. Considering the fact that the Tariff Policy permits that the tariffs for such lifeline consumers can be determined at 50% of the average cost of supply, the Commission in its last Tariff Order for FY 2011-12 dated May 24, 2011 had introduced a Fixed Charges of Rs. 5/connection/month for lifeline consumers in order to gradually reduce the cross subsidy and also to enable the licensee to recover some of its Fixed Cost. With a view to reduce the cross-subsidy and retaining the same within the specified limit of 50% of average cost of supply, the fixed changes of lifeline consumers have been increased from Rs. 6/connection/month to Rs. 7/connection/month. However, the energy charges have not been increased and are

retained at Rs. 1.50/kWh.

Further, as the Petitioner has sought time for metering unmetered rural domestic consumers, the Commission is permitting to retain this sub-category. However, with a view to reduce the cross-subsidy and to enable the licensee to recover its fixed costs, the fixed charges of unmetered rural consumers in hilly areas are being increased from Rs. 130/connection/month to Rs. 140/connection/month and for unmetered rural consumers in other areas from Rs. 285/connection/month to Rs. 310/connection/month.

For other domestic metered consumers, the fixed charges have been increased to Rs. 35/connection/month from the existing level of Rs. 30/connection/month for consumers with load upto 4 kW and to Rs. 90/connection/month from the existing level of Rs. 80/connection/month for consumers with load above 4 kW.

As discussed earlier, the Commission has decided to introduce one more slab for energy charges, i.e. consumption above 400 units/month. The energy charges for lowest slab, i.e. consumption upto 100 units/month have been retained at existing level of Rs. 2.30/kWh. The energy charges for the second slab, i.e. for consumption between 101-200 units/month have been fixed as Rs. 2.70/kWh. The energy charges for the third slab, i.e. for consumption between 201-400 units/month, have been fixed as Rs. 3.35/kWh and for the fourth slab created for consumers having consumption above 400 units/month, the energy charges have been fixed at Rs. 3.50/kWh.

For single point bulk supply connections, the energy charges have been increased to Rs. 3.15/kWh from Rs. 2.80/kWh and fixed charges have been increased to Rs. 35/kW/month from Rs. 30/kW/month.

A comparison of the tariff, i.e. existing, proposed by the Petitioner and that approved by the Commission, is given in the Table below:

**Table 7.8 : Tariff for Domestic Consumers**

S.No	Description	Existing Tariff		UPCL Proposed Tariff		Approved	
		Fixed Charge (Per Month)	Energy Charges	Fixed Charge (Per Month)	Energy Charges	Fixed Charge (Per Month)	Energy Charges
	<b>RTS-1: Domestic</b>						
1.1	Life Line Consumers	Rs. 6/ Connection	Rs. 1.50/kWh	Rs.10/ Connection	Rs. 2.00/kWh	Rs. 7/ Connection	Rs. 1.50/kWh
1.2	Other Domestic Consumers having load upto 4 KW						
(i)	0-100 Units / Month	Rs. 30/ Connection	Rs. 2.30/kWh	Rs. 50/ Connection	Rs. 2.98/kWh	Rs. 35/ Connection	Rs. 2.30/kWh
(ii)	101-200 Units / Month		Rs. 2.60/kWh		Rs. 3.65/kWh		Rs. 2.70/kWh
(iii)	201-400 Units /Month		Rs. 3.10/kWh		Rs. 4.50/kWh		Rs. 3.35/kWh
(iv)	Above 400 Units /Month		Rs. 3.10/kWh		Rs. 4.50/kWh		Rs. 3.50/kWh
1.3	Other Domestic Consumers having load above 4 KW						
(i)	0-100 Units / Month	Rs. 80/ Connection	Rs. 2.30/kWh	Rs. 50/ Connection	Rs. 2.98/kWh	Rs. 90/ Connection	Rs. 2.30/kWh
(ii)	101-200 Units / Month		Rs. 2.60/kWh		Rs. 3.65/kWh		Rs. 2.70/kWh
(iii)	201-400 Units /Month		Rs. 3.10/kWh		Rs. 4.50/kWh		Rs. 3.35/kWh
(iv)	Above 400 Units /Month		Rs. 3.10/kWh		Rs. 4.50/kWh		Rs. 3.50/kWh
2.1	Un-metered in Rural (Hilly) Areas	Rs. 130/ Connection	Nil	Rs. 180/ connection	Nil	Rs. 140/ Connection	Nil
2.2	Un-metered in Rural (Other) Areas	Rs. 285/ Connection	Nil	Rs. 400/ Connection	Nil	Rs. 310/ Connection	Nil
3	Single point bulk supply	Rs. 30/kW	Rs. 2.80/kWh	Rs. 50/kW	Rs. 4.20/kWh	Rs. 35/kW	Rs. 3.15/kWh

**7.3.6.2 RTS 1-A: Concessional Snowbound Area Tariff**

The Commission has increased the tariffs for domestic and non-domestic consumers in snow bound areas to gradually reduce the cross subsidy. The Commission has marginally increased the fixed charge from Rs. 6/connection/month to Rs. 7/connection /month for domestic and non-domestic consumers upto 4 kW living in snow bound areas and from Rs. 12/connection/month to Rs. 14/connection/month for non-domestic consumers above 4 kW.

Regarding energy charges, the Commission has decided not to change the energy charges of Rs. 1.50/kWh for domestic and non-domestic upto 1 kW living in snow bound areas. The energy charges for non-domestic above 1 kW and upto 4 kW living in snow bound areas has been marginally increased to Rs. 2.15/kWh from Rs. 2.05/kWh. Similarly, the energy charges for non-domestic above 4 kW living in snow bound areas has been increased to Rs. 3.25/kWh from Rs. 3.10/kWh.

A comparison of the tariff, i.e. existing, proposed by the Petitioner and that approved by the Commission, is given in the Table below:

**Table 7.9 : Concessional Tariff for Snowbound Areas**

S.No	Description	Existing Tariff		UPCL Proposed Tariff		Approved	
		Fixed Charge (Per Month)	Energy Charges	Fixed Charge (Per Month)	Energy Charges	Fixed Charge (Per Month)	Energy Charges
	<b>RTS-1A: Snowbound</b>						
1	Domestic	Rs. 6/ Connection	Rs. 1.50/kWh	Rs.10/ Connection	Rs. 2.00/kWh	Rs. 7/ Connection	Rs. 1.50/kWh
2	Non-Domestic upto 1 kW	Rs. 6/ Connection	Rs. 1.50/kWh	Rs.10/ Connection	Rs. 2.25/kWh	Rs. 7/ Connection	Rs. 1.50/kWh
3	Non-Domestic above 1 kW & upto 4 kW	Rs. 6/ Connection	Rs. 2.05/kWh	Rs. 10/ Connection	Rs. 2.98/kWh	Rs. 7/ Connection	Rs. 2.15/kWh
4	Non-Domestic above 4 kW	Rs. 12/ Connection	Rs. 3.10/kWh	Rs. 20/ Connection	Rs. 4.50/kWh	Rs. 14/ Connection	Rs. 3.25/kWh

### 7.3.7 RTS-2: Non-Domestic Tariff

For Non-Domestic consumers, the Commission has marginally increased the energy charges and fixed charges to enable the licensee recover its fixed costs and to meet the revenue gap. As discussed above, the Commission has decided to create a sub-category for small Non Domestic consumers having connected load upto 4 kW and consumption upto 50 units per month. The Commission has separately specified the tariff for concessional sub-category of educational institutions, hospitals and charitable institutions, which shall include:

- Government/Municipal Hospitals;
- Government/Government Aided Educational Institutions; and
- Charitable Institutions registered under the provisions of Income Tax Act, 1961 and whose income is exempted from tax under this Act.

The Commission has been reduced the MCG to 60 kVAh/kW/month and 720 kVAh/kW/annum for non-domestic consumers having load above 25 kW. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in Table below:

**Table 7.10: Tariff for Non-domestic consumers**

Sl. No.	Description	Existing Tariff			UPCL Proposed Tariff			Approved		
		Fixed/Charges (Per Month)	Energy Charges	MCG	Fixed/Demand Charges (Per Month)	Energy Charges	MCG	Fixed/Demand Charges (Per Month)	Energy Charges	MCG
<b>1</b>	<b>Government, Educational Institutions and Hospitals etc.</b>									
1.1	Upto 25 kW	Rs. 30/ kW	Rs 3.70/ kWh		Rs. 50/ kW	Rs 5.70/ kWh		Rs. 35/ kW	Rs 3.85/ kWh	
1.2	Above 25 kW	Rs. 30/ kW	Rs 3.30/ kVAh	75 kVAh /kW /month & 900 kVAh/ kW/ annum	Rs. 45/ kW	Rs 5.00/ kVAh	75 kVAh /kW/ month & 900 kVAh /kW/ annum	Rs. 35/ kVA	Rs 3.45/ kVAh	60 kVAh /kVA /month & 720 kVAh/ kVA/ annum
<b>2</b>	<b>Other Non-Domestic Users</b>									
2.1	Upto 4 kW and consumption upto 50 units per month							Rs. 35 / kW	Rs 4.00/ kWh	
2.2	Upto 25 kW	Rs. 30 / kW	Rs 4.40/ kWh		Rs. 50/ kW	Rs 6.65/ kWh		Rs. 35 / kW	Rs 4.55/ kWh	
2.3	Above 25 kW	Rs. 30 / kW	Rs 4.40/ kVAh	75 kVAh /kW /month & 900 kVAh/ kW/ annum	Rs. 45/ kW	Rs 6.65/ kVAh	75 kVAh /kW/ month & 900 kVAh /kW/ annum	Rs. 35 / kVA	Rs 4.55/ kVAh	60 kVAh /kVA /month & 720 kVAh/ kVA/ annum
3	Single Point Bulk Supply above 75kW	Rs. 30 / kW	Rs 4.30/ kVAh	75 kVAh /kW /month & 900 kVAh/ kW/ annum	Rs. 45/ kW	Rs 6.30/ kVAh	75 kVAh /kW/ month & 900 kVAh /kW/ annum	Rs. 35 / kVA	Rs 4.45/ kVAh	60 kVAh /kVA /month & 720 kVAh/ kVA/ annum

### 7.3.8 RTS-3: Public Lamps

The tariff for this category has been approved linked to average cost of supply without any element of cross-subsidy. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in Table below:



**Table 7.11 : Tariff for Public Lamps**

Description	Existing Tariff		UPCL Proposed Tariff		Approved	
	Fixed / Demand Charges (Per Month)	Energy Charges	Fixed / Demand Charges (Per Month)	Energy Charges	Fixed / Demand Charges (Per Month)	Energy Charges
<b>RTS-3: Public Lamps</b>						
1. Metered	Rs. 25/kW	Rs. 3.95/kWh	Rs. 45/kW	Rs. 6.20/kWh	Rs. 30/kW	Rs. 4.10/kWh
2. Un-metered (Rural)	Rs. 155 Per 100 W Lamp - For every 50W or part thereof increase over and above 100W Lamps additional Rs. 60	-	Rs. 210 Per 100W Lamp - For every 50W or part thereof increase over and above 100W Lamps additional Rs. 88	-	Rs. 175 Per 100 W Lamp - For every 50W or part thereof increase over and above 100W Lamps additional Rs. 70	-

### 7.3.9 RTS-4: Private Tube Wells/Pump sets

The Commission has marginally increased the tariff for this category of consumers. The fixed charges and energy charges for both metered and un-metered consumers, has been increased marginally.

However, the Commission has modified the MCG mechanism and has decided to fix Minimum Consumption Charges instead of MCG based on units. The Commission has decided to keep the Minimum Consumption Charges as Rs. 100/BHP/month on monthly basis and Rs. 1200/BHP/annum on annual basis. The minimum consumption charges is strictly not a tariff and will be levied on monthly basis only when monthly bill is less than the amount specified for monthly minimum charges. In case, cumulative actual consumption from the beginning of financial year exceeds the amount specified for annual minimum consumption charges, no further billing of monthly minimum consumption shall be done and the same shall be adjusted as detailed in Tariff Schedule.

The existing tariff, tariff proposed by the licensee and that approved by the Commission are given in the Table below:

**Table 7.12: Tariff for Private tube Wells/ Pump Sets**

Category	Existing Tariff		UPCL Proposed Tariff		Approved		
	Fixed / Demand Charges (Per Month)	Energy Charges	Fixed / Demand Charges (Per Month)	Energy Charges	Fixed / Demand Charges (Per Month)	Energy Charges	Minimum Charges
<b>RTS-4: Private Tube-wells / Pumping sets</b>							
1. Metered	Nil	Rs. 1.00/ kWh	Nil	Rs. 1.50/ kWh	Nil	Rs. 1.10/ kWh	Rs. 100/ BHP/ month & Rs. 1200 /BHP/ annum
2. Un-metered	Rs. 165/BHP	Nil	Rs. 250/BHP	Nil	Rs. 180/BHP	Nil	

**7.3.10 RTS-5: Government Irrigation System**

The tariff for this category has been approved linked to average cost of supply without any element of cross-subsidy. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in the Table below:

**Table 7.13: Tariff for Government Irrigation System**

Description	Existing Tariff		UPCL Proposed Tariff		Approved	
	Fixed / Demand Charges (Per Month)	Energy Charges	Fixed / Demand Charges (Per Month)	Energy Charges	Fixed / Demand Charges (Per Month)	Energy Charges
<b>RTS-5: Government Irrigation System</b>						
Upto 75 kW	Rs. 25/kW	Rs. 3.95/ kWh	Rs. 40/kW	Rs. 6.00/ kWh	Rs. 30/kW	Rs. 4.10/ kWh
Above 75 kW	Rs. 25/kVA	Rs. 3.80/ kVAh	Rs. 35/kVA	Rs. 5.85/ kVAh	Rs. 30/kVA	Rs. 3.95/ kVAh

**7.3.11 RTS-6: Public Water Works**

The tariff for this category has been approved linked to average cost of supply without any element of cross-subsidy. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in the Table below:

**Table 7.14 : Tariff for Public Water Works**

Description	Existing Tariff		UPCL Proposed Tariff		Approved	
	Fixed / Demand Charges (Per Month)	Energy Charges	Fixed / Demand Charges (Per Month)	Energy Charges	Fixed / Demand Charges (Per Month)	Energy Charges
<b>RTS-6: Public Water Works</b>	Rs. 25/kW	Rs. 3.80/ kVAh	Rs. 35/KW	Rs. 5.85/ kVAh	Rs. 30/kVA	Rs. 4.00/ kVAh

### 7.3.12 RTS-7: Industry

For LT and HT Industry, the Commission has marginally increased the fixed charges and energy charges to increase the recovery from fixed charges and to meet the revenue gap.

However, in doing so, it has been ensured that the cross-subsidy levels have reduced as compared to cross subsidy approved for FY 2012-13.

The Commission has decided to retain the peak hour rate as 50% higher than the normal hour rate applicable for highest slab, i.e. with load factor above 50% for all the HT industrial consumers. Further, consumers opting for continuous supply as per eligibility given in this Order shall have to pay 15% additional energy charges as continuous supply surcharge. As discussed above in tariff rationalisation measures, the Commission has retained MCG on monthly basis with adjustment as detailed out in Tariff Schedule. The existing tariff, tariff proposed by the licensee and that approved by the Commission for LT Industry is given in the Table below:

**Table 7.15 : Tariff for LT Industries**

Category	Existing Tariff			UPCL Proposed Tariff			Approved		
	Fixed Charges (Per Month)	Energy Charges	MCG	Fixed Charges (Per Month)	Energy Charges	MCG	Fixed Charges (Per Month)	Energy Charges	MCG
<b>RTS-7: Industry</b>									
<b>LT Industry</b>									
1. LT Industries (upto 25 kW)	Rs. 90/ kW	Rs 3.60/ kWh	*75 kWh/ kW/ month & 900 kWh /kW/ annum	Rs. 130/ kW	Rs 5.40/ kWh	* 75/ kwh/kW /month & 900 kwh/kW/ annum	Rs. 100/ kW	Rs 3.75/ kWh	*60 kWh/ kW/ month & 720 kWh /kW/ annum
2. LT Industries (above 25kW & upto 75 kW)	Rs. 90/ kW	Rs 3.25/ kVAh	75 kVAh/ kW/ month & 900 kVAh /kW/ annum	Rs. 130/ kW	Rs 5.00/ kVAh	75/kVAh /kW/month & 900 kVAh/kW / annum	Rs. 100/ kVA	Rs 3.40/ kVAh	60 kVAh/ kVA/month & 720 kVAh /kVA/ annum

*\*40 kWh/kW/month and 480 kWh/kW/annum for Atta Chakkis.*

The existing tariff and tariff proposed by the licensee for HT Industry is given in the Table below:

**Table 7.16 : Existing and Proposed Tariff for HT Industries**

Sl. No.	Category	Load Factor	Existing Tariff			Proposed Tariff		
			Energy Charges	Fixed /Demand Charges	MCG Charges	Energy Charges	Fixed /Demand Charges	MCG Charges
			Rs./kVAh	Rs./kVA		Rs./kVAh	Rs./kVA	
1	HT Industry having contracted load above 88kVA/75 kW (100 BHP)							
1.1	Contracted Load up to 1000 kVA	Upto 33%	2.85	Rs.200/kVA of the billable demand	110 kVAh/kVA / month & 1320 kVAh /kVA/annum	4.15	Rs. 285/kVA of the billable demand	110 kVAh /kVA/ month 1320 & kVAh /kVA/ annum
		Above 33% and upto 50%	3.10			4.65		
		Above 50%	3.40			5.15		
1.2	Contracted Load More than 1000 kVA	Upto 33%	2.85	Rs. 260/kVA of the billable demand		4.15	Rs. 375/kVA of the billable demand	
		Above 33% and upto 50%	3.10			4.65		
		Above 50%	3.40			5.15		

The approved tariff for HT Industry is given in Table below:

**Table 7.17 : Approved Tariff for HT Industry**

S.No	Category	Load Factor	Energy Charges	Fixed Charges	MCG
			Rs./kVAh	Rs./kVA/ month	kVAh/kVA of contracted load
1	HT Industry having contracted load above 88kVA/75 kW (100 BHP)				
1.1	Contracted Load up to 1000 kVA	Upto 33%	3.05	Rs. 210/kVA of the billable demand	110 kVAh/kVA/month & 1320 kVAh /kVA/annum
		Above 33% and upto 50%	3.30		
		Above 50%	3.60		
1.2	Contracted Load More than 1000 kVA	Upto 33%	3.05	Rs. 270/kVA of the billable demand	
		Above 33% and upto 50%	3.30		
		Above 50%	3.60		

### 7.3.13 RTS-8: Mixed Load

For single point bulk supply connections having mixed load with domestic and non-domestic usage, the Commission has approved the fixed charges of Rs. 40/kW and has specified the uniform energy charge of Rs. 3.75/kWh in order to gradually reduce the cross subsidy. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in the Table below:

**Table 7.18 : Tariff for Mixed Load**

Description	Existing Tariff		UPCL Proposed Tariff		Tariff Design	
	Fixed / Demand Charges (Per Month)	Energy Charges	Fixed / Demand Charges (Per Month)	Energy Charges	Fixed / Demand Charges (Per Month)	Energy Charges
<b>RTS-8: Mixed Load</b>						
Mixed Load Single Point Bulk Supply above 75 kW including MES as deemed licensee	Rs. 30/ kW	Rs. 3.60/ kWh	Rs. 50/ kW	Rs. 5.50/ kWh	Rs. 40/ kW	Rs. 3.80/ kWh

**7.3.14 RTS-9: Railway Traction**

For Railway Traction, the Commission has approved the demand charges of Rs. 190/kVA and has specified the uniform energy charge of Rs. 3.40/kVAh with an attempt to reduce the cross-subsidy. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in Tables below:

**Table 7.19 : Tariff for Railway Traction**

Description	Existing Tariff		UPCL Proposed Tariff		Tariff Design	
	Fixed / Demand Charges (Per Month)	Energy Charges	Fixed / Demand Charges (Per Month)	Energy Charges	Fixed / Demand Charges (Per Month)	Energy Charges
<b>RTS-9: Railway Traction</b>	Rs. 180/KVA	Rs. 3.20 /kVAh	Rs. 265/kVA	Rs. 4.80 kVAh	Rs. 190/KVA	Rs. 3.25/kVAh

**7.4 Revenue for FY 2013-14**

Based on the tariffs as approved above, the Commission has computed the projected revenue at existing tariffs for one month and at approved tariffs for eleven months from each category for 2013-14. The summary of category-wise projected revenue for FY 2013-14 is given in the following Table:

**Table 7.20: : Revenue for FY 2013-14**

S No	Category	Sales	Revenue	Average Billing Rate
		MU	Rs. Crore	Rs/Unit
1	RTS-1: Domestic	1,848	565.77	3.06
2	RTS-1A: Snowbound	30	5.32	1.77
3	RTS-2: Non Domestic	1,069	519.41	4.86
4	RTS-3: Public Lamps	81	33.85	4.16
5	RTS-4: Private Tube Wells	198	29.85	1.51
6	RTS-5: Government Irrigation System	164	68.64	4.19
7	RTS-6: Public Water Works	396	165.16	4.17
8	RTS-7: Industry	5,290	2425.66	4.59
	LT Industry	297	137.05	4.61
	HT Industry	4,992	2288.61	4.58
9	RTS-8: Mixed Load	197	77.74	3.94
10	RTS-9: Railway Traction	10	4.61	4.80
11	<b>Sub-Total</b>	<b>9,284</b>	<b>3896.00</b>	<b>4.19</b>
12	<i>Revenue on Account of Efficiency Improvement</i>	<b>112</b>	<b>46.94</b>	<b>4.19</b>
13	<b>Total</b>	<b>9396</b>	<b>3942.94</b>	<b>4.19</b>

The estimated revenue for FY 2013-14 considering the revenue at existing tariffs for one month and revenue at approved tariffs for eleven months works out to Rs. 3942.94 Crore, as against the net ARR of Rs. 3,932.60 Crore worked out after adjusting trued-up surplus/gaps of previous years, leaving a surplus of Rs. 10.34 Crore. In addition, the Commission has re-determined the tariff for FY 2010-11 in accordance with Hon'ble ATE's Judgment and has estimated a revenue of Rs. 3.61 Crore to be realized in FY 2013-14. Thus, a total surplus of Rs. 13.94 Crore is left to be retained with the Petitioner which will be adjusted in its APR Petition.

## 7.5 Cross-subsidy

As discussed above, the Commission has designed the tariffs for various categories with an objective of gradually reducing the cross subsidy with respect to average cost of supply. The extent of category-wise cross-subsidy at approved tariffs computed at average cost of supply is given in Table below:

**Table 7.21 : Cross Subsidy at Average Cost of Supply**

Category	Approved Average Billing Rate (ABR)	Average Cost of Supply (ACoS)	ABR / ACoS	Cross Subsidy
	Rs/kWh	Rs/kWh	%	%
Domestic	3.06	4.19	73.14%	-26.86%
Lifeline	2.09	4.19	49.94%	-50.06%
Non Domestic	4.86	4.19	116.05%	16.05%
Public Lamps	4.16	4.19	99.41%	-0.59%
PTW	1.51	4.19	36.02%	-63.98%
GIS	4.19	4.19	100.04%	0.04%
PWW	4.17	4.19	99.53%	-0.47%
LT Industrial	4.61	4.19	110.09%	10.09%
HT Industrial	4.58	4.19	109.53%	9.53%
Mixed Load	3.94	4.19	94.06%	-5.94%
Railways	4.80	4.19	114.70%	14.70%

The comparison of Cross Subsidy at Approved Tariffs with respect to the Average Cost of Supply in Tariff Order for FY 2012-13 and as approved in this Tariff Order for FY 2013-14 is given below:

**Table 7.22 : Cross Subsidy at Approved Tariffs in FY 2011-12 and FY 2012-13**

Category	Cross Subsidy at Approved Tariff for FY 2012-13	Cross Subsidy at Approved Tariff for FY 2013-14
Domestic	-28.15%	-26.86%
Lifeline	-50.09%	-50.06%
Non Domestic	16.64%	16.05%
Public Lamps	0.07%	-0.59%
PTW	-66.98%	-63.98%
GIS	0.79%	0.04%
PWW	0.05%	-0.47%
LT Industrial	10.66%	10.09%
HT Industrial	9.86%	9.53%
Mixed Load	-6.70%	-5.94%
Railways	19.37%	14.70%

The Commission while designing the tariffs for FY 2013-14 has either reduced or retained the cross subsidies for most of the categories with respect to approved tariffs for FY 2012-13 and has ensured to bring the cross-subsidy levels within the range specified in the National Tariff Policy. As the Private tube wells and domestic consumers are subjected to additional surcharge on account of re-determined tariffs for FY 2009-10 and FY 2010-11, any attempt to reduce the cross subsidy further would have lead to tariff shock to these consumers. Hence, keeping in view this fact, the

Commission has attempted to moderately reduce the cross-subsidy for these categories. However, it can be seen from the Table above, cross-subsidies of all the subsidising consumers is within the range of 120% as required in the Tariff Policy.

The Commission going forward in future years would attempt to reduce the cross-subsidy for subsidised categories with respect to the average cost of supply and would reduce the cross subsidies in next 2-3 years to adhere to the provisions of Tariff Policy.

Further, once the cross-subsidy level has been reduced to be within  $\pm 20\%$ , there is no mandate under the Act or Tariff Policy to reduce it further. The criteria of  $\pm 20\%$  of the average cost of supply for all the categories including subsidised categories depends upon the consumption mix of the Licensee. However, in case of Petitioner, the consumption mix is skewed towards subsidising categories with subsidising categories constituting almost two third of total sales, while the consumption by subsidised categories is around one third of the total consumption. Therefore, in case of Petitioner, though the tariff for all the subsidising categories have been within 120% of the overall average cost of supply of the Petitioner, the average tariff for some of the subsidised categories is less than 80% of the overall average cost of supply of the Petitioner.

Hon'ble Appellate Tribunal of Electricity, in its Judgment dated February 28, 2012, in Appeal No. 159 of 2011 has expressed similar views. The relevant extract given in Para 16 of the Judgment is reproduced as under:

*".... Provision of restricting cross subsidy to  $\pm 20\%$  in Tariff Policy is applicable to areas where proportion of both the categories, subsidizing and subsidized, are comparable. The same yard stick cannot be applied in areas where consumer mix is highly biased in favour on one category."*

## 7.6 Open Access Charges

Uttarakhand Electricity Regulatory Commission (Terms and Conditions of Intra State Open Access) Regulations, 2010 specify various charges applicable on the customers seeking open access to intra State transmission and/or distribution system, based on the category/nature of open access these customers come under in accordance with the regulations.

In accordance with the methodology provided in the regulations the rate of these charges for FY 2013-14 (applicable upto 31st March 2014) are based on the Tariff Order dated 11.04.2012 issued by the Commission for the financial year 2012-13.



Rate of Charge applicable for the FY 2013-14 shall be:

**Table 7.23 : Transmission and Wheeling Charges approved for FY 2013-14**

Description	Rs./MW/day
Transmission charge	3022.77
Wheeling charge	7302.22*

\*“Embedded open access consumers” shall not pay the wheeling charge as above who shall otherwise pay net wheeling charges calculated in accordance with the methodology specified in the regulations and the same works out to NIL for HT industry consumers and Rs. 6315.92/MW/day for Non-Domestic consumers.

However, in case augmentation of transmission system is required for giving long term open access then such long term customer shall, in addition to transmission charges as per Rate of Charge provided in Para 3 above, also bear the transmission charges for such augmentation works. These charges shall be determined by the Commission on Rs./MW-day basis after scrutiny of the annual revenue requirements for the said work including its capital cost, based on the proposal of the STU/transmission licensee, on case to case basis. With regard to sharing of these transmission charges for the said works, the Commission shall take a decision, taking into account the beneficiaries of the work and its usage, at the time of scrutiny of PTCUL’s ARR for the ensuing year for intra-State system. However, till such time the Commission issues tariff order for the ensuing year, the long term access customer for whom these augmentation works were carried shall be liable to pay these additional transmission charges.

The transmission losses, for intra-State transmission system, applicable to open access customers for FY 2013-14 shall be 1.85% as considered by the Commission in the Tariff Order for UPCL for FY 2012-13.

The distribution losses applicable to open access customers for FY 2013-14 shall be the pooled average system distribution losses, i.e. 17% considered in Tariff Order for FY 2012-13.

Cross subsidy surcharge applicable, in accordance with the regulations, to open access customers for FY 2013-14 have been determined as Rs 0.40/kWh.

## 7.7 Schedule of Miscellaneous Charges

The Petitioner submitted that the Commission vide its Order on ARR and Tariff Petition of

UPCL for FY 2003-04 has notified the schedule of the miscellaneous charges. These charges remain at same level even today also as they have not been reviewed since FY 2003-04. The Miscellaneous charges leviable by the Petitioner are primarily due to the cost of services provided by the Petitioner and labour- related cost incurred by the Petitioner. The Petitioner, therefore, proposed to review its miscellaneous charges to reflect the cost inflation over the years from FY 2003-04 to FY 2011-12. The Petitioner submitted a methodology of normalized Price indexation has been used to arrive at the new service charges with suitable rounding off. The Price Indexation ratio of 1.66 which was used for arriving at the new service charges has been evaluated by taking the ratio of the Wholesale Price Index for FY 2011-12 to that of FY 2003-04.

**Table 7.24: Price Indexation Ratio**

S. No.	Year	Parameter	Value
1.	FY 2003-04	Wholesale Price Index	93.91
2.	FY 2011-12	Wholesale Price Index	156.13
	Inflation Index (2/1)		1.66

Further, some parameters are deleted and some new are introduced by the Petitioner according to the changing scenario.

The summary of existing and proposed Schedule of Miscellaneous charges as proposed by the Petitioner is as follows:

**Table 7.25 : Schedule of Miscellaneous Charges as proposed by Petitioner (Rs.)**

Description	Units	Existing Rates (Rs.)	Proposed Rates (Rs.)
<b>1 Checking and Testing of Meters</b>			
a. Single Phase Meters	Per meter	35	100
b. Three Phase Meters	Per meter	40	300
c. LT CT operated Meters	Per meter		500
d. HT Meters with CT/PT	Per meter		1000
<b>2 Disconnection and Reconnection of supply for any reason, whatsoever, (for any disconnection or reconnection the charge will be 50%)</b>			
a. Consumer having load above 100 BHP/75 kW	Per job	400	700
b. Power consumers upto 100 BHP/75 kW	Per job	300	500
c. All other categories of consumers	Per job	200	350
<b>3 Replacement of Meters</b>			
a. By higher capacity Meter	Per job	25	50
b. Installation of Meter and its subsequent removal in case of Temporary Connections	Per job	50	100
c. Changing of position of Meter Board at the consumer's request	Per job	75	150
<b>4 Service of Wireman</b>			
a. Replacement of Fuse	Per job	20	50
b. Inserting and Removal of Fuse in respect of night loads.	Per job	15	25

**Table 7.25 : Schedule of Miscellaneous Charges as proposed by Petitioner (Rs.)**

Description	Units	Existing Rates (Rs.)	Proposed Rates (Rs.)
c. Hiring of services by the consumer during temporary supply or otherwise.	Per wireman/ Day of 6 hours	50	100
d. If inspector is obstructed/prevented by the consumer deliberately or otherwise	Per trip	150	300
<b>5 Resealing of Meters on account of any reason in addition to other charges payable in terms of other provision of charging of penalties, etc</b>	Per meter	55	100
<b>6 Checking of Capacitors (other than initial checking) on consumer's request:</b>			
a. At 400 V / 230 V	Per job	100	200
b. At 11 kV and above	Per job	200	350

The Commission accepts the Petitioners concern that the service charges have not been increased from FY 2003-04 to the current scenario. However, the charges proposed by the Petitioner are very high. The Commission has determined the following Miscellaneous Charges considering the appropriate rates in the current market scenario:

**Table 7.26 : Schedule of Miscellaneous Charges as approved by the Commission (Rs.)**

Sl. No	Nature of Charges	Unit	Existing Rates (Rs.)	Approved Rates (Rs.)
1	<b>Checking and Testing of Meters</b>			
	a. Single Phase Meters	Per Meter	35.00	50.00
	b. Three Phase Meters	Per Meter	40.00	75.00
	c. Recording Type Watt-hour Meters	Per Meter	170.00	170.00
	d. Maximum Demand Indicator/ LT CT operated Meters	Per Meter	335.00	350.00
	e. Tri-vector Meters/ HT Meters with CT/PT	Per Meter	1000.00	1000.00
	f. Ammeters and Volt Meters	Per Meter	65.00	65.00
	g. Special Meters	Per Meter	335.00	335.00
2	h. Initial Testing of Meters	Per Meter	NIL	NIL
	<b>Subsequent testing and installation other than initial testing</b>	Per Meter	80.00	80.00
3	<b>Disconnection and Reconnection of supply on consumers request or non-payment of bill (for any disconnection or reconnection the charge will be 50%)</b>			
	a. Consumer having load above 100 BHP/75 kW	Per Job	400.00	600.00
	b. Industrial and Non Domestic consumers upto 100 BHP/75 kW	Per Job	300.00	400.00
	c. All other categories of consumers	Per Job	200.00	200.00
4	<b>Replacement of Meters</b>			
	a. Installation of Meter and its subsequent removal in case of Temporary Connections	Per Job	50.00	75.00
	b. Changing of position of Meter Board at the consumer's request	Per Job	75.00	100.00
5	Checking of Capacitors (other than initial checking) on consumer's request:			
	a. At 400 V/ 230 V	Per Job	100.00	150.00
	b. At 11 kV and above	Per Job	200.00	300.00

## 8. Commission's Directives

The Commission in its previous Orders had issued a number of specific directions to the Petitioner with an objective of attaining operational efficiency, efficient manpower deployment and streamlining the flow of information, which would be beneficial for the Sector and the Petitioner, both in short and long term perspective. These directions aim at creating a conducive, competitive and healthy environment for the Petitioner to provide good quality of electricity supply and service to the consumers of Uttarakhand at optimum and affordable costs. This Chapter deals with the compliance status and the Commission's views thereon as well as the summary of new directions (given in preceding Chapters of this Order) for compliance and implementation by the Petitioner.

### 8.1 Compliance of Directives Issued in Tariff Order for FY 2011-12

#### 8.1.1 *Misuse of electricity by Staff*

The Petitioner was directed to act appropriately as per the direction given by the Commission in the previous Tariff Orders.

The Petitioner was further directed to submit one sample energy reading (opening & closing) for past one month for each scale of departmental employees, both serving and pensioners within one month of the issue of the Order.

The Petitioner was also directed to evolve a mechanism for reimbursement of expenses against electricity consumption by the departmental employees of UPCL and submit the same to the Commission latest by May 31, 2012.

#### **Petitioner's Submissions**

The Petitioner submitted the compliance status of the directives as follows:

- (a) 100% metering of departmental employees has been completed.
- (b) Departmental employees of UPCL are being charged at normative rates of electricity according to their designation. However, UPCL is in process to evolve a mechanism for reimbursement of expenses against electricity consumed by the departmental employees of UPCL. This exercise was expected to be completed by March 31, 2013.

- (c) As per Commercial Diary, the details of consumption and assessment on the departmental connections released to the employees and pensioners of UPCL for the period from April, 2012 to September, 2012 is as follows:

Particulars	Employees	Pensioners
Consumer (No)	4682	2679
Consumption (MU)	18.195	10.863
Assessment (Rs lakh)	29.48	18.98

Further, division-wise details have been submitted to the Commission vide UPCL's letter No.-504/UPCL/RM/J-10, dated February 20, 2013.

As regards the sample energy reading for each scale of departmental employees, the Petitioner submitted that sample energy readings (opening and closing) for each scale of departmental employees have already been submitted to the Commission vide UPCL's letter No.-93/UPCL/RM/C-8 dated January 11, 2013.

**The Commission has taken note of the submissions made by UPCL. The Commission again directs the Petitioner to evolve a mechanism for reimbursement of expenses against electricity consumed by the departmental employees of UPCL and submit the same to the Commission within one month from the date of this Order.**

### 8.1.2 Functioning of UPCL

The Petitioner was directed to submit detailed plan for creating and operating one or two sub-stations as Profit Centres. The Petitioner was also directed to submit a time bound Action Plan indicating their proposals for reduction in AT&C Losses, Energy Audit, Realisation of Arrears, Improvement in Collection System, Installation of ABC Conductors in High Loss prone areas and replacement of Meters.

#### Petitioner's Submissions

The Petitioner submitted the compliance status of the directives as follows:

#### (a) Profit Centres

The Petitioner submitted that UPCL has prepared its business plan and started energy audit in its operational area. The business plan has also been submitted to the Commission for seeking approval, vide UPCL's letter dated January 31, 2013. On approval of the business plan, one or two sub-station shall be created as Profit Centers on pilot basis as per direction of the Commission.

**(b) Time bound action plan in respect of reduction in AT&C Losses.**

The Petitioner submitted that UPCL has targeted to reduce its AT&C losses from 25.82% in FY 2011-12 to 22.85% in FY 2012-13, by adopting the measures mentioned herein below:

**1. Measures for distribution loss reduction:**

- (i) Implementation of reform programs through R-APDRP scheme,
- (ii) Installation of Double metering in selected 11 KV & 33 KV consumers,
- (iii) Shifting of 1 Phase & 3 Phase meter outside the premises of the consumers,
- (iv) Implementation of AMR on all KCC consumers (Industrial - 5KW and above, Commercial 10KW and above),
- (v) Replacement of Mechanical Meters with Electronic Meters and Installation of Electronic meters in un-metered connections,
- (vi) Laying of LT ABC in theft prone areas,
- (vii) Replacement of defective meters,
- (viii) MRI analysis of all KCC consumers every month.

**2. Measures for Commercial loss reduction and improvement of collection efficiency:**

- (i) Implementation of reform program under R-APDRP scheme in 31 towns having population above 10,000, SCADA/DMS in Dehradun town,
- (ii) Replacement of electromagnetic meters with tamper proof electronic meters,
- (iii) Shifting of single phase & three phase meters outside the premises of the consumers,
- (iv) Regularisation of unauthorised I.P. installation and thereby increasing the sales,
- (v) Convenient bill payment options like retail cash collection counters, online bill payment through credit card, debit card, internet banking, etc.,
- (vi) Deployment of more teams to rural areas for collection camps,
- (vii) Finalization of PD cases and waiver of fictitious arrears,

- (viii) Recovery of past arrears by issuing notices under Sections 3 and 5 of Recovery Act.

The Petitioner further submitted that details of the above measures have been given in UPCL's business plan, which has been submitted to the Commission vide UPCL's letter dated January 31, 2013.

**(c) Realisation of Arrears**

As regards the time bound action plan for realisation of arrears, the Petitioner has submitted the following details:

- (i) As regards recovery of outstanding Revenue Arrears, field officers have been directed to take rapid action for recovery of the arrear amount. Corporate Office prepared the list of top 100 Non-KCC consumers having highest amount of arrears and list of KCC consumers having arrear more than Rs. 5,000. These lists have been provided to the distribution divisions with the direction to take the action of recovery on these lists on priority basis.
- (ii) With the approval of Commission, UPCL introduced surcharge waiver scheme for domestic and PTW category of consumers. In this regard, UPCL has targeted to collect about Rs. 150 Crore in the scheme.

**(d) Improvement in Collection System**

As regards the time bound action plan for improvement in collection system, the Petitioner has submitted the following details:

- (i) Basic facilities such as sitting arrangement, toilets, fans, water have been provided in the collection centers.
- (ii) Arrangement has been made with the Punjab National Bank for deposit of electricity bills in all their branches situated in the State of Uttarakhand.
- (iii) Revenue camps for collection of electricity bills from the consumers in cash are being organized regularly every month by the UPCL at different prominent locations at the cities, towns and rural/remote areas in all the districts of Uttarakhand. The details of camps being organized monthly are as given below:

Area	No. of Camps being organized monthly
Roorkee	60
Haridwar	40
Dehradun	34
Uttarakashi	10
Tehri	20
Kotdwar	33
Rudraprayag	22
Srinagar	12
Pauri	10
Haldwani	25
Kashipur	12
Bazpur	22
Sitarganj	10
Champawat	10
Almora	15
Bageshwar	7
Ranikhet	6
<b>Total</b>	<b>348</b>

- (iv) UPCL vide its letter No.129/UPCL/COMM/PGSP, dated January 17, 2013 issued letter of intent for appointment of Electronic Payment Aggregator for providing online electricity bills payment facility to it. The following Online Payment Gateway Services are covered in this project:

- Grocery/ Kirana, Designated shops
- Cash Collection Agencies / Retail Kiosks
- Credit Cards (Visa, Master, Amex & Diners)
- Debit Cards (Visa, Master)
- Internet Banking Accounts
- Prepaid Cash Cards/Wallets
- Mobile Based Payment
- Standing instruction (SI) based collections on Bank Accounts & Electronic Bill presentment and Payment (EBPP) services through Banks.



On implementation of the above Online Payment Gateway Services, the bill collection system of the Petitioner will be as per the specific directives issued by the Commission in the matter.

**(e) Installation of ABC Conductors in High Loss prone areas.**

As regards the time bound action plan for installation of ABC Conductors in high loss prone areas, the Petitioner has submitted the following details:

- (i) UPCL has identified the high theft areas and proposes to lay around 3000 km of LT ABC in all these areas to reduce theft.
- (ii) This is a major work that will be taken up by UPCL in the control period to reduce theft.
- (iii) The details of target and progress for laying of LT AB cable in FY 2012-13 are as follows:
  - Target under State Plan - 727 Km.
  - Target under R-APDRP - 1889Km.
  - Progress - 180 Km.

**(f) Replacement of Meters**

As regards the replacement of electro-mechanical meters , the Petitioner has submitted the following details:

- (i) The details of replacement of mechanical meters by electronic meters are as follows;

	Single Phase	Three Phase
2011-12	23882	2077
2012-13	15310	1049

- (ii) UPCL projects to replace 1,03,420 mechanical meters in the next year.

**The Commission has taken note of the steps taken by the Petitioner and further directs the Petitioner to comply with the above mentioned measures/action plan and submit status report on the development to the Commission within 15 days of close of each quarter.**

### 8.1.3 Metering

On the analysis of the billing data it was evident that the Petitioner had not taken any concrete step in identifying and writing off such “ghost” consumers from their accounts as about 40,000 consumers with fictitious meter numbers still exist in their billing database. Therefore, the Petitioner was directed to initiate the exercise for identifying such ghost consumers and writing them off from its database under a transparent policy adopted from identifying and writing off bad debts so that true and correct position of losses can emerge.

Further the Petitioner was directed to submit to the Commission, quarterly status/progress report of each of the electricity distribution division in respect of this compliance.

The Petitioner was also directed to achieve 100% metering by June 30, 2012 and submit the report to the Commission.

#### Petitioner’s Submissions

As regards information on ghost/fictitious consumers, the Petitioner submitted that there is no separate category of ghost/fictitious consumers and these consumers are included in Stop Billed (SB), Not Billed (NB) and connections lying disconnected. Field officers have been directed to finalize SB, NB and disconnected connections on top priority, write off of fictitious arrears and recover the amount of final bill. For the period from April 1, 2012 to January 31, 2013, 7098 cases have been finalized by writing off the fictitious arrears of Rs. 18.97 Crore.

Further, the Petitioner submitted that the field units have been asked to submit the details of PD cases finalized. In this regard, information received from some of the field units is as follows:

Period	PD cases finalized			
	NB	SB	Other	Total
2010-11	572	89	819	1,480
2011-12	753	787	1,718	3,258
April, 2012	154	3	29	186
May, 2012	131	18	53	202
June, 2012	323	15	50	388
July, 2012	240	16	182	438
August, 2012	277	1	805	1,083
September, 2012	72	31	28	131
October, 2012	102	10	57	169
November, 2012	97	16	32	145
December, 2012	84	8	39	131
January, 2013	67	5	21	93

With regard to the 100% metering, the Petitioner submitted that UPCL has taken steps to meter the un-metered connections but could not complete such metering due to operational constraints and stiff resistance of the consumers. UPCL has now planned to meter such un-metered connections by June 30, 2013.

**The Commission has taken note of the steps taken by the Petitioner. The Commission hereby directs the Petitioner to submit the above information in the prescribed Format of Commercial Performance Monitoring Reports as provided alongwith Commission's letter no. UERC/7/CL/152/2008-09/284 dated May 17, 2012 and as discussed in para 8.2.1 below on regular basis for each month by 15<sup>th</sup> day of following month.**

#### **8.1.4 Billing**

The Commission had observed that UPCL was lagging far behind its own targets in respect of reduction of IDF/ADF/RDF cases. The Commission, therefore, directed UPCL to prepare a division-wise time bound action plan for FY 2012-13 and also a division-wise time bound programme for liquidating and finalization of SB/NB cases on priority. The Petitioner was further directed to submit quarterly report on division-wise status of NA/NR/ADF /IDF/RDF cases of meter readings.

The Commission further directed the Petitioner to recover outstanding arrears not less than 25% of current outstanding arrears within 6 months from the date of issuance of the Tariff Order for FY 2012-13.

The Commission examined the database of KCC consumers (260 Nos.) having load above 1000 kVA for December 2011, and compared the same with (243 Nos.) consumers for December 2010 of the same category. It was observed that about 8% consumers are having load factor less than 15% in both these years. In this regard, the Petitioner was directed to examine these consumers and submit a report of these consumers to the Commission latest by June 30, 2012. The Petitioner was also directed to examine the cases of consumer having load factor less than 10% and submit a report of these consumers to Commission latest by June 30, 2012.

Further, the Petitioner was directed to immediately take initiatives to realise the arrears against KCC consumers submit a report on the action taken, arrears realised, arrears remaining outstanding and reasons for the same within three months of the issuance of the Tariff Order for FY

2012-13. Further, the Petitioner was directed to take active steps to disconnect the KCC consumers with outstanding and undisputed arrears and submit report on the same within four months of this issuance of the Tariff Order for FY 2012-13.

#### **Petitioner's Submissions**

The Petitioner submitted that the targets for NA / NR, ADF, IDF and RDF have been kept as follows to be maintained at the end of FY 2012-13 in respect of each division:

NA / NR	-	1%
IDF	-	3%
ADF	-	0.25%
RDF	-	Nil

Further, the action plan for replacement of IDF meters is as follows:

- (i) 96,069 defective meters have been replaced in FY 2012-13.
- (ii) Presently, UPCL has 2,05,521 defective meters. The plan for replacement of such meters is given herein below:

<b>Month</b>	<b>No.</b>
March, 2013	25000
April, 2013	25000
May, 2013	25000
June, 2013	25000
July, 2013	25000
August, 2013	25000
September, 2013	25000
October, 2013	25000

The Petitioner further submitted that month-wise status of NA / NR / IDF/ ADF / RDF status has been submitted to the Commission vide UPCL's letter No.-503/UPCL /RM/J-10, dated 20-02-2013.

With regard to the arrears against KCC consumers, the Petitioner submitted that billing and collection of KCC consumers is being monitored at Corporate Office and recovery in respect of such billing is more or less equivalent to the billing. The Petitioner is facing difficulty for realization of arrears in respect of the consumers, which have raised any dispute. Month-wise details of arrears outstanding against KCC consumers are being submitted regularly to the Commission in the

commercial performance monitoring report. Further, supply of electricity is being disconnected to the KCC consumers having undisputed arrear of electricity.

As regards recovery of outstanding Revenue Arrears, the Petitioner submitted that field officers have been directed to take rapid action for recovery of the arrear amount. Corporate Office itself prepared the list of top 100 Non-KCC consumers having highest amount of arrears and list of KCC consumers having arrear more than Rs. 5,000. These lists have been provided to the distribution divisions with the direction to take the action of recovery on these lists on priority basis.

Further, with the approval of Commission the Petitioner has introduced surcharge waiver scheme for domestic and PTW category of consumers. In this regard, it is targeted to collect about Rs. 150 Crore in the scheme.

**The Commission has taken note of the steps taken by the Petitioner. The Commission hereby directs the Petitioner to submit the above information in the prescribed Format of Commercial Performance Monitoring Reports as provided alongwith Commission's letter no. UERC/7/CL/152/2008-09/284 dated May 17, 2012 and as discussed in para 8.2.1 below on regular basis for each month by 15<sup>th</sup> day of following month..**

#### **8.1.5 AT&C Losses / Energy Audit**

The Petitioner was directed to submit quarterly report on actions taken by the Petitioner along with division-wise improvements made in respect of replacement of mechanical meters, energy audit and reduction of AT&C Losses.

The Petitioner was directed to chalk out a concrete plan to replace all the mechanical as well as electro-mechanical meters in the State on top priority by December 31, 2012 including areas which are not covered under funding from R-APDRP. The Petitioner was also directed to take effective steps to reduce the percentage of defective meters, i.e. IDF/RDF/ADF below 3% as is the requirement of Commission's Regulations within a time bound programme.

The Petitioner was also directed to provide DT meters at all the distribution transformers, within three months from the date of issuance of the Tariff Order for FY 2012-13 and, thereafter, carry out complete energy audit upto 11 kV level for the entire system and upto LT level on at least

one 11 kV feeder in each Circle and submit a comprehensive report of the results by September 30, 2012.

### **Petitioner's Submissions**

The Petitioner submitted that work of energy audit in its operational area has been awarded vide UPCL's letter No.-711/UPCL/Comm/SE, dated August 27, 2012 as per details given below:

#### **Scope of Work:**

- Module-1: Analysis of energy injected in the state of Uttarakhand and energy sent out by STU to UPCL.
- Module-2: Energy audit of independent feeders (at least 30% of total 115 feeders), industrial feeders and feeders supplying to industrial estates.
- Module-3: Analysis of energy accounts of 66 and 33 kV substation of UPCL (at least 10% of total 274 sub-stations) and physical verification of energy received and energy sent out data.
- Module-4: Energy audit, voltage profile, feeder survey, feeder profile analysis, DT profile analysis of 11 KV feeders of UPCL and physical verification of energy received and energy sent out data.

#### **Duration:**

The duration for completion of the assignment is one year.

#### **Progress of Work:**

- Module-1: (Progress-20%) Collected PTCUL Energy accounting data. Shortlisted sample Power plants, PTCUL Substations, UPCL Substations for physical survey.
- Module-2: (Progress-20%) Collected Energy Accounting data of Independent feeders, Industries Billing Information. Shortlisted Independent feeders for physical survey.
- Module-3: (Progress-40%) Collected Energy Accounting data of UPCL Substations. Shortlisted UPCL substations for physical survey.

Module-4: (Progress-60%) Completed Footsurvey of Bhagawanpur, Bahadrabad & Ramanagar feeder. Jaspur feeder under progress. Shortlisted consumers of 1 kW, 2 kW and 5 kW for sample survey in 9 centres.

The Commission has taken note of the steps taken by the Petitioner. However, for monitoring the commercial performance of the Petitioner and with a view to have a regular report on the progress made by the Petitioner, the Commission vide letter no. UERC/7/CL/152/2008-09/284 dated May 17, 2012 has directed the Petitioner to submit monthly progress report in the format prescribed under Annexure 9 of the said letter of the Commission and as discussed in para 8.2.1 below. It is further clarified that for computation of (AT&C) losses, data required with respect to total energy sold, billing and collection efficiency, and energy input for the month, factoring in the billing/ collection cycle of the Licensee, should be submitted to the Commission, with a maximum lapse of 2 months, for example, data for January 2013 should be submitted in the prescribed format in the report of March 2013. For the purpose of comparison, the Petitioner should incorporate monthly target level alongside actual level of AT&C losses as directed by the Commission vide its Order dated 04.03.2013.

#### **8.1.6 Distribution Loss**

The Petitioner was directed to conduct complete energy audit upto 11 kV level for the entire system and upto LT level on at least one 11 kV feeder in each Circle and submit a report thereon within 6 months of the issuance of the Tariff Order for FY 2012-13.

The Petitioner was also directed to submit monthly report on the status of the energy audit programme undertaken by the Petitioner. The Petitioner was also directed to submit the confirmation of appointment of energy auditors within 30 days of the issuance of the Tariff Order for FY 2012-13.

#### **Petitioner's Submissions**

The Petitioner submitted that work of energy audit in its operational area has been awarded vide UPCL's letter No.-711/UPCL/Comm/SE, dated August 27, 2012 as per details submitted in the above clause-AT&C Losses / Energy Audit.

The Commission has taken note of the steps taken by the Petitioner. However, for monitoring the commercial performance of the Petitioner and with a view to have a regular

report on the progress made by the Petitioner, the Commission vide letter no. UERC/7/CL/152/2008-09/284 dated May 17, 2012 has directed the Petitioner to submit monthly progress report in the format prescribed under Annexure 9 of the said letter of the Commission and as discussed in para 8.2.1 below. For the purpose of comparison, the Petitioner should incorporate monthly target level alongside actual level of Distribution losses as directed by the Commission vide its Order dated 04.03.2013.

#### ***8.1.7 Power Purchase through UI***

The Petitioner was directed to prepare and submit to the Commission its long term as well as short term power procurement plan for next 5 financial years within 3 months of the issue of the Tariff Order for FY 2011-12. However, the Petitioner failed to comply with the specified timeline. Therefore, the Petitioner was directed to ensure the submission of a detailed long term as well as short term power procurement plan in its Business Plan as per the timelines specified in the UERC Tariff Regulations, 2011.

#### **Petitioner's Submissions**

In this regard, the Petitioner submitted that detailed power purchase plan has been included in our business plan which has been submitted to the Commission vide UPCL's letter dated 31-01-2013.

The Commission in the data gaps/deficiencies asked the petitioner to submit details of energy overdrawn and UI charges imposed on UPCL at system frequency below 49.2 Hz and 49.7 Hz for FY 2010-11 and FY 2011-12, as per the Commission's directive in the previous Order, till April 8, 2013. The Petitioner has not submitted the desired information to the Commission. The Commission in the absence of such data has not considered the impact of the same, however, the Commission hereby directs the Petitioner to submit the desired data within two month from the date of issue of this Tariff Order.

#### ***8.1.8 Bad and Doubtful debts***

The Petitioner was directed to carry out an independent audit of its receivables, by appointing a Chartered Accountant firm through a fair and a transparent process of bidding after getting the scope of work approved by the Commission, and also identify and classify the same and



submit the compliance report to the Commission within 6 months of the issuance of the Tariff Order for FY 2012-13.

Further, the Petitioner was directed to approach the Government with a proper plan to recover the arrears against various Government connections and report compliance to the Commission within three months of the date of the Tariff Order for FY 2012-13.

### **Petitioner's Submissions**

The Petitioner submitted that UERC vide its letter No.-UERC/6/TF/148/2012-13/452, dated 07-06-2012 approved the scope of work proposed by UPCL vide letter dated 22-05-2012 for the audit of receivables. Further, the work of audit of receivables outstanding as on March 31, 2012 has been awarded to three firms of Chartered Accountants in the month of January 2013, covering the following scope of work:

- a) Identification of division-wise, category-wise & consumer-wise arrears as per ledgers as on 31-03-2012 showing principle amount & surcharge amount with age.
- b) Identification and verification of division-wise, category-wise & consumer-wise fictitious arrears & irrecoverable arrears.
- c) Identification of division-wise, category-wise, consumer-wise & department-wise list of Government Consumers (Departments) having arrears showing principal & surcharge amount.
- d) Identification of division-wise, category-wise, consumer-wise cases in litigation showing the break-up of cases in different courts.
- e) Category-wise reconciliation of arrears as per commercial statements (CS)-4) with annual accounts.
- f) Identification of actual government (public lamps, water works and irrigation) arrears showing principal & surcharge as on 09-11-2000 & as on 31-03-2012. Consumer-wise & month-wise billing details (such as consumption, assessment and payment etc.) for the period from 09-11-2000 to 31-03-2012 shall be given.

- g) Verification of division-wise, category-wise & consumer-wise position of notices issued under section-5 of the U.P. Government electrical undertakings (Dues Recovery) Act, 1958, which are pending with District Magistrate.

The Petitioner further submitted that the above work has been targeted to be completed within five months from the date of award.

Further, the Petitioner has made a request to Govt. of Uttarakhand (GoU) for payment of electricity arrears outstanding as on March 31, 2012 and monthly regular payment from April 2012 with regard to Government connections. GoU vide its Order dated August 23, 2012 and October 11, 2012 made the payment of Rs. 25.00 Crore and Rs. 30.00 Crore respectively towards electricity arrears outstanding against Jal Sansthan. This payment has been made through book adjustment of payment of royalty. Further, GoU vide its Order dated November 09, 2012 made the payment of Rs. 45.00 Crore towards electricity arrears outstanding against street lights. Payment of Rs. 22.50 Crore has been made in cash and payment of Rs. 22.50 Crore has been made through book adjustment of payment of free power.

#### **8.1.9 Re-Determination of Tariff for FY 2009-10**

The Petitioner was directed to maintain separate records of category-wise revenue billed towards additional surcharge during FY 2012-13 and also submit the actual figures for the entire FY 2011-12 and first half of FY 2012-13 along with the MYT Petition for the First Control Period, which would be used by the Commission to adjust any excess/shortfall in recovery from these categories along with the carrying cost of deferred recovery.

#### **Petitioner's Submissions**

The Petitioner submitted that the said information shall be provided to the Commission by February 28, 2013.

**However, the Petitioner has not submitted the information. The Commission hereby further directs the Petitioner to maintain separate records of category-wise revenue billed towards additional surcharge during FY 2013-14 and also submit the actual figures for the entire FY 2012-13 and first half of FY 2013-14 alongwith the APR Petition for FY 2013-14.**

### **8.1.10 Tariff for Un-metered Consumers**

The Petitioner was directed that no new connection would be released without installation of proper meters failing which action would be taken against the person responsible.

The Petitioner was also directed to submit a division-wise quarterly report to the Commission regarding the number of new connections (metered & un-metered) released in each division in domestic, non-domestic and PTW category.

Further, the Petitioner was directed to apply this mechanism as an exception and not use this mechanism as a normal practice. Further, the Petitioner should come up with a concrete action plan to achieve demonstrable improvement in meter reading and bill distribution system within three months of the Tariff Order for FY 2012-13.

### **Petitioner's Submissions**

The Petitioner submitted that all the field officers have been directed not to release any new connection without installation of proper meter.

As regards division-wise report regarding number of new connections released, the Petitioner submitted that the said information is mentioned in its commercial statements which have been provided to the Commission.

Further, with a view to improvement in meter reading UPCL has planned to read the meters through hand held meter reading devices as mandated under R-APDRP.

**The Commission has taken note of the submission made by the Petitioner. The Commission hereby directs the Petitioner that no new connection should be released without installation of proper meters. Further, the Petitioner is directed to submit the detailed Action Plan giving timeframe in which it intends to meter the remaining unmetered consumers within 2 months of the date of the Order.**

### **8.1.11 Fixed Assets Register**

The Petitioner was directed to finalize the updated Fixed Assets Register and submit the timelines within one month of the issuance of the Tariff Order for FY 2012-13.

### **Petitioner's Submissions**

The Petitioner submitted that Fixed Assets Register for the period upto March 31, 2006 were prepared by the consultant and the work of preparation of the said registers for the period from April 2006 to March 2010 has been awarded in the month of December 2011. This work has been targeted to be completed by March 31, 2013.

**The Commission hereby directs the Petitioner to expedite the process and submit the updated Fixed Assets Register within 3 months of the date of the Order.**

#### ***8.1.12 Computerisation of Records***

The Petitioner was directed to computerize all its registers including the following and submit the action plan along with the timelines within one month of the issuance of the Tariff Order for FY 2012-13:

- (i) Release of new connections
- (ii) Billing ledgers
- (iii) Commercial ledgers
- (iv) Fixed Asset Registers

### **Petitioner's Submissions**

The Petitioner submitted that UPCL has taken steps to computerize its record maintained at Corporate Office as well as at field offices and presently most of the record is available in hard form as well as in soft form. Further, UPCL is in process to computerize all its record so that the same may be available in both the forms i.e. soft as well as in hard copies.

**The Commission has taken note of the compliance made by the Petitioner. The Commission once again directs the Petitioner to submit the action plan along with the timelines by which the Petitioner will be completing the computerization of all the records, within one month of issue of this Order.**

#### ***8.1.13 Demand Side Management Measures***

The Petitioner was directed to comply with the following directions and submit the action plan along with timelines within one month from the date of Tariff Order for FY 2012-13:

- (i) Format of DSM cells.
- (ii) Preparation of DSM plans as directed by the Commission.
- (iii) Provide Schedule for segregation of feeders having agriculture pump load and domestic/other load.
- (iv) Formulate a project/scheme for implementing DSM measures as suggested by the Commission.

### **Petitioner's Submissions**

The Petitioner submitted that UPCL has planned to initiate pilot project for segregation of agriculture feeders in EDD (R), Hardwar & EDD(R), Roorkee. The DPR of this project is under preparation. Further, UPCL under the initiatives for energy efficiency and DSM, is going to implement Bachat Lamp Yojana. The details of the scheme are as follows:

- a) The scheme shall be implemented in Haridwar, Roorkee, Rudrapur, Dehradun (U), Dehradun (R), Kashipur and Haldwani electricity distribution circles of UPCL.
- b) All the consumers of domestic category in the identified seven circles shall be given 4 nos. of 15 Watt CFL free of cost to replace the existing 60 watt lamps in their premises.
- c) The DPR of the above scheme is being prepared and shall be submitted to the Commission by June, 2013 for approval.

**The Commission directs the Petitioner to submit the complete details of Bachat Lamp Yojana Scheme alongwith DPR for the Commission's approval by June 2013. The Petitioner should submit initiatives planned for energy efficiency and demand side management measures for the Control Period along with the APR Petition in terms of approved cost of the schemes and savings expected on implementation of the above schemes in MU should be adjusted in the power purchase requirement.**

#### **8.1.14 Contribution towards Pension and Gratuity**

The Petitioner was directed to finalise the appointment of certified actuary and ensure submission of updated actuarial valuation report to the Commission along with the submission of MYT Petition.

The Petitioner has not submitted any compliance to the above direction. Therefore, the Commission hereby once again directs the Petitioner to finalise the appointment of certified actuary and ensure submission of updated actuarial valuation report to the Commission along with the submission of APR Petition for FY 2013-14.

#### **8.1.15 Non-Tariff Income**

The Petitioner was directed to instruct its field units to correctly record all the expenses and income in their accounts and also to submit the reconciliation statement on this account.

#### **Petitioner's Submissions**

In this regard, the Petitioner submitted that directions have been issued to the field officers.

It is observed that inspite of the directions issued by the Petitioner, the statement of Accounts in the Petitioner Company where in some years the revenues are adjusted for the rebates and other recoveries and in some other years the same are shown as expense item or other revenues having disproportionate trends. It seems that there is no uniform policy in UPCL and the field offices are booking income and expenses as deemed fit by them. **The Commission directs the Petitioner to prepare a policy regarding capturing of expenses and revenues in its accounts and circulate the same in its field offices within 3 months of the date of the Order and also submit the copy of the same to the Commission.**

#### **8.1.16 Unschedule Interchange (UI)**

The Petitioner was directed to restrict the net drawal from the grid within its drawal schedules whenever the system frequency is below 49.80 Hz.

#### **Petitioner's Submissions**

The Petitioner submitted that SLDC of the State has been requested to ensure the drawal of power from the Grid within the drawal schedules of UPCL whenever the system frequency is below 49.80 Hz.

**The Commission in the data gaps/deficiencies asked the Petitioner to submit details of energy overdrawn and UI charges imposed on UPCL at system frequency below 49.2 Hz and 49.7 Hz for FY 2010-11 and FY 2011-12, as per the Commission's directive in the previous Order till April 8, 2013. The Petitioner has not submitted the desired information to the Commission. The Commission in absence of such data has not considered the impact of the same, however, the**

**Commission hereby directs the Petitioner to submit the desired data within two month from the issue of this Tariff Order.**

#### ***8.1.17 Power Purchase Cost***

The Petitioner was directed to seek prior approval of the Commission, in case the variation in power purchase quantum or total power purchase cost in any quarter is estimated to be more than the approved power purchase quantum and cost for the respective quarter worked out on pro-rata basis from the total approved quantity and cost for FY 2012-13, failing which, the Commission may disallow power purchases so made while truing up the ARR for the FY 2012-13.

#### **Petitioner's Submissions**

The Petitioner submitted that UPCL vide its letter dated August 08, 2012 has requested UERC to approve the power purchases made during the first quarter of FY 2012-13. Further, UPCL vide its letter dated September 20, 2012 has requested UERC to approve the power purchases made during the second quarter of FY 2012-13. Thereafter, UPCL vide its letter dated January 10, 2013 has requested UERC to approve the power purchases made during the third quarter of FY 2012-13.

#### ***8.1.18 Capitalisation of Assets***

The Petitioner was directed to capitalise the HT/EHT works only after obtaining clearance by the Electrical Inspector. Further, the Petitioner was cautioned to take note of the same, as the Commission from April 01, 2012 would be recognising the capitalisation of any asset from the date of clearances obtained from the Electrical Inspector.

The Petitioner was directed to submit the rationale of allocation of expenses which should be based on a study, rather than on some hypothetical number, alongwith the scheme-wise (project-wise) detail of assets capitalised and the means of finance for these schemes alongwith the next Tariff Petition.

The Petitioner was directed to get the audit of the assets capitalised and submit the complete Audit Report to the Commission within 6 months of the issuance of the Tariff Order for FY 2012-13. Further, the Petitioner was directed to harmonise its Accounting codes with the Projects / Schemes / Capital Works, so that expenses against each of the Scheme can be identified clearly.

### **Petitioner's Submissions**

The Petitioner submitted that it approached Govt. of Uttarakhand (GoU) in the matter of Capitalisation of HT/EHT works. Further, Secretary (Energy), GoU directed the Electricity Inspector to inspect all the HT/EHT works of UPCL. Electrical Inspector has issued clearance certificate in respect of various assets and these certificates have been submitted to the Commission vide UPCL's letter No.-342/UPCL/RM/B-13, dated February 13, 2013.

With regard to the submission of the rationale of allocation of LT/HT works, the Petitioner submitted that in accordance with the UERC's direction, LT & HT works were segregated in value terms during tariff fixation exercise for FY 2012-13. This segregation was estimated/tentative and was not based on any study. Now, accounting costs have been harmonized in accordance with projects/schemes/capital works so as to identify such works separately.

**The Petitioner has submitted Electrical Inspector Certificate for Capitalization of Rs. 142.13 Crore from FY 2007-08 onwards. However, the capitalization of assets from FY 2007-08 to FY 2011-12 as per accounts is Rs. 1825.68 Crore. The Commission at this stage has allowed capitalization of assets for which Electrical Inspector Certificate has been submitted from FY 2007-08 to FY 2011-12 and has accordingly updated the value of Opening GFA for FY 2010-11. The Commission directs the Petitioner to submit the Electrical Inspector Certificate for the balance assets along with reconciliation of capitalization amount as per accounts.**

#### **8.1.19 Government of Uttar Pradesh (UP) Loan**

The Petitioner was directed to approach the State Government for early finalisation of the transfer scheme with all the necessary details/assistance in this regard. The Petitioner was also directed to submit an updated report on steps taken by it and the status of transfer scheme to the Commission within 6 months of issuance of the Tariff Order for FY 2012-13.

### **Petitioner's Submissions**

The Petitioner has not replied to the directive in the status report.

**The Commission directs the Petitioner to expedite its efforts for getting the Transfer Scheme finalised within six months from the date of this Order. (Refer Para 4.4.4)**



### **8.1.20 Employee Expenses**

The Petitioner was directed to submit the details of impact of new recruitment in reduction of expenses on remuneration to be paid to the employees of Purva Sainik Kalyan Nigam Ltd. expenditure separately.

Further, the Petitioner was directed to expedite its recruitment plan as the Commission understands that it is facing shortage of manpower because of which it has to place reliance on the contractual personnels who have no accountability to the Petitioner Company and as a result metering and billing of the Petitioner is being impacted.

#### **Petitioner's Submissions**

The Petitioner submitted that manpower plan and financial impact thereof has been included in its business plan and MYT Petition submitted to the Commission vide UPCL's letter dated January 31, 2013. Further, action is being taken for recruitment of man power as per plan submitted to the Commission.

**The Commission once again directs the Petitioner to expedite its recruitment plan submit the report on status of recruitment to the Commission regularly on quarterly basis.**

### **8.1.21 Fixed Charges, Minimum charges and Minimum Consumption Guarantee**

The Petitioner was directed to check the reasons for extremely low load factors, including testing of meters of high value consumers in these categories and submit a report to the Commission within six months from the date of Tariff Order for FY 2012-13.

#### **Petitioner's Submissions**

The Petitioner submitted that checking of consumers having load factor below 10% is being done regularly at Corporate Office. During FY 2012-13 anomalies in 926 cases have been found, out of which action against 427 such cases have been taken. Further, the MRI report and billing of the HT consumers are being checked at Corporate Office on regular basis. During FY 2012-13 anomalies in 188 cases have been found, out of which action against 122 such cases have been taken.

**The Commission has taken note of the compliance made by the Petitioner and directs the Petitioner to carry out this exercise regularly and submit report to the Commission on quarterly basis.**

## 8.2 Fresh Directives

### 8.2.1 Performance Report

In order to analyze the performance of the Petitioner with respect to metering, billing and collection activities and other factors affecting the financial position of the Petitioner, the Commission from its very first Tariff Order had been giving targets for reducing Distribution losses and improving collection efficiency. Various Orders have also been issued by the Commission in the matter from time to time. However, such directions and Orders of the Commission are not being complied fully by the Petitioner as some of the issues are not being either reported by the Petitioner. Comparative analysis of the information/figures submitted by the Petitioner becomes difficult, due to gaps in information provided by the Petitioner, as the previous data/information are generally not reported in the same formats.

The Commission has, therefore, decided to monitor the commercial performance of the Petitioner on monthly basis and accordingly formats were prescribed and issued to the Petitioner vide Commission's letter UERC/7/CL/152/2008-09/284 dated 17.05.2012. Details of the formats are as follows:

Particulars	Information required on	Format
Metering	a) Status of NA/NR/IDF/ADF/ RDF	Annexure 1
	b) Circle-wise Status report of Defective meters Replacement	Annexure 1(A)
	c) Ghost/Fictitious Consumers	Annexure 2
	d) Replacement of Mechanical meters	Annexure 5
	e) Un-metered Connections	Annexure 6
Billing	a) NB cases	Annexure 3(2)
	b) SB cases	Annexure 3
	c) Outstanding Arrears	Annexure 4
	d) Load Factor of KCC Consumers	Annexure 7
	e) Rate of Energy Input	Annexure 8
AT&C Losses of UPCL	AT& C losses	Annexure 9
Audit Report of 11 KV Feeders	Audit Report of 11 KV Feeders	Annexure 10

The Petitioner is directed to submit the above information in the prescribed Formats regularly on monthly basis by 15<sup>th</sup> day of the following month.

### 8.2.2 Electrical Accidents

Under Overall Standards of Performance, the Commission in its Regulation 8(10) of UERC (Standards of Performance) Regulations, 2007 stipulates as follows:

*“Minimise Electrical Accidents: Increase or decrease in no. of electrical accidents compared over a period of time will also be an indicator of the Licensee's performance.”*

#### Petitioner's Submissions

The Petitioner's has submitted a statement in format F-18.2 of Electrical Accidents occurred during FY 2011-12 and upto August, 2012 for FY 2012-13. As per instructions given in the form, the Petitioner's was required to provide a detailed note to outline the reasons thereof and measures taken/planned for improvement. However the Petitioner has not submitted the same along with the statement.

The Commission observed that during the six months period of FY 2012-13 there were significant increase in number of fatal accidents as compared to the 12 months of FY 2011-12. The Commission directs the Petitioner to submit the reasons for increase in fatal accidents and also indicate measures taken or planned to reduce the occurrence of such accidents within 3 months of the date of issue of the Order.

### 8.2.3 Reliability Indices

The Commission in its Regulation 8(5) & 8(6) of UERC (Standards of Performance) Regulations, 2007 stipulated that the Licensee shall compute the value of Reliability Indices namely SAIFI (System Average Interruption Frequency Index), SAIDI (System Average Interruption Duration Index) and MAIFI (Momentary Average Interruption Frequency Index) as per formula and methodology specified in the Regulations and report to the Commission for each month. The above Regulations are reproduced as below:

- (1) **Reliability Indices:** *The following reliability/outage indices are prescribed by the Institute of Electrical and Electronics Engineers (IEEE) Standard 1366 of 1998. The Licensee shall compute and report the value of these indices to the Commission from 2005-06 onwards:*

*a) System Average Interruption Frequency Index (SAIFI): The Licensee shall calculate the value as per the formula and methodology specified below.*

**b) System Average Interruption Duration Index (SAIDI):** The Licensee shall calculate the value as per the formula and methodology specified below.

**c) Momentary Average Interruption Frequency Index (MAIFI):** The Licensee shall calculate the value as per the formula and methodology specified below.

(2) **Method to compute Distribution System Reliability Indices:** The Indices shall be computed for the Discom as a whole by stacking, for each month all the 11KV/33KV feeders in the supply area, excluding those serving predominantly agricultural loads, and then aggregating the number and duration of all interruptions in that month for each feeder. The Indices would then be computed using the following formulae:

$$1. SAIFI = \frac{\sum_{i=1}^n (A_i * N_i)}{N_t} \quad \text{Where,}$$

$A_i$  = Total number of sustained interruptions (each longer than 5 minutes) on  $i$ th feeder for the month

$N_i$  = Connected load of  $i$ th feeder affected due to each interruption

$N_t$  = Total connected load at 11KV in the Distribution Licensee's supply area

$n$  = number of 11KV feeders in the licensed area of supply (excluding those serving predominantly agricultural loads)

$$2. SAIDI = \frac{\sum_{i=1}^n (B_i * N_i)}{N_t} \quad \text{Where,}$$

$B_i$  = Total duration of all sustained interruptions on  $i$ th feeder for the month.

$N_i$  = Connected load of  $i$ th feeder affected due to each interruption

$N_t$  = Total connected load at 11KV in the Distribution Licensee's supply area

$n$  = number of 11KV feeders in the licensed area of supply (excluding those serving predominantly agricultural loads)

$$3. MAIFI = \frac{\sum_{i=1}^n (C_i * N_i)}{N_t} \quad \text{Where,}$$

$C_i$  = Total number of momentary interruptions (each less than or equal to 5 minutes) on  $i$ th feeder for the month

$N_i$  = Connected load of  $i$ th feeder affected due to each interruption

$N_t$  = Total connected load at 11KV in the Distribution Licensee's supply area

$n$  = number of 11KV feeders in the licensed area of supply (excluding those serving predominantly agricultural loads)

Note: The feeders must be segregated into rural and urban and the value of the indices must be reported separately for each month.

**4. The Licensee shall propose the target level of these indices annually while submitting ARR. The Commission would accordingly notify these indices.**

### Petitioner's Submissions

The Petitioner in its Petition has submitted division-wise and month-wise Reliability Indices for FY 2011-12 and has not proposed the target levels for the control period of these indices with the Petition. In absence of this the Commission cannot fix/notify any target level.

**The Commission directs the Petitioner to comply with the above provision of the Regulations and submit the target indices along with the APR Petition for FY 2013-14.** Besides this, the Petitioner is also not submitting report on the above indices as required under the above provisions of SoP Regulations, **the Commission therefore directs the Petitioner to submit monthly report on Reliability Indices in the format prescribed by the Commission vide letter no. 1200/UERC/Tech/9/2010 dated 28.09.2010.** These reports should also be submitted in MS-Excel soft form.

### 8.2.4 Filing of APR and Truing up Petitions

**The Commission would like to caution the Petitioner that such delays in future filing of APR and truing up Petition during this control period would be dealt with as per Hon'ble APTEL's directions. Furthermore, this would be treated as non-compliance of relevant provisions**

**of various regulations and may entail appropriate punitive action against the Petitioner.(Refer Chapter 1)**

#### **8.2.5 Load Shedding**

With regards to unscheduled/emergency outages, the Commission would like to clarify that any such outage continuously been affected by the Petitioner for certain number of hours in a day for 15 or more days shall not be considered as unscheduled/emergency outage. **The Commission directs the Petitioner to obtain the prior approval for load shedding to be carried out continuously for certain number of hours in a day for 15 or more days. (Refer Para 3.23.2)**

#### **8.2.6 Issues raised by the Petitioner again despite Commission's ruling in previous Tariff Orders (Refer Para 3.23.18)**

**The Commission directs the Petitioner to not raise such issues again in the subsequent ARR and Tariff Petitions on which the Commission have already taken the decision and given in its ruling in the previous Tariff Orders, failing which, the Commission may reject the Petition upfront.**

#### **8.2.7 Capitalisation of Assets added till FY 2011-12**

Even after 12 years of its incorporation, UPCL does not have any system of identifying and segregating the works into EHT/HT or LT schemes. This is more so, considering the fact that it is being denied capitalization of even LT works, in the absence of any details. Recognising the fact that, this issue has been in abeyance since FY 2007-08, if allowed, may have considerable impact on consumer tariffs, **the Commission directs UPCL to submit the details of its LT/HT works capitalised since 2007-08 within 6 months of the date of the Order, so that they may be considered during the APR, failing which the Commission would be forced to consider the issued closed once for all. (Refer Para 4.4.5)**

#### **8.2.8 Bad and Doubtful Debts**

In the absence of the Audit Report the Commission has not allowed bad debts as per previous Orders and **directs the Petitioner to submit the Audit Report alongwith Action Plan within three months from the issue of this Order. (Refer Para 4.5.6)**

### ***8.2.9 Voltage wise Cost of Supply***

To facilitate the study on Voltage wise cost of supply, **the Commission directs the Petitioner to segregate the Assets at different voltage levels and provide the value of Gross Fixed Assets at each voltage level within 3 months from the date of this Order. Further, the Commission directs the Petitioner to submit the status of metering at various voltage levels, Distribution Transformers and at consumer level within one month from the date of this Order. Further, the Petitioner is also required to submit the action plan for completion of the metering at various points necessary for assessment of voltage wise losses.**

As regards the segregation of voltage wise losses, the Petitioner has submitted that work of energy audit in its operational area has been awarded vide UPCL's letter No.-711/UPCL/Comm/SE, dated August 27, 2012. **The Petitioner is directed to submit the detailed progress report indicating the status of the work of energy audit and key findings till date within one month from the date of this Order.** The Commission based on the review of detailed scope of work and progress made till date may suggest the modifications, if required in the scope of work of Energy Audit to assess the voltage wise losses. **(Refer Para 4.7)**

### ***8.2.10 Power Procurement Plan for the Control Period***

**The Commission directs the Petitioner to obtain the prior approval of the Commission for power procurement of deficit power at the rate beyond Rs 4.07/kWh. (Refer Para 5.3.6)**

### ***8.2.11 Capital Expenditure Plan***

The Petitioner requested the Commission to provide time till June 2013 for submission of the schemes for approval of the Commission. **The Commission directs the Petitioner to submit the Detailed Project Reports (DPRs) for the Capital Expenditure Schemes proposed during the Control Period by June 30, 2013. (Refer Para 5.4)**

**The Commission directs the Petitioner to maintain the separate details of LT works and HT/EHT works capitalised and submit the same to the Commission while claiming the truing up for the respective year. (Para 5.4)**

**Further, for the MYT Control Period, the Petitioner is directed to energise/capitalise the HT works only after obtaining clearance by the Electrical Inspector. (Refer Para 5.4)**

### **8.2.12 Past Adjustments**

The Petitioner is also directed to submit its response on the observations made by the Commission not only in this Tariff Order but also in its previous Tariff Orders with regard to the Transfer Scheme. The Commission is of the view that this inordinate delay towards finalization of the Transfer Scheme despite repeated directives is not acceptable in the best interest of the consumers of the State.

The Commission, if justified that there is lack of sincere effort on part of the Petitioner to get the Transfer Scheme finalised within a reasonable time limit might not consider any further revision in capital cost of transferred asset in the interest of the Consumers of the State. **Hence, the Commission directs the Petitioner to expedite its efforts for getting the Transfer Scheme finalised within six months from the date of this Order. (Refer Para 4.4.4 and Para 6.2.1)**

### **8.2.13 Electrical Inspector Certificate**

**The Commission directs the Petitioner to submit the Electrical Inspector Certificate for the balance assets along with reconciliation of capitalization amount as per accounts. (Refer Para 6.2.5.1).**

### **8.2.14 Power Purchase Expenses**

The Commission in the data gaps/deficiencies asked the Petitioner to submit details of energy overdrawn and UI charges imposed on UPCL at system frequency below 49.2 Hz and 49.7 Hz for FY 2010-11 and FY 2011-12, as per the Commission's directive in the previous Order till April 8, 2013. The Petitioner has not submitted the desired information to the Commission. The Commission in absence of such data has not considered the impact of the same, however, **the Commission hereby directs the Petitioner to submit the desired data within two month from the issue of this Tariff Order. (Refer Para 6.2.3)**

### **8.2.15 Cost of Assets and Financing**

The Petitioner now has submitted Electrical Inspector Certificate for Capitalization of Rs. 142.13 Crore from FY 2007-08 onwards. However, the capitalization of assets from FY 2007-08 to FY 2011-12 as per accounts is Rs. 1825.68 Crore. The Commission at this stage has allowed capitalization of assets for which Electrical Inspector Certificate has been submitted from FY 2007-08 to FY 2011-12 and has accordingly updated the value of Opening GFA for FY 2010-11. The



Commission directs the Petitioner to submit the Electrical Inspector Certificate for the balance assets along with reconciliation of capitalization amount as per accounts.

**The Commission again directs the Petitioner to get the audit of the assets capitalized since FY 2009-10 till FY 2012-13 and submit the complete Audit Report to the Commission within 6 months of the issue of this Tariff Order.**

Further, the Commission has also noted that the Accounting Codes in the books of the Petitioner do not provide segregated information of the Projects/Schemes/Capital Works. **The Commission directs the Petitioner to harmonise its Accounting codes with the Projects / Schemes / Capital Works, so that expenses against each of the Scheme can be identified clearly. (Refer Para 6.2.5.2)**

#### ***8.2.16 Interest on Security Deposit***

**The Commission directs the Petitioner to submit the actual interest paid on the security deposit to the consumers during FY 2009-10, FY 2010-11, and FY 2011-12 against the provisions made in the Audited/Provisional Accounts within 2 months from the date of this Order. (Refer Para 6.2.7.1)**

#### ***8.2.17 Reconciliation of Rebate***

**The Commission hereby directs the Petitioner to submit the reconciliation of the rebate allowed based on the information available at the field offices of the Petitioner within 3 months from the date of issue of this Order and the Commission shall take a view in the matter during the APR while carrying out the final truing up for FY 2011-12. (Refer Para 6.2.7.2)**

#### ***8.2.18 Non Tariff Revenue***

**The Commission directs the Petitioner to prepare a policy regarding capturing of expenses and revenues in its accounts and circulate the same in its field offices within 3 months of the date of the Order. (Refer Para 6.2.12)**

#### ***8.2.19 Sales***

**The Commission, therefore, directs the Petitioner to analyse the average consumption of the departmental employees including the reasons for such high consumption based on actual meter readings and submit the report to the Commission on quarterly basis.**

The Petitioner is directed to submit the mechanism for reimbursement of expenses against electricity consumed by the departmental employees of UPCL within 1 month of the date of the Order. The Petitioner is also directed to issue instructions to the field offices to record the sales of the departmental employees based on meter reading and submit compliance of the same within 1 month of the date of the Order.

The Commission directs the Petitioner to issue instructions to its field offices to either record the BPL/Kutir Jyoti consumers under domestic category or book them as a separate BPL category having consumption in excess of the ceiling specified by the Commission, in the month in which their consumption exceeds the ceiling fixed by the Commission and report compliance within 1 month of the date of the Order.

The Petitioner is directed to submit the detailed Action Plan giving timeframe in which it intends to meter the remaining unmetered consumers within 2 months of the date of the Order.

The Petitioner is directed to submit the detailed Action Plan giving timeframe in which it intends to meter the remaining unmetered consumers within 2 months of the date of the Order. Based on the submission of the Petitioner, the Commission may take a view on re-imposing penalty on account of unmetered consumers. (Refer Para 6.3.2)

The Petitioner is directed to correct the practices creeping in the metering and billing system in these categories which are primarily Government categories except for single point bulk supply (non-domestic). The Commission also directs the Petitioner to submit the audited sales and revenue figures after scrutiny of information received from field offices and correct the discrepancies observed by the Commission during the current proceedings alongwith the Petition for Final Truing Up for FY 2011-12 failing which the Commission may consider working out the revenue of the Petitioner on the basis of approved ABR for FY 2011-12. (Refer Para 6.3.2)

#### ***8.2.20 Bad & Doubtful Debts***

In the Compliance report, the Petitioner has submitted that the work of audit of receivables outstanding as on 31-03-2012 has been awarded to three firms of Chartered Accountants in the month of January, 2013 almost after one and a half year when this direction was issued for the first time. The Petitioner submitted that the audit work has been targeted to be completed within five months from the date of award. However, merely undertaking an audit exercise would not be

sufficient. UPCL is also directed to submit an Action Plan as to how it intends to move forward upon receipt of the Audit Report. (Refer Para 6.3.10)

#### ***8.2.21 Power Purchase Quantum and Cost***

The Commission hereby directs the Petitioner to restrict the net drawal from the grid within its drawal schedules whenever the system frequency is below 49.85 Hz.. (Refer Para 6.4.4.9)

The Commission, further, directs the Petitioner to seek prior approval of the Commission, in case the variation in power purchase quantum or total power purchase cost in any quarter exceeds by more than 5% of the approved power purchase quantum and cost for the respective quarter worked out on pro-rata basis from the total approved quantity and cost for FY 2013-14 as indicated in the Table 6.42, failing which, the Commission may disallow power purchases so made while truing up the ARR for the FY 2013-14: (Refer Para 6.4.4.10)

#### ***8.2.22 Interest and Finance Charges***

The Commission has decided to allow Interest on Consumer Security Deposit for the Control Period at the revised interest rate of 8.50% and **directs the Petitioner to compute and pay the interest to its consumers, accordingly, from FY 2013-14.** (Refer Para 6.4.6.1)

#### ***8.2.23 Depreciation***

The Petitioners submission of pro-rata depreciation on assets capitalised during the year would not be admissible in case the asset is capitalised at the year end. Hence, to validate the same, pre-requisite would be the capitalisation policy as well as the fixed asset register showing the date of additions made in the assets during the year. **The Petitioner is once again directed to take note of the above pre-requisite and submit the same along with the next filing and also claim depreciation based on the rates specified in the Regulations for each class of asset.** (Refer Para 6.4.9)

#### ***8.2.24 Return on Equity***

It is observed that the Petitioner is creating long term assets out of current liabilities as no prudent management would create long term assets from the current liabilities which are of short term. In case the Petitioner has to meet these liabilities it will have to either liquidate its assets or resort to external borrowings. Both the options would not be in the interest of the corporation.

Further, with holding any payment and utilizing it elsewhere can also attract punitive action which can be in the form of penalty or surcharge. The Commission has already taken a view that no penalty or surcharge due to the inefficiency of the Petitioner would be allowed to be a pass through in tariffs. **The management of the Petitioner's company is therefore directed to look into the issue and take appropriate remedial action for correcting this practice.**

**Further, the Petitioner is directed to submit the source of such internal resources from FY 2001-02 onwards within 3 months of the date of Order. (Refer Para 6.4.8)**

#### ***8.2.25 Employee Expenses***

**The Commission also directs the Petitioner to expedite its recruitment plan as the Commission understands that it is facing shortage of manpower because of which it has to place reliance on the contractual personnels who have no accountability to the Petitioner Company and as a result day to day functions including metering and billing of the Petitioner is being affected. (Refer Para 6.4.9.1)**

#### ***8.2.26 A&G Expenses***

**The Commission directs the Petitioner to separately maintain an account for the provisions allowed by the Commission. The Commission would write back the amount of provisions remaining unutilized with the Petitioner during the truing up exercise for the Control Period. Here the Commission would also like to caution the petitioner that the A&G expenses are controllable in nature and the Petitioner is expected to exercise prudence and propriety while incurring expenses under this head. (Refer Para 6.4.9.3)**

#### ***8.2.27 Additional Surcharge on account of Re-determination of Tariff for FY 2009-10***

**The Petitioner is directed to maintain separate records of category-wise revenue billed towards additional surcharge during FY 2013-14 and also submit the actual figures for the entire FY 2011-12, FY 2012-13 and first half of FY 2013-14 alongwith the Annual performance review for FY 2013-14, which will be used by the Commission to adjust any excess/shortfall in recovery from these categories alongwith the carrying cost of deferred recovery. (Refer Para 7.1)**

#### ***8.2.28 Additional Surcharge on account of Re-determination of Tariff for FY 2010-11***

**The Petitioner is directed to maintain separate records of category-wise revenue billed towards additional surcharge and rebate allowed during FY 2013-14 and submit the same**

alongwith the ensuing year's tariff Petition, which will be used by the Commission to adjust any excess/shortfall in recovery from these categories alongwith the carrying cost of deferred recovery/rebate. (Refer Para 7.2)

### 8.3 Conclusion

Having considered the submissions made by the Petitioner, the responses of various stakeholders and the relevant provisions of the Electricity Act, 2003 and Regulations of the Commission, the Commission hereby approves that:

- (i) Uttarakhand Power Corporation Ltd., the distribution and retail supply licensee in the State will be entitled to charge the tariffs from consumers in its licensed area of supply as given in the Rate Schedule for FY 2013-14 annexed hereto as Annexure-1 and additional surcharge towards re-determination of tariff for FY 2009-10 and towards re-determination of tariff for FY 2010-11 as approved in Chapter 7 of this Order. These Tariffs will be effective from May 1, 2013.
- (ii) Uttarakhand Power Corporation Ltd., the distribution and retail supply licensee in the State will realize from consumers of Electricity in the State, miscellaneous charges as listed out in Annexure 2 of this Order and shall not recover any other charge, fee, deposit etc., unless approved by the Commission.
- (iii) The above tariffs shall continue to be applicable till revised by the Commission.
- (iv) The Petitioner shall forward a report on compliance of the directions given in this Order within one month of time stipulated for compliance.

**(K.P. Singh)**  
Member

**(C.S. Sharma)**  
Member

**(Jag Mohan Lal)**  
Chairman

## **9. Annexures**

### **9.1 Annexure 1: Rate Schedule Effective from 01.05.2013**

#### **A. General Conditions of Supply**

##### **1. Character of Service**

- i) Alternating Current 50 Hz., single phase, 230 Volts (with permissible variations) up to a load of 4 kW.
- ii) Alternating Current 50 Hz, three phase, 4 wire, 400 Volts or above (with permissible variations) for loads above 4 kW depending upon the availability of voltage of supply.

##### **2. Conditions for New Connections**

- i) Supply to new connections of more than 75 kW (88 kVA) and up to 2550 kW (3000 kVA) shall be released at 11 kV or above, loads above 2550 kW (3000 kVA) and upto 8500 kW (10000 kVA) shall be released at 33 kV or above and loads above 8500 kW (10000 kVA) shall be released at 132 kV or above.
- ii) All new connections shall be given with meter conforming to CEA Regulations on Installation and Operation of Meters.
- iii) All new 3 phase connections above 4 kW shall be released with Electronic Tri-vector Meter having Maximum Demand Indicator.
- iv) All new Single Point Bulk Connection shall be given only for Load of more than 75 kW.
- v) Consumers having motive loads of more than 5 BHP shall install Shunt Capacitor of appropriate rating and conforming to BIS specification.
- vi) All new connections at HT/EHT should be released only with 3 phase 4 wire meters.

##### **3. Point of Supply**

Energy will be supplied to a consumer at a single point.

##### **4. Billing in Defective Meter (ADF/IDF), Meter Not Read/Not Accessible (NA/NR) and Defective Reading (RDF) Cases**

In NA/NR cases, the energy consumption shall be assessed and billed as per average consumption of last one year average consumption (as per Regulations 3.1.2 (3) of the Electricity Supply Code) which shall be subject to adjustment when actual reading is taken. Such provisional billing shall not continue for more than two billing cycles at a stretch. Thereafter, the licensee shall not be entitled to raise any bill on provisional basis. In case of defective meter (ADF/IDF) and defective reading (RDF) cases, the consumers shall be billed on the basis of the average consumption of the past three billing cycles immediately preceding the date of the meter being found or being reported defective (as per Regulations 3.2(1) of the Electricity Supply Code). These charges shall be leviable for a maximum period of three months only during which time the licensee is expected to have replaced the defective meter. Thereafter, the licensee shall not be entitled to raise any bill without correct meters.

The checking and replacement of defective meter cases namely IDF and ADF and defective reading cases namely RDF shall be done by the licensee in accordance with Regulation 3.1.4 of the Electricity Supply Code.

#### **5. Billing in case of domestic metered consumers in rural/hilly areas whose meters are not being read**

For cases relating to domestic metered consumers in rural/hilly areas, where meter reading is not being taken and bills are being raised based on tariff approved for unmetered connections, the provisional billing shall be done at the normative levels of consumption as given below, which shall be subject to annual adjustment based on actual meter reading.

<b>Category</b>	<b>Normative Consumption</b>
Domestic (Rural-Hilly Areas)	30 kWh/kW/month
Domestic (Rural-Other Areas)	50 kWh/kW/month

For this purpose, the contracted load shall be rounded off to next whole number. Billing on this basis is subject to annual adjustment and the licensee is supposed to take the meter reading of such consumers at least once a year.

#### **6. Billing in New Connection or conversion from unmetered to metered Cases**

For cases such as new connections or conversion of unmetered to metered connection, where past reading is not available, the provisional billing shall be done at the normative levels of consumption as given below, which shall be subject to adjustment when actual reading is taken.

Category	Normative Consumption
Domestic (Urban)	100 kWh/kW/month
Domestic (Rural-Hilly Areas)	30 kWh/kW/month
Domestic (Rural-Other Areas)	50 kWh/kW/month
Non-domestic (Urban)	150 kWh/kW/month
Non-domestic (Rural)	100 kWh/kW/month
Private Tube Wells	70 kWh/BHP/month
<b>Industry</b>	
LT Industry	150 kWh/kW/month
HT Industry	150 kVAh /kVA /month

For this purpose, the contracted load shall be rounded off to next whole number. Billing on this basis shall continue only for a maximum period of 2 billing cycles, during which the licensee is supposed to have taken actual reading. Thereafter, the licensee shall not be entitled to raise any bill without correct meter reading. In all other categories 1st bill shall be raised only on actual reading.

## 7. Delayed Payment Surcharge (DPS) (for all categories except PTW)

In the event of electricity bill rendered by licensee, not being paid in full within 15 days' grace period after due date, a surcharge of 1.25% on the principal amount of bill which has not been paid shall be levied from the original due date for each successive month or part thereof until the payment is made in full without prejudice to the right of the licensee to disconnect the supply in accordance with section 56 of the Electricity Act, 2003. The licensee shall clearly indicate in the bill itself the total amount, including DPS, payable for different dates after the due date, after allowing for the grace period of 15 days, taking month as the unit as shown exemplified below:

### EXAMPLE:

Amount payable by Due date	Rs. 100/-	
Due Date	1 <sup>st</sup> May 2013	
	<b><u>Amount Payable</u></b>	
<b>On or Before</b>	<b>After</b>	<b>After</b>
16 <sup>th</sup> May 2013	16 <sup>th</sup> May 2013	1 <sup>st</sup> June 2013
Rs. 100/-	Rs. 101.25	Rs. 102.50

## 8. Solar Water Heater rebate

If consumer installs and uses solar water heating system, rebate of Rs. 100/- p.m. for each



100 litre capacity of the system or actual bill for that month whichever is lower shall be given subject to the condition that consumer gives an affidavit to the licensee to the effect that he has installed such system, which the licensee shall be free to verify from time to time. If any such claim is found to be false, in addition to punitive legal action that may be taken against such consumer, the licensee will recover the total rebate allowed to the consumer with 100% penalty and debar him from availing such rebate for the next 12 months.

### **9. Rebate for Prepaid Metering**

Prepaid metering scheme approved by the Commission in the Tariff Order dated 11.04.2012 for FY 2012-13 shall continue to be in force. A rebate of 4% of energy charges for Domestic category (RTS-1 and RTS-1A) and 3% of energy charges for Other LT consumers shall be allowed to the consumers under the Prepaid Metering Scheme from the date of installation and operationalisation of Prepaid Meters. However, no rebate shall be applicable on Part (A) of RTS-10, i.e. Temporary Supply for Illumination & Public Address Needs.

### **10. Rebate/surcharge for availing supply at voltage higher/lower than base voltage**

- (i) For consumers having contracted load upto 75 kW/88 kVA - If the supply is given at voltage above 400 Volts and upto 11 kV, a rebate of 5% would be admissible on the Rate of Charge.
- (ii) For consumers having contracted load above 75 kW/88 kVA - In case the supply is given at 400 Volts, the consumer shall be required to pay an extra charge of 10% on the bill amount calculated at the Rate of Charge.
- (iii) For consumers having contracted load above 75kW/88 kVA - In case of supply at 33 kV the consumer shall receive a rebate of 1.5% on the Rate of charge.
- (iv) For consumers having contracted load above 75 kW/88 kVA and receiving supply at 132 kV and above, the consumer shall receive a rebate of 5% on the Rate of charge.
- (v) All voltages mentioned above are nominal rated voltages.

### **11. Low Power Factor Surcharge (not applicable to Domestic, PTW categories and other categories having kVAh based Tariff)**

- (i) In respect of the consumers without Electronic Tri Vector Meters, who have not

installed shunt capacitors of appropriate ratings and specifications, a surcharge of 5% on the current energy charges shall be levied.

- (ii) For consumers with Electronic Tri Vector Meters, a surcharge of 5% on current energy charges will be levied for having power factor below 0.85 and upto 0.80 & a surcharge of 10% of current energy charges will be levied for having power factor below 0.80.

## **12. Excess Load/Demand Penalty (Not applicable to Domestic, Snow bound and PTW categories)**

In case of consumers where electronic meters with MDI have been installed, if the maximum demand recorded in any month exceeds the contracted load/demand, such excess load/demand shall be levied twice the normal rate of fixed/demand charge as applicable. Such excess load penalty shall be levied only for the month in which maximum demands exceeds contracted load.

### **Example:**

- (i) For consumers where fixed charges on the basis of contracted load/demand have been specified:

Contracted load 30 kW, Maximum Demand 43 kW,

Excess Demand  $43-30=13$  kW, Rate of Fixed Charges= Rs. 35/kW

Fixed Charges for contracted load =  $30 \times 35 = \text{Rs. } 1050$

Fixed Charges for excess load =  $13 \times (2 \times 35) = \text{Rs. } 910$

Total Fixed Charges =  $1050+910 = \text{Rs. } 1960$

- (ii) For industrial consumers billed on billable demand:

Contracted demand 2500 kVA, Maximum Demand 2800 kVA, Billable Demand =2800 kVA

Excess Demand =  $2800-2500=300$  kVA, Rate of Demand Charges= Rs. 270/kVA

Demand Charges for contracted demand =  $2500 \times 270 = \text{Rs. } 675000$

Demand Charges for excess demand =  $300 \times (2 \times 270) = \text{Rs. } 162000$

Total Demand Charges =  $675000+162000 = \text{Rs. } 837000$

### 13. Minimum Consumption Guarantee (MCG)

The minimum consumption guarantee (MCG) charges shall be applicable to all non-domestic consumers having load above 25 kW, metered PTW consumers and all industrial consumers for their consumption in kWh (where kWh tariff is applicable) and kVAh (where kVAh tariff is applicable). The Commission has specified the minimum consumption guarantee on monthly basis as well as on annual basis. The minimum consumption guarantee charges will be levied on monthly basis when monthly consumption is less than the units specified for monthly minimum consumption guarantee (MCG). In case Cumulative actual consumption from the beginning of financial year exceeds the units specified for annual minimum consumption guarantee (MCG) no further billing of monthly MCG shall be done. In such cases differential paid in excess of actual billing shall be adjusted in the bill for month of March 2014.

*Example:*

**Illustrative case for LT Industry-Connected load of 10 kW**

Month	Actual consumption (kWh)	Cumulative Actual Consumption (kWh)	Billed Consumption (kWh)	Cumulative Billed Consumption (kWh)
Apr	700	700	750	750
May	610	1310	750	1500
Jun	540	1850	750	2250
Jul	1210	3060	1210	3460
Aug	690	3750	750	4210
Sep	1535	5285	1535	5745
Oct	2560	7845	2560	8305
Nov	910	8755	910	9215
Dec	570	9325	570	9785
Jan	340	9665	340	10125
Feb	865	10530	865	10990
Mar	710	11240	250	11240

### 14. Monthly Minimum Charges (MMC)

The monthly minimum charges shall be applicable to metered PTW Consumers. The Commission has specified the monthly minimum charges on monthly basis as well as on annual basis.

## 15. Single Point Bulk Supply for Domestic, Non Domestic and Mixed Load Categories

- (i) Single Point Bulk Supply connection shall only be allowed for Sanctioned/Contracted Load above 75 kW with single point metering for further distribution to the end users. However, this shall not restrict the individual owner/occupier from applying for individual connection.
- (ii) The person who has taken the single point supply shall be responsible for all payments of electricity charges to the Licensee and collection from the end consumer as per applicable tariff for them. The Licensee shall ensure that tariff being charged from end consumer does not exceed the prescribed tariff for the concerned category of the consumer.
- (iii) The person who has taken the single point supply shall also be deemed to be an agent of Licensee to undertake distribution of electricity for the premises for which single point supply is given under seventh proviso to section 14 of the Electricity Act, 2003 and distribution licensee shall be responsible for compliance of all provisions of the Act and Rules & Regulations thereunder within such area.
- (iv) Single Point Bulk Supply under “Domestic” shall only be applicable for Residential Colonies/Residential Multistoreyed Buildings including common facilities (such as Lifts, Common Lighting and Water Pumping system) of such Residential Colonies/Residential Multistoreyed Buildings. In case these Residential Colonies/Residential Multistoreyed Buildings also have some shops or other commercial establishments, the tariff of Mixed Load shall be applicable for such premises.
- (v) Single Point Bulk Supply Under “Non-Domestic” shall only be applicable for Shopping Complexes/Multiplex/Malls.

## 16. Rounding off

- (i) The contracted load/demand shall be expressed in whole number only and fractional load/demand shall be rounded up to next whole number.

### *Example:*

Contracted/Sanctioned Load of 0.15 kW shall be reckoned as 1 kW for tariff

purposes. Similarly, contracted/sanctioned load of 15.25 kW/kVA shall be taken as 16 kW/kVA.

(ii) All bills will be rounded off to the nearest rupee.

### **17. Other Charges**

Apart from the charges provided in the Rate of Charge and those included in the Schedule of Miscellaneous Charges, no other charge shall be charged from the consumer unless approved by the Commission.

## B. Tariffs

### RTS-1: Domestic

#### 1. Applicability

This schedule shall apply to:

- (i) Residential premises for light, fan, power and other domestic purposes including common facilities (such as Lifts, Common Lighting and Water Pumping system)
- (ii) Single Point Bulk Supply above 75 kW for Residential Colonies, Residential Multi-storeyed buildings where energy is exclusively used for domestic purpose including common facilities (such as Lifts, Common Lighting and Water Pumping system) of such Residential Colonies/Residential Multistoreyed Buildings
- (iii) Places of worship, i.e. Mandir, Masjid, Gurudwara, Church, etc. (only for stand alone places of worship and not for the places of worship which have other facilities such as Dharamshala, Community Hall, Dormitories, etc. attached with it)

(This rate schedule shall also be applicable to consumers having contracted load upto 2 kW and consumption upto 200 kWh/month using some portion of the premises mentioned above for business/other purposes. However, if contracted load for such premises is above 2 kW or consumption is more than 200 kWh/month, then the entire energy consumed shall be charged under the appropriate Rate Schedule unless such load is segregated and separately metered.)

#### 2. Rate of Charge

##### (A) Un-Metered Supply (Domestic) in Rural Areas

Description	Fixed Charges
1) Hilly Areas*	Rs. 140/connection/month
2) Other Areas	Rs. 310/connection/month

\* Hill areas for this purpose shall be district Pithoragarh, Almora, Bageshwar, Chamoli, Uttarkashi, Tehri, whole tract of Rudraprayag. Apart from above, Chakarata and Mussoorie tehsil of Dehradun district, Nainital tehsil of Nainital district, part of Ram Nagar tehsil after leaving remaining regularized region of Ram Nagar, part of Tanakpur municipality limit after leaving remaining part of Champawat district and part of Kotdwar municipal limit after leaving remaining part of Pauri district are also included.

**(B) Metered Supply**

Description	Fixed Charges	Energy Charges
1) Domestic Metered		
1.1) Life line consumers		
Below Poverty Line and Kutir Jyoti having load upto 1 kW and consumption upto 30 units per month	Rs. 7/connection/ month	Rs. 1.50/kWh
1.2) Other domestic consumers	Upto 4 kW - Rs. 35/connection/month More than 4 kW - Rs. 90/connection/month	<ul style="list-style-type: none"> <li>• For Consumption Upto 100 units/month – Rs 2.30/kWh</li> <li>• For Consumption between 101-200 units/month – Rs 2.70/kWh</li> <li>• For Consumption 201-400 units/month – Rs 3.35/kWh</li> <li>• For Consumption above 400 units/month – Rs 3.50/kWh</li> </ul>
2) Single Point Bulk Supply	Rs. 35/kW/month	Rs. 3.15/kWh

### **RTS-1A: Snowbound**

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#### **2. Applicability**

- (i) Domestic and non-domestic consumers in snowbound areas.
- (ii) This Schedule applies to areas notified as snowbound/snowline areas by the concerned District Magistrate.

#### **3. Rate of Charge**

Description	Fixed Charges	Energy charges
1) Domestic	Rs. 7/connection/month	Rs. 1.50/kWh
2) Non-domestic upto 1 kW		
3) Non-domestic more than 1kW & upto 4 kW		Rs. 2.15/kWh
4) Non-Domestic more than 4 kW	Rs. 14/connection/month	Rs. 3.25/kWh

4. All other conditions of this Schedule shall be same as those in RTS-1.



**RTS-2: Non-Domestic****1. Applicability**

- 1.1 (i) Government/Municipal Hospitals  
(ii) Government/Government Aided Educational Institutions  
(iii) Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act
- 1.2 Small Non Domestic Consumers with connected load upto 4 kW and consumption upto 50 units per month
- 1.3 Other Non-Domestic Users including single point bulk supply above 75 kW for shopping complexes/multiplex/malls including common facilities (such as lifts, common lighting and water pumping system).

**2. Rate of Charge****Metered Category**

S. No.	Description	Fixed Charges	Energy charges	MCG (kVAh/kW of contracted load)*
1.1	(i) Government/Municipal Hospitals (ii) Government/Government Aided Educational Institutions (iii) Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act			
	(a) Upto 25 kW	Rs. 35/kW/Month	Rs. 3.85/kWh	
	(b) Above 25 kW	Rs. 35/kVA/Month	Rs. 3.45/kVAh	60 kVAh/kVA/month & 720 kVAh/kVA/annum
1.2.	Other Non Domestic Users			
	(a) Small Non Domestic Consumers with connected load upto 4 kW and consumption upto 50 units per month	Rs. 35 / kW/Month	Rs 4.00/ kWh	
	(b) Upto 25 kW	Rs. 35/kW/Month	Rs. 4.55 /kWh	
	(c) Above 25 kW	Rs. 35/kVA/Month	Rs. 4.55/kVAh	60 kVAh/kVA/month & 720 kVAh/kVA/annum
1.3	Single Point Bulk Supply**	Rs. 35/kVA/Month	Rs 4.45/kVAh	60 kVAh/kVA/month & 720 kVAh/kVA/annum

*\* For consumers having contracted load in kW, the contracted load for MCG purposes shall be calculated by considering a power factor of 0.85.*

*The Minimum Consumption Guarantee Charge shall be in addition to fixed/demand charge and shall be levied if Consumption during a month is less than MCG and will be subject to adjustment*

*\*\* For loads above 75 kW for shopping complexes/multiplex/malls*

- (i) ToD Meters shall be read by Meter Reading Instrument (MRI) only with complete dump with phasor diagram, Tamper Reports, full load survey reports etc. shall be downloaded for the purpose of complete analysis.
- (ii) All consumers above 25 kW shall necessarily have ToD Meters.
- (iii) No meter shall be read at zero load or very low load. Licensee shall carry appropriate external load and shall apply the same, wherever, necessary to take MRI at load.
- (iv) Copy of MRI Summary Report shall be provided alongwith the Bill. Full MRI Report including load survey report shall be provided on demand and on payment of Rs. 15/ Bill.

### RTS-3: Public Lamps

#### 1. Applicability

This schedule shall apply to public lamps including street lighting system, traffic control signals, lighting of public parks, etc. The street lighting of Harijan Bastis and villages are also covered by this Rate Schedule.

#### 2. Rate of Charge

Category	Fixed Charges	Energy Charge
Metered	Rs. 30/kW/month	Rs. 4.10/kWh
Unmetered Rural	*Rs. 175/100 W lamp or part thereof / month	Nil

*\* For every 50 W or part thereof increase over and above 100W lamp additional Rs. 70/month shall be charged*

#### 3. Maintenance Charge

In addition to the “Rate of Charge” mentioned above, a sum of Rs. 10/- per light point per month shall be charged for operation and maintenance of street lights covering only labour charges where all material required will be supplied by the local bodies. However, the local bodies will have the option to operate and maintain the public lamps themselves and in such case no maintenance charge will be charged.

#### 4. Provisions of Street Light Systems

In case, the maintenance charge, as mentioned above, is being charged then the labour involved in the subsequent replacement or renewals of lamps shall be provided by the licensee but all the material shall be provided by the local bodies. If licensee provides material at the request of local body, cost of the same shall be chargeable from the local body.

The cost involved in extension of street light mains (including cost of sub-stations if any) in areas where distribution mains of the licensee have not been laid, will be paid for by the local bodies.

## RTS-4: Private Tube Wells/ Pumping Sets

### 1. Applicability

This schedule shall apply to all power consumers getting supply for private tube-wells / pumping sets for irrigation purposes and for incidental agricultural processes confined to chaff cutter, thrasher, cane crusher and rice huller only. However, the tariff applicable for RTS-4 shall only be applicable if such incidental agricultural processes are being carried out for agricultural produce of the connection sanctioned for irrigation purposes.

### 2. Rate of charge

Category	Fixed Charges Rs./BHP/Month	Energy Charges Rs./kWh	Monthly Minimum Charge (MMC)
Unmetered	*180	Nil	Nil
Metered	Nil	1.10	Rs. 100 / BHP/Month & Rs. 1200/BHP/Annum

*\*Plus Rs. 20/connection/month for lighting load of not more than two lamps not exceeding 60 Watt each.*

### 3. Payments of bills and Surcharge for Late Payment

The bill shall be raised for this category twice a year only, i.e. by end of December (for period June to November) and end of June (for period December to May). The bill raised in December may be paid by the consumer either in lump-sum or in parts (not more than four times) till 30<sup>th</sup> April next year for which no DPS shall be levied. Similarly, bill raised in June may be paid by 31<sup>st</sup> October without any DPS. In case consumer fails to make payment within the specified dates, a surcharge @ 1.25% per month for the period (months or part thereof) shall be payable on the outstanding amount.

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**RTS-5: Government Irrigation System**


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**1. Applicability**

This schedule shall apply to:

- (i) Supply of power for State Tubewells, World Bank Tubewells, Pumped Canals and Lift irrigation schemes, Laghu Dal Nahar etc., having a load upto 75 kW (100 BHP).
- (ii) Irrigation system owned and operated by any Government department.

**2. Rate of charge**

Description	Fixed Charges	Energy Charges
1. Upto 75 kW	Rs. 30/kW/month	Rs. 4.10/kWh
2. More than 75 kW	Rs. 30/kVA/month	Rs. 3.95/kVAh

## **RTS-6: Public Water Works**

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### **1. Applicability**

This Schedule shall apply to Public Water Works, Sewage Treatment Plants and Sewage Pumping Stations functioning under Jal Sansthan, Jal Nigam or other local bodies and Plastic Recycling Plants.

### **2. Rate of charge**

<b>Fixed Charges</b>	<b>Energy Charges</b>
Rs. 30/kVA/month	Rs. 4.00/kVAh

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**RTS-7: LT and HT Industry**

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**1. Applicability**

This schedule shall apply to:

- (i) All consumers of electrical energy for industrial and /or processing or agro- industrial purposes, power loom as well as to Arc/Induction Furnaces, Rolling/Re-rolling Mills, Mini Steel Plants and to other power consumers not covered under any other Rate Schedule
- (ii) The Vegetable, Fruits, Floriculture & Mushroom integrated units farming, Processing, storing and Packaging shall also be covered under this Rate schedule.

**2. Specific Conditions of Supply**

- (i) All connections shall be connected with MCB (Miniature Circuit Breaker) or Circuit Breaker / Switch Gear of appropriate rating and BIS Specification.
- (ii) The supply to Induction and Arc Furnaces shall be made available only after ensuring that the loads sanctioned are corresponding to the load requirements of tonnage of furnaces. The minimum load of 1 Tonne furnace shall in no case be less than 500 kVA and all loads will be determined on this basis. No supply will be given for loads below this norm.
- (iii) Supply to Steel Units shall be made available at a voltage of 33 kV or above through a dedicated individual feeder only with check meter at sub-station end. Difference of more than 3%, between readings of check meter and consumer meter(s), shall be immediately investigated by the licensee and corrective action shall be taken.
- (iv) Supply to all new connections with load above 1000 kVA should be released on independent feeders only with provisions as at (iii) above.

Description	Energy Charge		Fixed/Demand Charge per month	Minimum Consumption Guarantee (MCG) **
1. LT Industry having contracted load upto 75kW (100 BHP)				
1.1 Contracted load up to 25 kW	Rs. 3.75/kWh		Rs. 100/ kW of contracted load	\$60 kWh/kW of contracted load / month & 720 kWh/kW of contracted load / annum
1.2 Contracted load more than 25 kW	Rs. 3.40/kVAh		Rs. 100/ kVA of contracted load	60 kVAh/kVA *** of contracted load / month & 720 kVAh/kVA of contracted load / annum
2. HT Industry having contracted load above 88kVA/75 kW (100 BHP)	Load Factor#	Rs./ kVAh		
2.1 Contracted Load up to 1000 kVA	Upto 33%	3.05	Rs. 210/kVA of the billable demand*	110 kVAh/kVA of contracted load / month & 1320 kVAh/kVA of contracted load / annum
	Above 33% and upto 50%	3.30		
	Above 50%	3.60		
2.2 Contracted Load More than 1000 kVA	Upto 33%	3.05	Rs. 270/kVA of the billable demand*	
	Above 33% and upto 50%	3.30		
	Above 50%	3.60		

\$ 40 kWh/kV/month and 480 kWh/kV/annum for Atta Chakkis.

\* Billable demand shall be the actual maximum demand or 80 % of the contracted load whichever is higher.

\*\* The Minimum Consumption Guarantee Charge shall be in addition to fixed/demand charge and shall be levied if Consumption during a month is less than MCG and will be subject to adjustment on annual basis

\*\*\* For consumers having contracted load in kV, the contracted load for MCG purposes shall be calculated by considering a power factor of 0.85.

#For tariff purposes Load Factor (%) would be deemed to be =

$$\frac{\text{Consumption during the billing period}}{\text{Maximum Demand or Contracted Demand whichever is less} \times \text{No. of hours in the billing period}} \times 100$$

### 3. Time of Day Tariff

- The rates of energy charge given above for LT industry with load more than 25 kW and HT industry shall be subject to ToD rebate/surcharge.
- ToD Meters shall be read by Meter Reading Instrument (MRI) only with complete dump with phasor diagram, Tamper Reports, full load survey reports etc. shall be downloaded for the purpose of complete analysis and bills shall be raised as per ToD rate of charge.



- (iii) No meter shall be read at zero load or very low load. Licensee shall carry appropriate external load and shall apply the same wherever necessary to take MRI at load
- (iv) Copy of MRI Summary Report shall be provided along with the Bill. Full MRI Report including load survey report shall be provided on demand and on payment of Rs. 15/ Bill
- (v) ToD Load shall be as under:

Season/Time of day	Morning Peak hours	Normal hours	Evening Peak hours	Off-peak Hours
Winters 01.10 to 31.03	0600-0930 hrs	0930-1730 hrs	1730-2200 hrs	2200-0600 hrs
Summers 01.04 to 30.09	--	0700-1800 hrs	1800-2300 hrs	2300-0700 hrs

The, ToD Rate of Energy Charges shall be as under:

**For LT Industry**

Energy Charge during		
Normal Hours	Peak Hours	Off-peak Hours
Rs. 3.40/kVAh	Rs. 5.10/kVAh	Rs. 3.06/kVAh

**For HT Industry**

Load Factor*	Energy Charge during		
	Normal Hours	Peak Hours	Off-peak Hours
Upto 33 %	Rs. 3.05/kVAh	Rs. 5.40/kVAh	Rs. 2.75/kVAh
Above 33% and upto 50 %	Rs. 3.30/kVAh	Rs. 5.40/kVAh	Rs. 2.97/kVAh
Above 50%	Rs. 3.60/kVAh	Rs. 5.40/kVAh	Rs. 3.24/kVAh

\* Load Factor shall be as defined in Clause 3 above

#### 4. Seasonal Industries

Where a consumer having load in excess of 18 kW (25 BHP) and ToD meter and avails supply of energy for declared Seasonal industries during certain seasons or limited period in the year, and his plant is regularly closed down during certain months of the financial year, he may be levied for the months during which the plant is shut down (which period shall be referred to as off-season period) as follows.

- (i) The tariff for 'Season' period shall be same as "Rate of Charge" as given in this schedule.
- (ii) Where actual demand in 'Off Season' Period is not more than 30% of contracted load, the energy charges for "Off-Season" period shall be same as energy charges for

“Season” period given in Rate of Schedule above. However, the contracted demand in the “Off Season” period shall be reduced to 30%.

- (iii) During ‘Off-season’ period, the maximum allowable demand will be 30% of the contracted demand and the consumers whose actual demand exceeds 30% of the contracted demand in any month of the ‘Off Season’ will be denied the above benefit of reduced contracted demand during that season. In addition, a surcharge at the rate of 10% of the demand charge shall be payable for the entire ‘Off Season’ period.

#### **Terms and Conditions for Seasonal Industries**

- (i) The period of operation should not be more than 9 months in a financial year.
- (ii) Where period of operation is more than 4 months in a financial year, such industry should operate for at least consecutive 4 months.
- (iii) The seasonal period once notified cannot be reduced during the year. The off-season tariff is not applicable to composite units having seasonal and other categories of loads.
- (iv) Industries in addition to sugar, ice, rice mill and frozen foods shall be notified by Licensee only after prior approval of the Commission.

#### **5. Factory Lighting**

The electrical energy supplied under this schedule shall also be utilised in the factory premises for lights, fans, coolers, etc. which shall mean and include all energy consumed for factory lighting in the offices, the main factory building, stores, time keeper’s office, canteen, staff club, library, creche, dispensary, staff welfare centres, compound lighting, etc.

#### **6. Continuous and Non-continuous supply**

- (i) Only Continuous Process Industry consumers operating 24 hours a day for 7 days of a week without any weekly off connected on either independent feeders or industrial feeder can opt for continuous supply. For industrial feeder, all connected industries will have to opt for continuous supply and in case any one consumer on industrial feeder does not wish to opt for continuous supply, all the consumers on such feeder will not be able to avail continuous supply. Such Continuous Process Industry consumers who opt for continuous supply shall be exempted from load shedding during scheduled/unscheduled power cuts and during restricted hours of the period of restriction in usage approved by

the Commission from time to time, except load shedding required due to emergency breakdown/shutdown. Such consumers shall pay 15% extra energy charges, in addition to the energy charges given above, with effect from May 01, 2013 or in case of new consumers, from the date of connection, till 31st March 2014, irrespective of actual period of continuous supply option. However, in case of re-arrangement of supply through independent feeder, the Continuous Supply Surcharge shall be applicable from the date of energisation of aforesaid independent feeder till 31st March 2014, irrespective of actual period of continuous supply option. Demand charge and other charges remain same as per rate of charge given above.

- (ii) Consumers who are existing Continuous Supply Consumers shall continue to remain Continuous Supply Consumers and they need not to apply again for seeking continuous supply option. However, in case of any pending dispute with UPCL in the matter of continuous supply on certain feeders, those consumers will have to apply afresh, for availing the facility of continuous supply, by May 31, 2013;
- (iii) The new applicants for continuous supply of power (including those who are applying afresh as per above) need to apply for seeking the continuous supply option latest by May 31, 2013. UPCL shall provide the facility of continuous supply within 7 days from the date of application, subject to fulfilment of Conditions of Supply. However, in case of re-arrangement of supply through independent feeder, UPCL shall provide the facility of continuous supply from the date of completion of work of independent feeder subject to fulfilment of Conditions of Supply.
- (iv) The existing consumers availing continuous supply option, who wish to discontinue the continuous supply option granted to them earlier, will have to communicate, in writing, to UPCL latest by May 31, 2013 and they shall continue to pay continuous supply surcharge alongwith the tariff approved in this Order till May 31, 2013. Further, in this regard, if due to withdrawal by one consumer from availing continuous supply option on a particular feeder, supplying to other continuous supply consumers as well, the status of other continuous supply consumers in that feeder is affected, then UPCL shall inform all the affected consumers in writing, well in advance;

- (v) The option for seeking or discontinuing the facility of continuous supply, shall be available to a consumer only once in the entire financial year and that too latest by May 31, 2013, in case of existing consumers and at the time of making an application for new connection, in case of new consumers;
- (vi) UPCL shall not change the status of a continuous supply feeder to a non-continuous supply feeder;
- (vii) UPCL/PTCUL shall take up augmentation, maintenance and overhauling works on top priority, specially in the sub-stations where circuit breakers, other equipments, etc. are in dilapidated condition and, thereby, shall ensure minimisation of interruptions of the continuous supply feeders;
- (viii) UPCL/PTCUL shall carry out periodical preventive maintenance of the feeders supplying to continuous supply consumers. The licensees shall prepare preventive maintenance schedule, in consultation with continuous supply consumers, well in advance, so that such consumers can plan their operations accordingly.
- (ix) The Licensee should show the energy charges and continuous supply surcharge thereon separately in the bills.

#### **7. Demand Charges for HT Industry**

If the minimum average supply to any HT Industry Consumers is less than 18 hours per day during the month, the Demand Charges applicable for such HT Industry Consumer shall be 80% of approved Demand Charges for HT Industry.

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**RTS 8: Mixed Load**


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**1. Applicability**

This schedule applies to single point bulk supply connection of more than 75 kW where the supply is used predominantly for domestic purposes (with more than 60% domestic load) and also for other non-domestic purposes. This schedule also applies to supply to MES.

**2. Rate of Charge**

The following rates shall apply to consumers of this category

<b>Fixed Charges</b>	<b>Energy Charges</b>
Rs. 40/kW/month	Rs. 3.80/kWh

**3. Other conditions**

Apart from the above, other conditions of tariff shall be same as those for RTS-1 consumers. However, excess load penalty shall be applicable as per clause 12 of General Conditions of Supply.

## **RTS 9: Railway Traction**

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### **1. Applicability**

This schedule applies to Railways utilizing power for traction purposes.

### **2. Rate of Charge**

The following rates of energy and demand charge shall apply to this category:

<b>Demand Charges</b>	<b>Energy Charges</b>
Rs./kVA/month	Rs./ kVAh
190/-	Rs. 3.25

### **3. Other conditions**

Apart from the above, other conditions of tariff shall be same as those for General HT Industries under RTS-7 consumers except applicability of ToD tariff and surcharge for continuous supply.

### RTS-10: Temporary Supply

#### (A) Temporary Supply for Illumination & Public Address Needs

##### 1. Applicability

This schedule shall apply to temporary supply of light & fan up to 10 kW, public address system and illumination loads during functions, ceremonies and festivities, temporary shops not exceeding three months.

##### 2. Rate of Charge

Description	Fixed Charges
(1) For Illumination / public address/ ceremonies for load up to 15 kW	Rs. 1110 per day
(2) Temporary shops set up during festivals / melas and having load upto 2 kW	Rs. 70 per day
(3) Other Temporary shops/ Jhuggi /Jhopris for load upto 1 kW	
3.1) Rural	Rs. 100/month/connection
3.2) Urban	Rs. 200/month/connection

The amount of Fixed Service Charge as specified in 2 above shall be taken in advance.

#### (B) Temporary Supply for Other Purposes

##### 1. Applicability

- (i) This schedule shall apply to temporary supplies of light, fan and power loads for the purposes other than mentioned at (A) including illumination/public address/ceremonies for load above 15 kW.
- (ii) This schedule shall also apply for power taken for construction purposes including civil work by all consumers including Government Departments. Power for construction purposes for any work / project shall be considered from the date of taking first connection for the construction work till completion of the work / project.  
**However, a permanent connection sanctioned for premises being used for construction, repair or renovation of building, whether existing or new shall not be considered as unauthorised use of electricity as long as the intended purpose/use of the building/appurtenants being constructed is same/permissible in the sanctioned category of the connection.**

##### 2. Rate of Charge


The rate of charge will be corresponding rate of charge in appropriate Schedule Plus 25%. The appropriate rate schedule for the temporary supplies for cane crusher upto 15 BHP given for maximum period of four (4) months will be RTS-7.

**9.2 Annexure 2: Schedule of Miscellaneous Charges**

Sl. No	Nature of Charges	Unit	Approved (Rs.)
1	<b>Checking and Testing of Meters</b>		
	a. Single Phase Meters	Per Meter	50.00
	b. Three Phase Meters	Per Meter	75.00
	c. Recording Type Watt-hour Meters	Per Meter	170.00
	d. Maximum Demand Indicator/ LT CT operated Meters	Per Meter	350.00
	e. Tri-vector Meters/ HT Meters with CT/PT	Per Meter	1000.00
	f. Ammeters and Volt Meters	Per Meter	65.00
	g. Special Meters	Per Meter	335.00
	h. Initial Testing of Meters	Per Meter	NIL
2	<b>Subsequent testing and installation other than initial testing</b>	Per Meter	80.00
3	<b>Disconnection and Reconnection of supply on consumers request or non-payment of bill (for any disconnection or reconnection the charge will be 50%)</b>		
	a. Consumer having load above 100 BHP/75 kW	Per Job	600.00
	b. Industrial and Non Domestic consumers upto 100 BHP/75 kW	Per Job	400.00
	c. All other categories of consumers	Per Job	200.00
4	<b>Replacement of Meters</b>		
	a. Installation of Meter and its subsequent removal in case of Temporary Connections	Per Job	75.00
	b. Changing of position of Meter Board at the consumer's request	Per Job	100.00
5	Checking of Capacitors (other than initial checking) on consumer's request:		
	a. At 400 V/ 230 V	Per Job	150.00
	b. At 11 kV and above	Per Job	300.00



## 9.3 Annexure 3: Public Notice on MYT Petition of UPCL



## UTTARAKHAND POWER CORPORATION LTD.

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### PUBLIC NOTICE

**Inviting Comments on the Multi Year Tariff Petition for the Control Period from FY 2013-14 to FY 2015-16 and determination of tariff for FY 2013-14 filed by UPCL before the Uttarakhand Electricity Regulatory Commission**

**Salient Points of the ARR / Tariff Petition**

- Uttarakhand Power Corporation Limited (UPCL), the sole Distribution and Retail Supply Licensee in the State, has filed a Petition before Uttarakhand Electricity Regulatory Commission (UERC or Commission) for approval of its Annual Revenue Requirement (ARR) for the FY 2013-14 to FY 2015-16 and has sought revision of Retail Tariffs to be charged from different category of electricity consumers in the State for the FY 2013-14.
- Through the above Petition, UPCL has also sought truing up of expenses for FY 2010-11 (based on audited accounts) and for FY 2011-12 (based on provisional accounts). However, in absence of actual/reliable data for the FY 2012-13, while providing revised estimates for different expense items, UPCL has not sought any true up for the FY 2012-13. The summary of the revised ARR and the revised revenue Gap for FY 2010-11, FY 2011-12 & FY 2012-13 and projected ARR & projected Revenue gap for the FY 2013-14 to FY 2015-16 are given in the following Table:

(Figures in ₹ Crore)

S. No.	Particulars	FY 2010-11		FY 2011-12		FY 2012-13		Projected by UPCL for		
		Provisionally trued up by the Commission	Final truing up claimed by UPCL	Approved by the Commission	Provisional Truing up claimed by UPCL	Approved by the Commission	Revised Estimates submitted by UPCL	FY 2013-14	FY 2014-15	FY 2015-16
<b>A.</b>	<b>Expenditure</b>									
1	Power Purchase Expenses	2,055.93	2,055.03	2,195.91	2,728.59	2,884.64	3,284.60	3,646.54	3,952.35	4,344.16
2	Transmission Charges- PGCIL	125.93	125.93	113.35	211.02	119.02	219.23	243.54	268.30	316.30
3	Transmission Charges- PTCUL	111.50	111.50	131.82	184.82	159.54	159.54	175.49	193.04	212.35
4	O&M expenses	286.32	286.39	272.52	296.83	353.50	378.40	443.96	490.67	546.32
5	Interest charges	77.48	66.77	71.08	88.49	90.23	59.41	143.33	228.65	271.65
6	Depreciation	21.95	21.95	27.95	112.65	23.19	174.43	207.47	253.12	299.27
7	Provision for Bad and Doubtful Debts	-	67.77	-	76.04	-	84.33	96.68	108.09	121.06
8	Return on Equity	5.91	67.13	7.47	83.24	10.75	103.23	117.64	146.67	172.73
9	Interest on Working Capital	14.06	21.44	8.02	13.21	13.59	13.68	22.37	29.47	37.66
<b>B.</b>	<b>Gross Expenditure</b>	<b>2,699.06</b>	<b>2,823.91</b>	<b>2,828.12</b>	<b>3,794.89</b>	<b>3,654.45</b>	<b>4,476.84</b>	<b>5,097.04</b>	<b>5,670.34</b>	<b>6,321.49</b>
<b>C.</b>	<b>Less: Non-tariff income</b>	<b>59.25</b>	<b>182.02</b>	<b>35.20</b>	<b>335.51</b>	<b>37.50</b>	<b>260.13</b>	<b>262.84</b>	<b>265.68</b>	<b>268.67</b>
<b>D.</b>	<b>Aggregate Revenue Requirement (A-B)</b>	<b>2,639.81</b>	<b>2,641.88</b>	<b>2,792.92</b>	<b>3,459.39</b>	<b>3,616.95</b>	<b>4,216.71</b>	<b>4,834.20</b>	<b>5,404.66</b>	<b>6,052.82</b>
<b>E.</b>	<b>Revenues from Existing/ Approved Tariffs</b>	<b>2,718.44</b>	<b>2,592.60</b>	<b>2,804.70</b>	<b>2,899.96</b>	<b>3,556.88</b>	<b>3,442.80</b>	<b>3,747.76</b>	<b>4,058.84</b>	<b>4,451.62</b>
<b>F.</b>	<b>Additional Gap/(Surplus) from truing up of previous years</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(67.27)</b>	<b>-</b>	<b>608.78</b>	<b>-</b>	<b>-</b>
<b>G.</b>	<b>Add: Carrying Cost on the total Gap</b>	<b>-</b>	<b>-</b>	<b>3.61</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>189.90</b>	<b>-</b>	<b>-</b>
<b>H.</b>	<b>Revenue Surplus/(Gap) (E)-(F)-(D)-(G)</b>	<b>78.63</b>	<b>(49.28)</b>	<b>8.17</b>	<b>(559.50)</b>	<b>7.21</b>	<b>(773.91)</b>	<b>(1,885.12)</b>		

- UPCL has, accordingly, for the FY 2010-11, FY 2011-12 and FY 2013-14 taken together, projected a total revenue gap of ₹ 1,885.12 Crore.
- The increase in revenue gap from the figures approved by the Commission for different financial years (as indicated above) is primarily due to increase in the power purchase cost of UPCL along with the increase in Capital Related Expenses. For FY 2013-14, UPCL has projected the distribution loss level of 18.25%. It is also to mention that for projecting the power purchase cost for FY 2013-14 from Central Sector Generating Stations, UPCL has taken the rates as approved in the orders of CERC. Similarly, PGCIL charges have been projected on "per MU basis", i.e. power projected to be procured from outside the state for each year is multiplied by the ratio of actual PGCIL charges for FY 2011-12 and quantum of power procured from outside the state in that particular year. ULDC, NRLDC and Intra-state transmission charge has been projected by assuming an escalation of 10% in each year over FY 2011-12.
- UPCL has proposed to recover the revenue gap of ₹ 1,885.12 Crore relating to FY 2010-11, FY 2011-12 and FY 2013-14 through tariffs in the FY 2013-14 and has deferred the recovery of the revenue gap of Rs. 773.91 Crore relating to FY 2012-13 for next year. UPCL has, accordingly, proposed an average tariff hike of 50.30% in the existing retail tariffs of consumers.
- In addition UPCL has claimed past adjustments of capital related expenses from 09.11.2001 to 31.03.2011 arising out of approval of the transfer scheme with UPCL by GoU, amounting to ₹ 1,581.24 Crore (including the carrying cost till 31.03.2013), which was not considered by the Commission earlier. UPCL has submitted that since, the recovery of such a huge amount in FY 2013-14 alone would lead to a tariff shock to consumers, hence, it has proposed that the entire impact of the transfer scheme should be treated as regulatory asset to be recovered over a period of three years alongwith the carrying cost on the same. Accordingly, UPCL has proposed a recovery of ₹ 640.38 Crore in FY 2013-14 by imposing a regulatory surcharge of 11.37% to be levied on total fixed charges and energy charges for all the categories of consumers and the remaining unrecovered amount of ₹ 1280.77 Crore would be recovered over next two subsequent years, i.e. FY 2014-15 and FY 2015-16. This Regulatory Surcharge of 11.37% for FY 2013-14 would imply another 17.09% increase over the existing tariff in addition to 50.30% proposed by UPCL for FY 2013-14, thereby, implying an overall tariff hike of 67.39% proposed by UPCL on the existing retail tariffs.
- Further, PTCUL and UJVNL have also submitted their ARR and Tariff Petition for the Control Period FY 2013-14 to FY 2015-16 before the Commission. If their claims are accepted by the Commission it would necessitate a hike of 26.28% (approx) in consumer tariffs in addition to the hike of 67.39% proposed by UPCL for FY 2013-14.
- In addition, UPCL has also proposed to review its miscellaneous charges to reflect the cost inflation over the years from FY 2003-04 to FY 2011-12 based on the change in WPI and has also proposed to remove some parameters and introduce some new parameters according to the changed scenario.
- The tariff proposals are as below:

Table: Summary of Existing and Proposed Tariff Schedule \*

Category	Fixed/Demand Charges		Energy Charges		Minimum consumption charges	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
<b>RTS-1: DOMESTIC</b>						
<b>1.1 For consumers getting un-metered supply in Rural Areas</b>						
1.1.1 Hill areas	₹ 130/ connection/month	₹ 185/ connection/month				
1.1.2 Other Areas	₹ 285/ connection/month	₹ 400/ connection/month				
<b>1.2 Domestic Metered</b>						
1.2.1 Life line consumers						
Below Poverty Line and Kasta Jyoti having load upto 1kW and consumption upto 50 units per month	₹ 6/ connection/month	₹ 10/ connection/month	₹ 1.50/kWh	₹ 2.00/kWh		
1.3 Other domestic consumers						
Consumption upto 100 units p.m.			₹ 2.30/kWh	₹ 2.80/kWh		
Consumption between 101-200 units p.m.	Upto 4 kW: ₹ 30/ connection/month More than 4 kW: ₹ 80/ connection/month	₹ 50/kWh/month	₹ 2.60/kWh	₹ 3.65/kWh		
Consumption above 200 units p.m.			₹ 3.10/kWh	₹ 4.50/kWh		
1.4 Single Point Bulk Supply	₹ 30/kWh/month	₹ 50/kWh/month	₹ 2.80/kWh	₹ 4.20/kWh		
<b>RTS-1A: SNOWBOUND</b>						
1) Domestic				₹ 2.00/kWh		
2) Non-domestic upto 1 kW	₹ 6/ connection/month	₹ 10/kWh/month	₹ 1.50/kWh	₹ 2.25/kWh		
3) Non-domestic more than 1 kW & upto 4 kW			₹ 2.05/kWh	₹ 2.80/kWh		
4) Non-domestic more than 4 kW	₹ 12/ connection/month	₹ 20/kWh/month	₹ 3.10/kWh	₹ 4.50/kWh		
<b>RTS-2: NON-DOMESTIC</b>						
<b>2.1 Government/Municipal Hospitals, Government/Government aided Educational Institutions, Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act **</b>						
(a) Upto 25 kW	₹ 30/kWh/month	₹ 50/kWh/month	₹ 3.70/kWh	₹ 5.70/kWh		
(b) Above 25 kW	₹ 30/kWh/month	₹ 45/kWh/month	₹ 3.30/kWh	₹ 5.00/kWh	75 kWh/kWh/month & 900 kWh/kWh/annum	75 kWh/kWh/month & 900 kWh/kWh/annum
<b>2.2 Other Non-Domestic</b>						
(a) Upto 25 kW	₹ 30/kWh/month	₹ 50/kWh/month	₹ 4.60/kWh	₹ 6.65/kWh		
(b) Above 25 kW	₹ 30/kWh/month	₹ 45/kWh/month	₹ 4.60/kWh	₹ 6.65/kWh	75 kWh/kWh/month & 900 kWh/kWh/annum	75 kWh/kWh/month & 900 kWh/kWh/annum
2.3 Single Point Bulk Supply	₹ 30/kWh/month	₹ 45/kWh/month	₹ 4.30/kWh	₹ 6.50/kWh	75 kWh/kWh/month & 900 kWh/kWh/annum	75 kWh/kWh/month & 900 kWh/kWh/annum
<b>RTS-3: PUBLIC LAMPS - In addition to Tariff, Maintenance charge of ₹ 18/- per light point per month. Further, for every 50 W or part thereof increase over and above 100 W lamp, additional ₹ 60/month has been retained.</b>						
1. Metered	₹ 25/kWh/month	₹ 45/kWh/month	₹ 3.95/kWh	₹ 6.20/kWh		
2. Unmetered Rural	₹ 150/100 watt lamp/month	₹ 210/100 watt lamp/month	Nil	Nil		
<b>RTS-4: PRIVATE TUBE WELLS/PUMPING SETS - In addition to Tariff, charge of ₹ 20/connections/month for lighting load of not more than two lamps has been retained.</b>						
1. Unmetered	₹ 165/BEP/month	₹ 250/BEP/month	Nil	Nil		
2. Metered	Nil	Nil	₹ 1.00/kWh	₹ 1.50/kWh	100 kWh/BEP/month & 1200 kWh/BEP/annum	100 kWh/BEP/month & 1200 kWh/BEP/annum
<b>RTS-5: GOVERNMENT IRRIGATION SYSTEM</b>						
Upto 75 kW	₹ 25/kWh/month	₹ 40/kWh/month	₹ 3.95/kWh	₹ 6.00/kWh		
More than 75 kW	₹ 25/kWh/month	₹ 35/kWh/month	₹ 3.80/kWh	₹ 5.85/kWh		
<b>RTS-6: PUBLIC WATER WORKS</b>						
	₹ 25/kWh/month	₹ 35/kWh/month	₹ 3.80/kWh	₹ 5.85/kWh		
<b>RTS-7: LT &amp; HT INDUSTRIES ***</b>						
<b>1. LT Industry having contracted load upto 100 BHP/75kW</b>						
1.1 Connected load up to 25 kW	₹ 30/kWh/month of contracted load	₹ 130/kWh/month	₹ 3.60/kWh	₹ 5.40/kWh	75 kWh/kWh/month & 900 kWh/kWh/annum and 40 kWh/kWh/month & 480 kWh/kWh/annum for Atta Chakki	75 kWh/kWh/month & 900 kWh/kWh/annum and 40 kWh/kWh/month & 480 kWh/kWh/annum for Atta Chakki
1.2 Connected load more than 25 kW		₹ 130/kWh/month	₹ 3.25/kWh	₹ 5.00/kWh	75 kWh/kWh/month & 900 kWh/kWh/annum	75 kWh/kWh/month & 900 kWh/kWh/annum
<b>2. HT Industry having contracted load above 100 BHP/75kW/90kVA</b>						
<b>2.1 Connected load upto 100 kVA</b>						
2.1.1 Upto 33%			₹ 2.85/kVAh	₹ 4.15/kVAh	110 kWh/kVA/month & 1320 kWh/kVA/annum	110 kWh/kVA/month & 1320 kWh/kVA/annum
2.1.2 Above 33% and upto 50%	₹ 200/kVA/month of billable demand	₹ 285/kVA/month of billable demand	₹ 3.10/kVAh	₹ 4.65/kVAh	110 kWh/kVA/month & 1320 kWh/kVA/annum	110 kWh/kVA/month & 1320 kWh/kVA/annum
2.1.3 Above 50%			₹ 3.40/kVAh	₹ 5.15/kVAh		
<b>2.2 Connected load more than 100 kVA</b>						
2.2.1 Upto 33%			₹ 2.85/kVAh	₹ 4.15/kVAh	110 kWh/kVA/month & 1320 kWh/kVA/annum	110 kWh/kVA/month & 1320 kWh/kVA/annum
2.2.2 Above 33% and upto 50%	₹ 260/kVA/month of billable demand	₹ 375/kVA/month of billable demand	₹ 3.10/kVAh	₹ 4.65/kVAh	110 kWh/kVA/month & 1320 kWh/kVA/annum	110 kWh/kVA/month & 1320 kWh/kVA/annum
2.2.3 Above 50%			₹ 3.40/kVAh	₹ 5.15/kVAh		
<b>RTS-8: MIXED LOADS</b>						
	₹ 30/kWh/month	₹ 50/kWh/month	₹ 3.60/kWh	₹ 5.30/kWh		
<b>RTS-9: RAILWAY TRACTION</b>						
	₹ 180/kVA/month	₹ 265/kVA/month	₹ 3.20/kVAh	₹ 4.80/kVAh		
<b>RTS-10: TEMPORARY SUPPLY</b>						
(1) For Illumination / public address/ ceremonies for load up to 15 kW	₹ 1050 per day	₹ 1600 per day				
(2) Temporary shops set up during festivals / melas and having load upto 2 kW	₹ 65 per day	₹ 100 per day				
(3) Other Temporary shops / Juggi / Jhopris for load upto 1 kW						
3.1) Rural	₹ 95/month/connection	₹ 150/month/connection				
3.2) Urban	₹ 190/month/connection	₹ 300/month/connection				
(4) Temporary supply for other purposes					Rate of charge in appropriate schedule plus 25%.	

\* In addition to the fixed/demand and energy charges proposed above by UPCL, an additional surcharge of 11.37% has been proposed on these charges.

\*\* UPCL has proposed to shift (i) Government/Municipal Hospitals and (ii) Government/Government Aided Educational Institutions to other non-domestic sub-category under RTS-2. Charitable Institutions registered under the Income Tax Act, 1961 and whose income is exempted from tax under this Act will remain in the existing rate schedule in RTS-2 (1.1).

Further, UPCL has clarified that all places of worship i.e. Mandir, Masjid, Gurudwara, Church having load upto 25 KW are included under rate schedule RTS-2 (1.1).

\*\*\* For industries opting continuous supply, UPCL has proposed to increase the continuous supply surcharge to 20% from 15%. Besides this, UPCL has proposed the following ToD charges for the industries:

Industries	Energy Charge during		
	Normal hours	Peak hours	Off-peak hours
<b>LT Industries</b>	₹ 5.40/kVAh	₹ 8.10/kVAh	₹ 4.86/kVAh
<b>HT Industries with Load Factor</b>			
Upto 33%	₹ 4.15/kVAh	₹ 7.73/kVAh	₹ 3.74/kVAh
Above 33% and upto 50%	₹ 4.65/kVAh	₹ 7.73/kVAh	₹ 4.19/kVAh
Above 50%	₹ 5.15/kVAh	₹ 7.73/kVAh	₹ 4.64/kVAh

In addition, UPCL has also proposed to introduce the scheme of express/independent feeders to provide its high value HT industrial consumers 24x7 uninterrupted supply by levying a surcharge of 25% on energy charge.

10. Responses/suggestions, if any, are sought from consumers and other stakeholders on the Petition. Responses may be sent to the Secretary, Uttarakhand Electricity Regulatory Commission, either in person, or by post at First Floor, Institution of Engineers (India) Building, Near I.S.B.T., Saharanpur Road, Clement Town, Majra, Dehradun or through e-mail to [uttarakhalerc@rediffmail.com](mailto:uttarakhalerc@rediffmail.com) by 15.03.2013.

11. Detailed Petition can be seen free of cost on any working day at the Commission's office or at the offices of Chief Engineer (Regulatory Management) at Urja Bhawan, Kanwali Road, Dehradun/ Chief Engineer (Distribution), Garhwal Zone, UPCL, 120-Handwar Road, Dehradun/ Chief Engineer (Distribution), Kumaon Zone, UPCL, 132-KV Substation, Katgodam, Haldwani. Relevant extracts can also be obtained from the above mentioned offices of the Petitioner.

12. The Petition is also available at the website of the Commission ([www.uerc.gov.in](http://www.uerc.gov.in)) and at the Petitioner's website ([www.upcl.org](http://www.upcl.org)).

Letter No: 859/EE/C/MA2 UPCL/Dt. 05.02.2013

"SAVE ELECTRICITY IN THE INTEREST OF NATION"

Managing Director

## Public Notice on Business Plan of UPCL



**UTTARAKHAND POWER CORPORATION LTD.**  
 Urja Bhawan, Kanwali Road, Dehradun-248004, Telephone - 0135-2763672-75  
 Websites : [www.upcl.org](http://www.upcl.org) & [www.Uttarakhandpower.org](http://www.Uttarakhandpower.org)

**PUBLIC NOTICE**

**Inviting Comments on the Petition filed by UPCL for approval of the Business Plan for FY 2013-14 to FY 2015-16**

1. Uttarakhand Power Corporation Limited (UPCL), the sole Distribution and Retail Supply Licensee in the State, has filed a Petition before Uttarakhand Electricity Regulatory Commission (UERC or Commission) for approval of its Business Plan for FY 2013-14 to FY 2015-16 giving details of the activities proposed to be carried out by it during this Control Period.
2. Responses/suggestions, if any, are sought from consumers and other stakeholders on the Petition. Responses may be sent to the Secretary, Uttarakhand Electricity Regulatory Commission, either in person, or by post at First Floor, Institution of Engineers (India) Building, Near I.S.B.T., Saharanpur Road, Clement Town, Dehradun or through e-mail to [uttaranchalerc@rediffmail.com](mailto:uttaranchalerc@rediffmail.com) by 15.03.2013.
3. Detailed Petition can be seen free of cost on any working day at the Commission's office or at the offices of Chief Engineer (Regulatory Management) at Urja Bhawan, Kanwali Road, Dehradun/Chief Engineer (Distribution), Garhwal Zone, UPCL, 120-Haridwar Road, Dehradun/Chief Engineer (Distribution), Kumaon Zone, UPCL, 132-KV Substation, Kathgodam, Haldwani. Relevant extracts can also be obtained from the above mentioned offices of the Petitioner.
4. The Petition is also available at the website of the Commission ([www.uerc.gov.in](http://www.uerc.gov.in)) and at the Petitioner's website ([www.upcl.org](http://www.upcl.org)).

No. : 858/EE/C.M/A2 UPCL  
Date : 05.02.2013

Managing Director

**"SAVE ELECTRICITY IN THE INTEREST OF NATION"** (Customer Care toll Free No. : 1800 419 0405)  
 For information on Electricity theft, Informer may report to the Vigilance officer via E-mail : [jyothakur@uttarakhandpower.org](mailto:jyothakur@uttarakhandpower.org) or by FAX on 0135-2760911 & send report by SMS on 491 8958811999.

## 9.4 Annexure 4: List of Respondents

Sl.	Name	Designation	Organization	Address
1.	Sh. S.C. Gupta	Chief Engineer	State Water & Hygiene Mission	Peyjal Vibhag, Govt. of Uttarakhand, 01, Bhagirathi Puram, Doon Vihar, Jakhan, Dehradun.
2.	Sh. R.K. Atoliya	Chief Electricity Distribution Engineer	Northern Railway	Headquarters Office, Baroda House, New Delhi-110001.
3.	-	Principal Secretary	-	H.E. the Governor of Uttarakhand, Governor House, Dehradun, Uttarakhand.
4.	Sh. Raghubir Singh	-	M/s S.K. Enterprises	House No. 2, Lane No. 4, Kali Mandir Enclave, Dehradun
5.	Sh. Yogesh Kumar Jindal	Director	M/s Kashi Vishwanath Textile Mill Ltd.	Works : 5th Km. Stone, Ramnagar Road, Kashipur-244713, Distt. Udham Singh Nagar.
6.	Sh. Pradeep Kumar	Col.	Headquarters-Commander Works Engineers	Military Engineer Services, Dehradun Cantt.
7.	Sh. Dinesh Aggarwal	Jt. Managing Director	M/s Anchor Electricals Pvt. Ltd.	Regd. Office-Steel House, B-Wing, Plot No. 24, Mahal Industrial Estate, Mahakali Caves Road, Near Paper Box, Andheri (E), Mumbai-400093
8.	Sh. Devendra Kumar Agrawal	Vice President	M/s Uttarakhand Steel Manufacturers Association	C/o Shree Sidhbal Industries Ltd., Kandi Road, Kotdwar, Uttarakhand
9.	Sh. Vidyarthi Bhaiya	State President	M/s Hind Mazdoor Sabha	Post Box No. 10, Kashipur-244713, Uttarakhand
10.	Sh. Saurabh Vaish	Managing Director	M/s Rosewood Hospitality Pvt. Ltd.	Amazon Tower-B, Omaxe Riviera, IIE Pantnagar-263153, Uttarakhand
11.	Sh. Atar Singh Aswal	-	-	Shri Badrinath Marg, Agency Mohalla, Srinagar Garhwal, Pauri, Uttarakhand
12.	Sh. S.P. Joshi	-	-	Village & Post-Nakraunda, Near IDEA Tower, Nakraunda, Dehradun
13.	Sh. Rajendra Singh	-	-	01, Bahuguna Colony, Ajabpur Khurd, Dehradun
14.	Sh. Abbal Singh Negi	Uttarakhand Rajya Andolankari	-	Village-Jauligrant, Bichli Jauli, Block-Doiwala, Dehradun
15.	-	-	M/s Flex Foods Ltd.	Lal Tappar Industrial Area, P.O.-Resham Majri, Haridwar Road, Dehradun-248140, Uttarakhand
16.	Sh. G.S. Manchanda	Proprietier	Hotel India	Gandhi Chowk, Mussoorie, Dehradun

Sl.	Name	Designation	Organization	Address
17.	Sh. A.K. Singh	President	M/s Biofriends	419/1, Indira Nagar, Dehradun-248006
18.	Sh. R.N. Mathur	President	Mussoorie Hotels Association	Hotel Surya Kiran, The Mall, Mussoorie, Uttarakhand
19.	Sh. Rakesh Bhatia	-	M/s Uttarakhand Industrial Welfare Association	Off. G-31, UPSIDC, Industrial Area, Selaqui, Dehradun, Uttarakhand
20.	Sh. R.R. Malhotra	Executive Director	M/s Jalpac India Ltd.	Village-Tularampur, P.O.-Mota Haldu, Haldwani, Nainital, Uttarakhand-262402
21.	-	-	M/s BST Textile Mills Pvt. Ltd.	Works : Plot No. 9, IIE, SIDCUL, Pantnagar, Rudrapur-263153, Distt. Udham Singh Nagar
22.	Sh. Vivek Jha	-	M/s Sanjay Techno Plast Pvt. Ltd.	Pant Nagar Plant : Khata No. 182, Khasra No. 301 Min., Village-Fulsunga, Tehsil-Kichha, Rudrapur, Distt. Udham Singh Nagar, Uttarakhand-263153
23.	Sh. Kuldeep Singh Cheema	State Member Advisor	Bhartiya Kisan Union	Village-Dhakia Kala, Post-Dhakia, Distt. Udham Singh Nagar
24.	Sh. Teeka Singh Saini	Chairman	Sayunkta Kisan Sangarsh Samiti-Kashipur	97/3, Purana Avaas Vikas, Kashipur- 244713, Udhamsingh Nagar
25.	Sh. H.D. Arora	-	-	R/o Civil Lines, Rudrapur, Distt. Udham Singh Nagar
26.	Sh. Ganesh Upadhyaya	Member	Uttarakhand Pradesh Congress Committee	Res.-Village & Post-Shantipuri No. 2 (Kichha), Udhamsingh Nagar.
27.	Sh. P.K. Rajput	Executive Director	M/s Vista Alps Industries Ltd.	B-2, Loni Road, Industrial Area (Opp. Mohan Nagar), Sahibabad- 201007
28.	Sh. Umesh Sharma Kau	Hon'ble MLA (Raipur)		Brahma Niwas, Ajabpur Kalan, Dehradun
29.	Sh. Vishnu Dutt Tyagi	AGM	M/s Ultimate Flexipack Ltd.	Plot No. 12, Sector-11, IIE, SIDCUL, Haridwar-249403, Uttarakhand
30.	Sh. Dhuruv Semwal	-	M/s Montage Enterprises Pvt. Ltd.	Plot No. 13, Sector-11, IIE, SIDCUL, Haridwar-249403
31.	Sh. Surendra Bhardwaj	President	-	Akhil Bhartiya Dharamshala Prabhandhak Sabha (Regd.)- Haridwar, Seth Murlimal Dharamshala, Railway Road, Haridwar, Uttarakhand
32.	Sh. Gopal Singhal	-	-	Chettriya Dharamshala Prabandh Samiti (Regd.), Tayal Dharamshala, Bhopatwala, Haridwar

Sl.	Name	Designation	Organization	Address
33.	Sh. V.V. Joshi	AGM (CPED & Env.)	M/s TATA Motors Ltd.	Plot No. 1, Sector-11, Integrated Industrial Estate, SIDCUL, Pantnagar-263145, Udham Singh Nagar
34.	Sh. G.S. Bedi	General Manager	M/s Indian Drugs & Pharmaceuticals Ltd.	Virbhadra-249202, Rishikesh, Uttarakhand
35.	-	-	M/s Asahi India Glass Ltd.	Integrated Glass Plant, Village-Latherdeva Hoon, Manglaur-Jhabrera Road, P.O. Jhabrera, Tehsil Roorkee, Distt. Haridwar, Uttarakhand
36.	Sh. Rajeev Gupta	-	M/s KVS Infraatech LLP	Works : B-20, 29, Industrial Estate, Nainital Road, Kashipur-244713, Uttarakhand
37.	Sh. Pramod Singh Tomar	Director	M/s Galwalia Ispat Udyog Ltd.	Narain Nagar Industrial Estate, Nainital Road, Kashipur-244713, Distt. Udham Singh Nagar
38.	Sh. Ram Kumar	Sr. Vice President	Mussoorie Hotels Association	C/o Hotel Vishnu Palace, Gandhi Chowk, Mussoorie
39.	Sh. Sanjay Kumar Agrawal	Director & General Secretary	Shree Karuna Jan Kalyan Samiti (Regd.)	Sanjay Bhawan, Malla Joshi Khola, Almora, Uttarakhand-263601
40.	Sh. Pratap Singh	President	Vasant Vihar Members Welfare Association (Regd.)	95, Vasant Vihar, Phase-I, P.O.-New Forest, Dehradun-248006
41.	Sh. Amar Jeet Singh Bhatiya	President	Doon Sikh Welfare Society	30/3, Mohini Road, Dehradun
42.	Sh. Atul Kumar Agrawal	-	M/s Kashi Enterprises	B-25-29, Industrial Estate, Nainital Road, Kashipur-244713, Udham Singh Nagar
43.	Sh. Devendra Kumar Agrawal	Managing Director	M/s Kashi Vishwanath Steels Ltd.	Narain Nagar Industrial Estate, Nainital Road, Kashipur-244713, Distt. Udham Singh Nagar
44.	-	Secretary	Mussoorie Dehradun Development Authority	Saharanpur Road, Near Transport Nagar, Dehradun
45.	Sh. Pankaj Gupta	President	M/s Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun
46.	Smt. Rashmi Agrawal	-		A-12, Prakash Residency, Stadium-Manpur Road, P.O. Kashipur-244713, Uttarakhand
47.	Sh. Kailash Sharma	-	M/s Devbhoomi Dharamshala Prabhandhak Sabha (Regd.)	Narsingh Bhawan, Upper Road, Haridwar
48.	Sh. Suresh Kumar	President (Works)	M/s Laopala RG Ltd.	B-108, Eldeco Sidcul Industrial Park, Sitarganj, Udham Singh Nagar
49.	-	District Magistrate	-	Tehri Garhwal, Uttarakhand

Sl.	Name	Designation	Organization	Address
50.	Sh. V.P. Chitturi	Vice President	M/s Hindustan National Glass & Industries Ltd.	P.O. Virbhadra, Rishikesh-249201, Uttarakhand
51.	-	President	Nagar Palika Parishad	Tehri Garhwal, Uttarakhand
52.	M.C. Sharma	-	-	Block-1/138, Bindal Road, Khudbuda, Dehradun
53.	Sh. Vikas Jindal	President	M/s Kumaon Garhwal Chamber of Commerce & Industry Uttarakhand	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt. Udham Singh Nagar
54.	Sh. M.C. Upreti	Addl. Secretary (Energy Section-1)	Secretariat	Government of Uttarakhand, Subhash Road, Dehradun-248001
55.	Sh. Nipurn Rastogi	Director	M/s Khatema Fibres Ltd.	UPSIDC Industrial Area, Khatima-262308, Uttarakhand
56.	Sh. V.K. Aggarwal	-	M/s Balaji Action Buildwell	Plot No. C-34 & C-34 (a) to (d), Eldeco Sidcul Industrial Park, Sitarganj, Udham Singh Nagar
57.	Sh. N. Ram Mohan	Vice President	M/s Polyplex Corp. Ltd.	B-37, Sector-1, Noida-201301, Gautam Budh Nagar, Uttar Pradesh
58.	Sh. R.K. Gupta	Sr. General Manager	M/s Gujarat Ambuja Exports Ltd.	C-50, ELDECO SIDCUL, Industrial Park, Sitarganj-262405, Distt. Udham Singh Nagar
59.	Sh. Pradeep Datta	-	-	11, Chander Road, Dalanwala, Dehradun
60.	Ms. Vibha Malhotra	Director & Head	Confederation of Indian Industry	Uttarakhand State Office, Northern Region, 30/1, Rajpur Road, Dehradun-248001
61.	Sh. K.B. Pandey	Secretary	Retd. Central Employees Welfare Committee Almora (Uttarakhand)	Address-Baans Gali, Johri Market, Almora, Uttarakhand
62.	Ms. Jaya Sahu	Assistant General Manager	M/s Prince Industries	Plot No. 5B, Sector-3, IIE, BHEL, SIDCUL, Ranipur, Haridwar-249403

## 9.5 Annexure 5: List of Participants in Public Hearings

### List of Participants in Hearing at Ranikhet on 14.03.2013

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Hem Chowdhary	Vice President	Cantt Board	Ranikhet
2.	Sh. Ajay Kumar	General Secretary	Nagar Congress Committee	Ranikhet
3.	Sh. Harish Chandra Bavadi	-	-	Shree Bhawan, Mall Road, Ranikhet
4.	Sh. Kailash Pandey	-	-	151, Khadi Bazaar, Ranikhet
5.	Sh. Jagdish Agrawal	-	-	761, Sadar Market, Ranikhet
6.	Sh. A.L. Shah	-	-	205, Khadi Bazaar, Ranikhet
7.	Sh. Deep Bhagat	-	-	Bhagat Store, Sadar Market, Ranikhet
8.	Sh. G.S. Bisht	-	-	Hotel Ranikhet Grant, Ranikhet
9.	Sh. Bhaskar Bisht	-	-	Village & Post-Ganiya Dholi, Ranikhet
10.	Sh. Anand Aggarwal	-	-	Sadar Market, Ranikhet
11.	Sh. Vivek Agarwal	-	-	13, Windy House, Mall Road, Ranikhet
12.	Sh. Deepak Garg	-	-	456, Sadar Market, Ranikhet
13.	Sh. Girish Pandey	-	-	C/o-J.P. Pandey & Sons, Sadar Market, Ranikhet



**List of Participants in Hearing at Rudrapur on 15.03.2013**

Sl. No.	Name	Designation	Organization	Address
1.	Mohammad Imran	-	M/s Star Auto Industries Pvt. Ltd.	Sector-11, IIE, SIDCUL, Pant Nagar, Udham Singh Nagar, Uttarakhand
2.	Sh. Diwakar Pant	-	M/s Amul Auto Component Pvt. Ltd.	Plot No. 40, Sector-11, IIE, SIDCUL, Pantnagar, Udham Singh Nagar, Uttarakhand
3.	Sh. Mukesh Jha	-	M/s Ultra Tech Suspensions Pvt. Ltd.	Plot No. 29, Sector-11, Pantnagar, Udham Singh Nagar, Uttarakhand
4.	Sh. R.S. Rawat	-	M/s Mayur Industries Ltd.	Plot No. 7, Sector-11, Tata Vendor Park, Sidcul, Pantnagar - 263153, Udham Singh Nagar, Uttarakhand,
5.	Sh. Sunil Nayal	-	M/s Autoline Industries Ltd.	Plot No. 5,6,8, Sector-11, SIDCUL, Pant Nagar, Udham Singh Nagar- 263153, Uttarakhand
6.	Sh. Amit Sharma	-	M/s Autoline Industries Ltd.	Plot No. 5,6,8 Sector-11, SIDCUL, Pant Nagar, Udham Singh Nagar- 263153, Uttarakhand
7.	Sh. J.C. Kandpal	-	M/s Mayur Industries Ltd.	SIDCUL, Rudrapur, Udham Singh Nagar, Uttarakhand
8.	Sh. Sachin Bhandari	-	M/s Bajaj Motors Ltd.	41/11, IIE, SIDCUL, Pantnagar, Uttarakhand
9.	Sh. Sagar Tyagi	-	M/s BST Textile Mills	Plot No. 9, Sector-9, SIDCUL, Pantnagar, Rudrapur, Udham Singh Nagar
10.	Sh. D.N. Jaiswal	-	M/s Archidply Ind. Ltd.	Plot No. 7, Sector-9, SIDCUL, Pantnagar, Rudrapur, Udham Singh Nagar
11.	Sh. P.C. Pant	-	M/s Kiran Udhyog Pvt. Ltd.	Plot No. 34, Sector-11, SIDCUL, Pantnagar, Udham Singh Nagar
12.	Sh. Munish Lath	-	M/s Badve Engineering Ltd.	Unit No. XII, IIE, Tata Vendor Park, Pantnagar, Udham Singh Nagar, Uttarakhand
13.	Sh. Anoop Singh	-	M/s KLT Automotive & Tube Ltd.	Plot No. 20, Sector-11, Tata Vendor Park, Pantnagar, Udham Singh Nagar, Uttarakhand
14.	Sh. Rupendra Singh	-	M/s Dali & Samir Engineering Pvt. Ltd.	Plot No. 43, Sector-11, Tata Vendor Park, IIE Pantnagar, Rudrapur - 263153, Uttarakhand
15.	Sh. Mor Singh	-	M/s Mangala Auto Engineering Pvt. Ltd.	Plot No. 1-C, Sector-11, IIE, SIDCUL, Tata Vendor Park, Pantnagar, Udham Singh Nagar, Uttarakhand
16.	Sh. Ashwini Kumar	-	M/s Perfect Dynamics Auto Pvt. Ltd.	Village - Fulsunga, Post - Transit Camp, Tahsil - Kichha, Rudrapur, Dist. Udham Singh Nagar
17.	Sh. Arunesh Kumar	-	M/s Om Sai Industries	Village - Fulsunga, Post - Transit Camp, Tahsil - Kichha, Rudrapur, Dist. Udham Singh Nagar
18.	Sh. Vivek Jha	-	M/s Sanjay Technoplast Pvt. Ltd.	Village - Fulsunga, Post - Transit Camp, Tahsil - Kichha, Rudrapur, Dist. Udham Singh Nagar

**List of Participants in Hearing at Rudrapur on 15.03.2013**

Sl. No.	Name	Designation	Organization	Address
19.	Sh. A.L. Dandavate	-	M/s Bajaj Auto Ltd.	Plot No. 2, Sector-10, SIDCUL, Pantnagar, Rudrapur, Dist. Udham Singh Nagar, Uttarakhand
20.	Sh. Mayur Ghode	-	M/s Anusuya Auto Press Part Pvt. Ltd.	Plot No. 53, 54, Sector-11, IIE, Pantnagar, Rudrapur, Dist. Udham Singh Nagar, Uttarakhand
21.	Sh. Vikas Jindal	-	M/s Kumaon Garhwal Chamber of Commerce & Industry	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt.- Udham Singh Nagar
22.	Sh. Darbara Singh	-	M/s Kumaon Garhwal Chamber of Commerce & Industry	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt.- Udham Singh Nagar
23.	Sh. Pawan Agarwal	Chairman	Power Committee, M/s Kumaon Garhwal Chamber of Commerce & Industry	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt.- Udham Singh Nagar
24.	Sh. Suresh Kumar	-	M/s La-opala RGLN	B-108, Eldeco, SIDCUL Industrial Park, Sitarganj, Distt.- Udham Singh Nagar
25.	Sh. R.K. Gupta	-	M/s Gujarat Ambuja Exports Ltd.	C-50, Eldeco, Sitarganj, Distt.- Udham Singh Nagar
26.	Sh. D.K. Singh	-	M/s Omega Ice Hill Pvt. Ltd.	Plot No. 37, Sector-4, SIDCUL, Rudrapur, Udham Singh Nagar-263153
27.	Sh. Amresh Dwivedi	-	M/s Varroc Engineering Pvt. Ltd.	Plot No.-20, Sector-9, Integrated Industrial Estate (IIE), SIDCUL, Pantnagar, Rudrapur, Udham Singh Nagar
28.	Sh. Dilip Mishra	-	M/s Wheels India Ltd.	Plot No.-56, Sector-11, Pantnagar, Rudrapur, Udham Singh Nagar
29.	Sh. Jagdish Chandra Singh	-	M/s Bhramari Steels Pvt. Ltd.	New Mandi Gate, Bareilly Road, Haldwani, Distt. Nainital
30.	Sh. Umesh Sharma	-	M/s Voltas Ltd.	Plot No. 2-5, Sector-8, IIE, Pantnagar Industrial Area, Rudrapur, Udham Singh Nagar-263153
31.	Sh. Yogesh K. Gautam	-	M/s UCP Ltd.	Plot No. 1, Sector-10, IIE, Pantnagar Industrial Area, Rudrapur, Udham Singh Nagar-263153
32.	Sh. Maneesh Gupta	-	M/s Shivani Locks Pvt. Ltd.	Plot No. 44, Sector-11, IIE, Pantnagar, Rudrapur, Udham Singh Nagar
33.	Dr. Ganesh Upadhyaya	-	-	Village & P.O.-Shantipuri No.-2, Kichha, Distt.-Udham Singh Nagar
34.	Sh. Bharat Saigal	-	M/s Innovative Textiles Pvt. Ltd. Pvt. Ltd.	Plot No. 8, Block-B, Phase-1, Sidcul Industrial Park, Sitarganj, Distt. Udham Singh Nagar, Uttarakhand-262405
35.	Sh. V.V. Joshi	-	M/s Tata Motors Ltd.	Plot No. 1, Sector 11, IIE, SIDCUL, Pant Nagar, Udham Singh Nagar
36.	Sh. R.K. Mahapalan	-	M/s Tata Motors Ltd.	Plot No. 1, Sector 11, IIE, SIDCUL, Pant Nagar, Udham Singh Nagar

**List of Participants in Hearing at Rudrapur on 15.03.2013**

<b>Sl. No.</b>	<b>Name</b>	<b>Designation</b>	<b>Organization</b>	<b>Address</b>
37.	Sh. Manish Tanwar	-	M/s HCL Infosystems Ltd.	Plot No. 1&2, Sector-5, IIE, Pant Nagar, SIDCUL, Distt.- Udham Singh Nagar
38.	Sh. Parminder Singh Rattan	-	M/s Rattan Legal Associates	No. 10, Barlowganj, Mussoorie, Dehradun
39.	Sh. Mahesh Varma	-	M/s Jalpac India Ltd.	Village-Tularampur, P.O.-Mota Haldu, Haldwani, Nainital, Uttarakhand-262402
40.	Sh. Puneet Mohindra	-	M/s Kashi Vishwanath Steels Ltd.	Narain Nagar Industrial Estate, Nainital Road, Kashipur-244713, Distt. Udham Singh Nagar
41.	Sh. Ashok Bansal	-	M/s. Rudrapur Solvents Pvt. Ltd.	Lalpur, Kichha, Rudrapur, Distt.- Udham Singh Nagar
42.	Sh. Rajeev Gupta	-	M/s Galwalia Ispat Udyog Ltd.	Narain Nagar Industrial Estate, Nainital Road, Kashipur-244713, Distt. Udham Singh Nagar
43.	Sh. Mahendra Prasad	-	M/s Kortek Electronics India Ltd.	Plot No.-543, Village-Kishanpur, Tehsil-Kichha, Distt: Udham Singh Nagar, Uttarakhand (Rudrapur), Pincode - 263148
44.	Sh. Anurag Tiwari	-	M/s Ganesha Echosphere Ltd.	Plot No. 6, Sector-2, IIE Pantnagar, Rudrapur, Udham Singh Nagar
45.	Sh. Rais Ahmed	-	M/s Ganesha Echosphere Ltd.	Plot No. 6, Sector-2, IIE Pantnagar, Rudrapur, Udham Singh Nagar
46.	Sh. P.K. Dubey	-	M/s Ganesha Echosphere Ltd.	Plot No. 6, Sector-2, IIE Pantnagar, Rudrapur, Udham Singh Nagar
47.	Sh. V.P. Joshi	-	M/s Gee Cee Corp. Pvt. Ltd.	Plot No. 15, Sector-9, SIDCUL, Pantnagar, Udham Singh Nagar
48.	Sh. S.S. Rawat	-	M/s Nestle India Ltd.	Sector-1, Plot Number-1A, IIE, Pantnagar, Rudrapur, Udham Singh Nagar- 263145
49.	Sh. Sanjay Kr. Sharma	-	M/s Advik Hitech Pvt. Ltd.	Sector-9, Plot No.-7A, Integrated Industrial Estate (IIE), Pantnagar, Rudrapur, Udham Singh Nagar-263153
50.	Sh. Suresh Singh Yadav	-	M/s Autocomp Corporation Panes Pvt. Ltd.	Plot No. 38-39, Sector-11, IIE, Pantnagar, Rudrapur, Udham Singh Nagar
51.	Sh. R.B. Biradar	-	M/s Radico Khaitan Ltd.	B-3, UPSIDC, Industrial Area, Sultanpur Patti, Bazpur, Distt. Udham Singh Nagar
52.	Sh. Atul Mittal	-	M/s Radico Khaitan Ltd.	B-3, UPSIDC, Industrial Area, Sultanpur Patti, Bazpur, Udham Singh Nagar
53.	Sh. R.S. Yadav	-	M/s India Glycols Ltd.	A-1, Industrial Area, Bazpur Road, Kashipur, Distt. Udham Singh Nagar-244713
54.	Sh. L.M.C. Bhatt	-	M/s Sravanthi Energy Pvt. Ltd.	Kashipur, Udham Singh Nagar

**List of Participants in Hearing at Rudrapur on 15.03.2013**

Sl. No.	Name	Designation	Organization	Address
55.	Sh. A.K. Goel	Secretary General	M/s Kumaon Garhwal Chamber of Commerce & Industry	Chamber House, Industrial Estate, Bazpur Road, Kashipur, Distt.- Udham Singh Nagar
56.	Sh. Amit Kapoor	-	M/s Minala Corporation Ltd.	Plot No. 9, Sector-10, SIDCUL, Rudrapur, Udham Singh Nagar
57.	Sh. Surendra Girdhar	-	-	Tarai Shoe Centre, Bhagat Singh Chowk, Rudrapur, Dist. Udham Singh Nagar
58.	Sh. Tushar Agrawal	-	M/s BTC Industries Ltd.	Village-Kishanpur, Post-Deoria, Tehsil- Kiccha, Dist. Udham Singh Nagar
59.	Sh. Ram Kumar Agarwal	-	M/s Umashakti Steels Pvt. Ltd.	Village-Vikrampur, Bannakheda Road, Bazpur, Distt. Udham Singh Nagar
60.	Sh. Balkar Singh	-	-	Raipur Khurd, P.O.-Kashipur, Distt. Udham Singh Nagar
61.	Sh. Bhupendra Singh	General Secretary	Bhartiya Kisan Union	Village & Post-Dhakia No. 1, Tehsil-Kashipur, Udham Singh Nagar
62.	Sh. Teeka Singh Saini	Chairman	Sayunkt Kisan Sangharsh Committee,	33-Katoratal, Kashipur, Distt.- Udham Singh Nagar
63.	Sh. Kuldeep Singh Cheema	-	Bhartiya Kisan Union	Village & Post-Dhakia No. 1, Tehsil-Kashipur, Udham Singh Nagar
64.	Sh. Jeet Singh Cheema	-	Bhartiya Kisan Union	Village & Post-Dhakia No. 1, Tehsil-Kashipur, Udham Singh Nagar
65.	Sh. Satnam Singh Cheema	-	Bhartiya Kisan Union	Village-Chanakpur Farm, P.O.-Kashipur, Udham Singh Nagar
66.	Sh. Karnail Singh	President	Bhartiya Kisan Union Committee	Guru Nanak Agri Clinic, Near Gurudwara, Gadarpur, Distt. Udham Singh Nagar
67.	Sh. H.D. Arora	President	Mohalla Swachata Samiti	Civil Lines, Doctors Colony, Rudrapur, Udham Singh Nagar

**List of Participants in Hearing at Dehradun on 18.03.2013**

Sl. No.	Name	Designation	Organization	Address
1.	Sh. Mahesh Sharma	Secretary General	Uttarakhand Industrial Welfare Association	Off. G-31, UPSIDC, Industrial Area, Selaqui, Dehradun, Uttarakhand
2.	Sh. Rakesh Bhatia	Sr. Vice President	Uttarakhand Industrial Welfare Association	E-8, Govt. Industrial Area, Patel Nagar, Dehradun
3.	Sh. Naresh Bansal	-	Uttarakhand Industrial Welfare Association	Off. G-31, UPSIDC, Industrial Area, Selaqui, Dehradun, Uttarakhand
4.	Sh. Manoj Gupta	-	Uttarakhand Industrial Welfare Association	Off. G-31, UPSIDC, Industrial Area, Selaqui, Dehradun, Uttarakhand
5.	Sh. Pankaj Gupta	President	Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun
6.	Sh. Rajiv Agarwal	Sr. Vice-President	Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Industrial Area, Dehradun
7.	Sh. P.K. Rajput	Executive Director	M/s Alps Industries Ltd.	Plot No. 1-A, Sector-10, IIE, SIDCUL, Roshnabad Road, Haridwar-249403
8.	Sh. Man Singh	General Manager (Engg.)	M/s Alps Industries Ltd.	Plot No. 1-A, Sector-10, IIE, SIDCUL, Roshnabad Road, Haridwar-249403
9.	Sh. Naval Duseja	AGM	M/s Flex Foods Ltd	Lal Tappar Industiral Area, Haridwar Road, Dehradun
10.	Sh. Vishnu Dutt Tyagi	Asst. General Manager (HR & A)	M/s Ultimate Flexipack Ltd.	Plot No. 12, Sector-11, IIE, SIDCUL, Haridwar-249403
11.	Sh. Gulshan Roy	-	Shri Ganesh Roller Flour Mill	Mohabbewala, Dehradun
12.	Sh. G.S. Manchanda	Proprietor	Hotel India	Library, Mussoorie - 248179
13.	Sh. Ajay Bhargava	Secretary General	Mussoorie Hotels Association	Hotel Surya Kiran, Mall Road, Mussoorie
14.	Sh. Rakesh Gupta	Accountant	Hotel Aketa	Rajpur Road, Dehradun-248001
15.	Sh. Rakesh Kr. Tyagi	-	M/s Creative Industries	Plot - 5/5A, Sector 3, SIDCUL, IIE, Haridwar
16.	Sh. R.K. Jalan	-	M/s Revati Print O Pack	Sector-2, Plot No. 37, IIE, SIDCUL, Haridwar
17.	Sh. Ashish Gupta	-	M/s GLS Electronics Industries Pvt. Ltd.	Plot No. 5, Sector-2, SIDCUL, Haridwar
18.	Sh. Yogendra Singh Rathi	Editor	M/s Unnati Times Daily	34&35, Mayur Vihar, Kandoli, Dehradun
19.	Sh. R.K. Rajwar	Unit Coordinator (Engg.)	Project Management Unit	Swajal (Drinking Water Dept.), Mussoorie Diversion Road, Dehradun

**List of Participants in Hearing at Dehradun on 18.03.2013**

Sl. No.	Name	Designation	Organization	Address
20.	Sh. G.C. Pande	Managing Director	Uttarakhand Peyjal Sansadhan Vikas & Nirman Nigam	11, Mohini Road, Dehradun
21.	Sh. P.K. Goel	Executive Engineer	State Water & Swachhata Mission	01, Bhagirathi Puram, Doon Vihar, Jhakhan, Dehradun
22.	Sh. Shanti Prasad Bhatt	-	Uttarakhand Kranti Dal	22, Mitralok, Colony, Dehradun
23.	Sh. Vishwamitra	-	-	36, Panchsheel Park, Chakrata Road, P.O.-Forest Research Institute (FRI), Dehradun
24.	Sh. M.S. Mehta	-	-	109/7, Dharampur, Dehradun
25.	Sh. S.P. Nautiyal	-	-	Nehru Gram-Lower, P.O.-Nehru Gram, Dehradun
26.	Sh. K.S. Pundir	-	-	Shanti Kunj, Lane : 1-A, Lower Natthanpur, P.O.-Nehrugram, Dehradun
27.	Sh. Vigyan Swarup Bhatnagar	-	-	98/3, Bell Road, Near Junior Hilton School, Clementown, Dehradun
28.	Sh. M.G. Trivedi	-	Commander Works Engineers	Mall Road, Dehradun Cantt., Dehradun
29.	Sh. K.K. Dhiman	GE	Commander Works Engineers	Garhi Cantt, Dehradun
30.	Sh. G.D. Madhok	-	-	146/1, Rajendra Nagar, Street No. 9, Kaulagarh Road, Dehradun
31.	Col. D. Singh	-	-	C-107, Sector-3, Defence Colony, Dehradun
32.	Col. S.P.S. Negi	-	-	B-262, Sector-4, Defence Colony, Dehradun
33.	Sh. O.P. Rank	-	-	104, Mahendra Vihar, Ballupur Road, Dehradun

**List of Participants in Hearing at New Tehri on 20.03.2013**

<b>Sl. No.</b>	<b>Name</b>	<b>Designation</b>	<b>Organization</b>	<b>Address</b>
1.	Sh. Umesh Gusain	Chairman	Nagar Palika	New Tehri
2.	Sh. Chiran Jeet Tiwari	Sabhasad	Nagarpalika	New Tehri
3.	Sh. Rajpal Singh Miya	Sabhasad	Nagarpalika	New Tehri
4.	Sh. Jeet Ram Bhatt	Member	District Panchayat	District Planning Committee, New Tehri
5.	Sh. Anil Uniyal	-	-	Sector-9B, 11/2, Bauradi, New Tehri
6.	Sh. Vijay Kathait	-	-	B/29, Near Main Market, New Tehri
7.	Sh. Gulab Singh Panwar	-	-	C/o Sh. Darshan Lal Bhatt, B-3, Covered Market, Bauradi, New Tehri
8.	Sh. Sohan Singh Chauhan	-	-	Sector-2, Flat No. 104, Near Soni Hotel, New Tehri
9.	Sh. Vikram Singh	-	-	Village-Nawagar, New Tehri
10.	Sh. Vinod Mamgain	-	-	Near R.S. Public School, New Tehri Road, Badshaithaul, New Tehri
11.	Sh. Roshan Singh Chauhan	-	-	Village-Painula, P.O.-Pangarkhal, New Tehri