Order on Retail Tariff

for

Uttarakhand Power Corporation Ltd.

for

2007-08 & 2008-09

18th March 2008

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

1st Floor of Institution of Engineers (I) Building,

Near ISBT, Majra, Dehradun

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Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No.: 04/2007

In the Matter of:

Determination of ARR for the years 2007-08 and 2008-09 and retail tariff for sale to consumers of Uttarakhand Power Corporation Ltd. (UPCL), a Government owned company in the State.

AND

In the Matter of:

Uttarakhand Power Corporation Limited .... Petitioner
Urja Bhawan, Kanwali Road, Dehradun

Coram

Sh. V.J. Talwar	**Chairman**
Sh. V.K. Khanna	**Member**

Date of Order: 18th March 2008

This Order relates to Petition no. 04/2007 for determination of ARR and Tariff for Uttarakhand Power Corporation Ltd. for 2007-08 (hereinafter referred to as "UPCL" or "Petitioner" or "licensee") and *suo-moto* proceedings for determination of ARR and Tariff of UPCL for 2008-09, in exercise of its powers under section 86(1)(a) of the Electricity Act, 2003 read with Regulation 56 of Uttaranchal Electricity Regulatory Commission (Conduct of Business) Regulations, 2004. For sake of convenience, this Order is divided into following 9 Sections:

1. Background and Procedural History
2. Petitioner's Submissions
3. Stakeholders' Responses and Petitioner's Comments
4. Commission's Approach
5. Analysis of Petitioner's Metering, Billing and Collection System
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7. Analysis of Annual Revenue Requirement
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1. Background and Procedural History

Uttarakhand Power Corporation Ltd. (UPCL) is a company wholly owned by the State Government and the sole distribution licensee engaged in the business of Distribution and retail supply of power in the State. The Electricity Act, 2003 (Act) read with the Commission' 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 ensuing Financial Year, on or before 30th November each year.

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

- UERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2004.
- UERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, (First Amendment) 2006.
- UERC (Conduct of Business) Regulations, 2004

The Commission issued its order on July 12, 2006 on the Petition filed by UPCL for determination of Retail Tariff for 2006-07.

After repeated reminders, UPCL filed its Annual Revenue Requirements and the Tariff proposals for 2007-08 on August 17, 2007 which had numerous deficiencies. The Commission vide its letter no. 593/UERC/07 dated September 20, 2007 asked the Petitioner to provide additional information in certain heads such as Depreciation, Receivables, Financing Cost, O&M expenses, proposal for Regulatory Assets, Revenue Details, Tariff proposal and rationale behind it, Sales forecast, Power Purchase Cost and system losses. The Petitioner was also asked to file truing up figures for the past years in the formats provided by the Commission.

The Petitioner submitted the additional information vide its letter No. 900/UPCL/ARR/2008-09 dated October 15, 2007. The Commission analysed the information submitted by the Petitioner and found that the information submitted was incomplete. The Commission vide its letter dated October 20, 2007 asked the Petitioner for clarifications on certain other issues and to furnish additional information such as Provisional Annual Accounts, basis of sales projections, certain clarifications regarding capital expenditure and power purchase expenses.

In response to the queries raised by the Commission, UPCL submitted its responses vide letter No. 1594/UPCL/ARR/B-5/DF/UERC dated November 14, 2007. Considering this additional information, the Petition was admitted on November 19, 2007 and the proposals were notified by the Petitioner in leading newspapers on November 22, 2007 for inviting responses from the stakeholders **(Annexure 3(a))**. Copies of the summary of the proposals were also sent to members of the Advisory Committee and the details were made available at the Commission's office and its website as well as in the Petitioner's offices.

As stated earlier, in accordance with the provisions of Regulation 56(4) of UERC (Conduct of Business) Regulations, 2004 every Licensee is required to submit its Petition for Determination of ARR and Tariff by 30th November of each year for the ensuing year. While the ARR and Tariff Determination for 2007-08 was in process, the Commission directed the Petitioner to file its Petition for ARR and Tariff Determination for 2008-09. However, the Petitioner had not submitted its Petition for ARR and Tariff Determination for 2008-09 even after extension of due date till December 31, 2007. Considering that in case the Petitioner submits its Petition for ARR and Tariff Determination for 2008-09 after issuance of Order on ARR and Tariff Determination for 2007-08, it may lead to revision in tariff again after a short span of 2-3 months which would give rise to uncertainties in the minds of consumers, the Commission initiated *suo-moto* proceedings for Determination of UPCL's ARR and Retail Tariff for 2008-09 on the basis of information already filed by the Petitioner upto September 2007. The public notice inviting comments on *suo-moto* proceedings for ARR and Tariff determination for 2008-09 was published in leading newspapers on 12.01.2008 **(Annexure 3(b))** and responses were invited till January 28, 2008.

The Commission received total 56 responses in writing on UPCL's ARR and Tariff Petition for 2007-08 and *suo-moto* proceedings for 2008-09. The list of respondents who submitted their objections are enclosed at **Annexure-4**.

The Commission held common public hearings on Determination of Generation Tariff, Transmission Tariff and Retail Supply Tariff for 2007-08 and 2008-09 with a view to give adequate opportunity of personal hearing to the objectors for which hearing was held not only on the representations/comments received but an opportunity was also given for open hearing to all the participants, irrespective of whether they had submitted written objections / comments on the tariff application or not at the following places in the State. The list of participants who attended the

Public Hearing are enclosed at **Annexure-5**

Table 1.1: Schedule of Hearings

No.	Place	Date
1	Srinagar	10.01.2008
2	Almora	16.01.2008
3	Haldwani	17.01.2008
4.	Ramnagar	19.01.2008
5.	Roorkee	21.01.2008
6.	Dehradun	22.01.2008

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

Meanwhile, first round of Technical Validation Session was held with UPCL on November 29, 2007 at Commission's office. The additional information asked from the Petitioner during the session was as follows:

- Basis of Sales projections and estimation of losses
- Summary of Source-wise, month-wise actuals for power purchase in the first six months of 2007-08 (April to September 2007)
- Copy of Power Purchase bills for the month of September 2007 for all sources of power purchase
- Details of the unallocated share available to the Petitioner during past years
- Justification and assumptions for considering the losses in the PTCUL system as 4.5%
- Details of actual other costs of power purchase such as incentive, income tax and other charges paid to Central Generating Stations for 2006-07
- Note on the assumptions and basis for projecting O&M expenses for 2007-08 and details of O&M expenses capitalised for 2006-07.
- Basis of projections for Non-Tariff Income
- Details of the physical progress of capital expenditure for 2005-06 & 2006-07 for different schemes
- Details of loans, interest and repayment computations corresponding to assets capitalised during 2005-06 and 2006-07

- Basis and assumptions of computing interest on consumer security deposit for 2005-06, 2006-07 and 2007-08
- Revised workings for the depreciation as per the rates specified in the Regulations against the various assets
- Detailed calculations for the Government Guarantee fee and also a note on the same.
- Data for truing up of ARR for 2006-07 in the formats specified by the Commission and detailed note on reasons for variation in actual expense and revenue as compared to approved figures for 2006-07
- Detailed note on the efforts made to collect receivables, UPCL's policy and a note on provisioning of bad debts considering consumer category-wise age profile
- Basis of Projections of Income from Delayed Payment Surcharge for 2007-08

In response to the details asked by the Commission during the First Technical Validation Session, the Petitioner submitted its response through its letter no. 1612 dated December 12, 2007 and submitted the revised Annual Revenue Requirement for 2007-08.

The second round of Technical Validation Session was held with UPCL on December 17, 2007 and December 19, 2007. The additional information asked from the Petitioner during this session was as follows:

- Provisional Tariff Order for Chamera-II station issued by CERC
- O&M Capitalisation policy and O&M expenses capitalised during 2006-07
- Basis of projections for Non-Tariff Income
- Physical progress and details of various schemes linked with financial progress and capitalisation details of schemes capitalised
- Details of loans, interest and repayment computations corresponding to assets capitalised during 2005-06 and 2006-07 and break-up of interest expenses under two heads i.e., interest expenses related to capitalised assets and interest expenses for ongoing capital schemes
- Basis of Interest on Consumer Security Deposit with assumptions and supporting computations for Interest on Consumer Security Deposit for 2005-06, 2006-07 and 2007-08
- Details and computation of Depreciation for 2005-06 and Original Cost of Fixed Assets and basis of original cost of fixed assets as on date alongwith documentary evidence and calculations of Depreciation for 2006-07 and 2007-08 in accordance with the Regulations

- Truing up of ARR for 2006-07 in the formats specified by the Commission and detailed note on reasons for variation in actual expense and revenue as compared to approved figures for 2006-07
- Detailed note on the efforts made to collect receivables, UPCL's policy and a note on provisioning of bad debts considering consumer category-wise age profile of arrears
- Basis of Projections of Income from Delayed Payment Surcharge

On December 31, 2007, UPCL through its letter no 1620/UPCL/UERC/B-5 submitted the responses to the queries raised by the Commission during the Second Technical Validation Session. The Petitioner in this submission again revised the Annual Revenue Requirement for 2007-08.

In compliance of undertaking given by the Petitioner before Hon'ble ATE during the hearing on Appeal No. 225 of 2006, the Petitioner filed a truing up Petition for the years 2001-02 to 2004-05 on 25.01.2008. The Petitioner also subsequently revised its claims for truing up for the year 2006-07 through another Petition for true up for 2005-06 and 2006-07.

The Commission has examined various claims made by UPCL in these submissions in subsequent sections.

2. Petitioner's Submissions

This Section deals with the summary of Proposals made by the Petitioner, UPCL, in its Aggregate Revenue Requirement (ARR) and Retail Tariff proposals for 2007-08.

2.1 Abstract of Aggregate Revenue Requirement (ARR) of UPCL

Uttarakhand Power Corporation Limited (UPCL) is presently the sole licensee for undertaking distribution of electricity in the State of Uttarakhand. UPCL filed its ARR and Tariff Petition for 2007-08 on August 17, 2007. In this Petition, the Petitioner has submitted the revised Annual Revenue Requirement (ARR) for 2006-07 considering the actual figures as Rs. 1209.64 Crore and with the expected revenue of Rs. 919.03 Crore, the Petitioner has claimed revenue deficit of Rs. 290.60 Crore for 2006-07.

The Petitioner has projected the Annual Revenue Requirement for 2007-08 as Rs. 1698.86 Crore and considering the projected revenue of Rs. 1156.62 Crore has estimated the revenue gap of Rs. 542.23 Crore for 2007-08. The Petitioner in its subsequent submissions dated December 12, 2007 revised the figures of Transmission Charges and Interest on Working Capital and submitted the revised ARR for 2007-08 as Rs. 1648.72 Crore. The summary of Petitioner's revised ARR for 2007-08 is given in the following Table:

Table 2.1: Annual Revenue Requirement for 2007-08 (Revised) (Rs. Crore)

S.No.	Particulars	2007-08
1	Power Purchase Expenses	1102.91
2	Increase in UJVNL power purchase costs due to income tax payable	61.14
3	Transmission Charges	92.62
4	O & M Expenses	215.77
5	Interest & Finance charges (Net)	47.81
6	Depreciation (As per rates given in UERC Regulations)	55.84
7	Interest on Working Capital	11.19
	Gross Expenditure	***1587.28***
	Other Expenses	
8	Provision for Bad & Doubtful Debts	28.92
9	Return on Equity	0.70
10	Adjustment for reduction of steel units tariffs	35.00
	Net Expenditure	***1651.90***
11	***Less***: Non-tariff income	3.18
	Annual Revenue Requirement	**1648.72**

2.2 Action plan for 2007-08

The Petitioner submitted that it realises the importance of increasing efficiency in its operations and is committed to undertake a number of technical and commercial measures in this direction in 2007-08 as follows:

2.2.1 Human Resources Study

The Petitioner submitted that it has undertaken a comprehensive human resources study by appointing National Productivity Council, New Delhi to study its organisation structure, human resources and the business process of its field units/offices as well as its Corporate Office in terms of their efficiency. The final report of National Productivity Council is expected by 31.08.2007. On the basis of findings and recommendations of study, the Petitioner shall make necessary organisational restructuring and redeployment of the manpower shall be made to achieve the desired result.

2.2.2 Commercial Process Improvement

The Petitioner has submitted that it has completed a study of its commercial procedures and practices covering new service connections, meter reading, billing process, bill distribution, collection, maintenance of consumer database/MIS, quality of supply, consumer services and receivable management. The Petitioner has submitted that it has already initiated a number of commercial measures such as online billing system, centralized billing and MIS for high value consumers, outsourcing of meter reading and bill distribution in some of the districts, drop boxes for collection of payments, collection through post offices, Corporate level dispute settlement committee at head office etc.

2.2.3 System Study for Identifying Low Voltage Areas and Remedial Measures

The Petitioner submitted that in compliance to the Commission's directions, to carry out a system study for identification of the low voltage pockets all over the State and corrective measures to improve supply voltages, it has awarded the work to two engineering consultants, namely, M/s. Areva T&D India Limited and M/s. Trident Techlabs Pvt. Ltd, who have undertaken the study. They are expected to complete the study and submit their reports by September 2007 for Pauri and Almora Districts in the first phase. The final reports for the remaining districts are expected to be submitted by the consultants by December, 2007. The Petitioner has, subsequently, submitted the reports of the above two districts falling under Garhwal and Kumaon Zone respectively.

2.2.4 Energy Audit & Non-Technical Loss Reduction

The Petitioner submitted that it has been assessing losses at all 33 kV and some 11 kV feeders and energy audit of all independent feeders is also being done. The Petitioner proposed to dedicate a team of officers at the corporate office to continuously analyse the outputs of the energy audit exercise to take specific measures on high loss feeders/distribution transformers.

In order to reduce its non-technical losses, the Petitioner will be taking a number of steps like regularisation of unauthorised connections/load, bringing un-ledgerised consumers to the billing fold, replacement of defective meters, ensuring accurate and complete meter reading and billing, vigilance and raid activities etc. The Petitioner intends to introduce pre-paid metering on pilot basis in one urban sub-division.

2.2.5 Metering

The Petitioner has submitted that since the formation of the Company, the Petitioner has been putting its best efforts to complete metering of all its consumers. The summarised information on metering as of April 30, 2007 as been submitted by the Petitioner, which is shown in the Table below:

Table 2.2: Details of Metered and Un-metered Consumers

Category	Total As on 30th June 2005				Total As on 30th April 2007			
	Metered	Un-metered	% of Metered Consumers	Total	Metered	Un-Metered	% of Metered Consumers	Total
Domestic	805,255	52,489	93.88%	857,744	875,485	20,397	97.72%	895,882
Commercial	98,801	1,151	98.85%	99,952	104,670	-	100.00%	104,670
Public Lamps	171	47	78.44%	218	216	-	100.00%	216
Departmental Employees	0	8,153	0.00%	8,153	7,679	-	100.00%	7,679
Public Inst./ Govt. Bodies	2,213	96	95.84%	2,309	2,376	-	100.00%	2,376
State Tube Well	344	337	50.51%	681	655	-	100.00%	655
Private Tube Well	2,688	15,061	15.14%	17,749	16,494	2,143	88.50%	18,637
Total	**909,472**	**77,334**	**92.16%**	**986,806**	**1,007,575**	**22,540**	**97.81%**	**1,030,115**

The Petitioner has emphasized that it is putting its best effort possible to achieve 100% metering of its consumers but it is unable to achieve the desired progress in the matter due to the following reasons:

- Stiff resistance from the consumers
- Prevalent tariff for un-metered supply for rural areas domestic category is Rs.120/connection/month, irrespective of the contracted load of the consumer, resulting in higher financial burden on the below poverty line consumers having load upto 0.50 kW and on the contrary, benefiting other consumers having higher load.

The Petitioner mentioned that it had filed a Petition before the Commission vide its letter No.-116/UPCL/UERC dated 23-06-2006 praying to modify the tariff for un-metered supply, particularly in rural domestic consumer category.

The Petitioner, in this ARR Petition has again proposed prohibitive tariff for unmetered domestic rural and private tube-well consumers to enable complete metering of consumers under these categories.

2.2.6 Strengthening of Distribution System

The Petitioner submitted that it has undertaken strengthening of Distribution System under the following two categories:

- Funded Distribution Investment Program under APDRP Program
- Non-Funded Distribution Investment – Internal System Improvement Works

2.2.7 Rural Electrification

During 2005-06, 304 un-electrified/de-electrified villages and 1,099 hamlets were electrified. During 2006-07, 581 un-electrified/de-electrified villages and 1,989 hamlets were electrified. The target during 2007-08 is set for electrification of balance 534 un-electrified/de-electrified villages and 4,355 hamlets by March 31, 2008.

2.3 Energy sales forecast

2.3.1 Sales for 2006-07

The Petitioner submitted that it has considered the actual sales based on the commercial reports available for 2006-07. For consumers in domestic and private tube wells categories, UPCL has considered the same consumption profile for un-metered and metered consumers, as both types of consumers are receiving supply under similar conditions.

The category-wise quantity variances between the revised sales figures submitted by the Petitioner for 2006-07 and those approved by the Commission in the Retail Tariff Order for UPCL for 2006-07, have been shown in the Table below:

Table 2.3: Approved and Actual Sales for 2006-07 (MU)

Sl. No.	Sub-category/Category	Approved	Actual	Variance
1	RTS-1: Domestic	1,170	1,037	-133
2	RTS-2: Non Domestic	741	544	-197
3	RTS-3: Public Lamps	56	41	-15
4	RTS-4: Private Tube Wells	114	154	40
5	RTS-5: Government Irrigation System	42	83	41
6	RTS-6: Public Water Works	192	196	4
7	RTS-7: Industry	3,210	1,568	-1,642
	LT Industry	*109*	*155*	*46*
	HT Industry	*654*	*971*	*317*
	Steel Units	*2,448*	*442*	*-2,006*
8	RTS-8: Mixed Load	-	65	65
9	RTS-9: Railway Traction	12	7	-5
	Total	**5,537**	**3,694**	**-1,843**

2.3.2 Energy Sales Forecast for 2007-08

UPCL has estimated the energy sales for 2007-08 based on the trends observed in the actual sales for the previous five years (2002-03 to 2006-07) and has used three parameters i.e., number of consumers, connected load and specific consumption to obtain a realistic forecast for energy sales in 2007-08. The category-wise details of the sales projections are given here under:

2.3.2.1 RTS-1: Domestic, including Snowbound Areas

The Petitioner submitted that it has considered the actual rural electrification in 2006-07 and projected rural electrification in 2007-08 under RGGVY scheme for projecting the consumption in 2007-08. The numbers of consumers within the domestic category (including consumers in snowbound areas) are 1,001,237 in 2006-07, which represents an increase of 9% over the previous year. UPCL has proposed a 20% increase in the number of consumers in the ensuing year due to culmination of the rural electrification program in 2007-08. The number of domestic consumers of UPCL at the end of 2007-08 is expected to be 1,214,151.

UPCL in its subsequent submissions mentioned that the domestic consumption for 2007-08 is estimated by considering one year growth rate of 2.8% over 2006-07 sales and additional 125 MU projected on account of addition of consumers under rural electrification program. The total number of new connections under RGGVY considered by UPCL is 1,90,362 and UPCL has assumed an average load per consumer of 0.75 kW and load factor of 10% for arriving at additional 125 MU sales. For snowbound consumers, the Petitioner has estimated the sales for 2007-08 as 16 MU based on consumption growth of 10-15% over 2006-07.

The total consumption for domestic category for 2007-08 is projected at 1257 MU.

2.3.2.2 RTS-2: Non-Domestic

The Petitioner has considered a growth equivalent to normal two years CAGR of 2.7% over 2006-07 sales, additional commercial sales of 30 MU on account of high urbanization and commercial activities and additional 30 MU as a result of efficiency improvement through reduction in losses. The total consumption for non-domestic category for 2007-08 is projected at 618 MU.

2.3.2.3 RTS-3: Public Lamps

The Petitioner has considered a growth equivalent to three years CAGR of 27% over 2006-07 sales. The total consumption for Public Lamps for 2007-08 is projected at 51 MU.

2.3.2.4 RTS-4: Private Tube-Wells

The Petitioner has recasted the consumption for the un-metered private tube-wells using the specific consumption @ 68.38 units per BHP per month as per the directions of the Commission. The Petitioner has considered a growth equivalent to two years CAGR of 10.5% over 2006-07 sales and estimated increase in consumption of 21 MU on account of additional connections of 1500 PTWs. The total consumption for this category for 2007-08 is projected at 193 MU.

2.3.2.5 RTS-5: Government Irrigation System

The Petitioner has projected the consumption for 2007-08 as 101 MU based on growth in number of connections expected to be released during 2007-08.

2.3.2.6 RTS-6: Public Water Works

The Petitioner has considered a growth equivalent to two years CAGR of 13.7% over 2006-07 sales and estimated increase in consumption of 16 MU on account of additional load to be released as per the State Government program and replacement of defective meters. The total consumption for this category for 2007-08 is projected at 239 MU.

2.3.2.7 RTS-7: Industrial Consumers

The Petitioner has considered a growth equivalent to three years CAGR of 31% over 2006-07 sales. The total consumption for industrial consumers for 2007-08 is projected at 2053 MU.

2.3.2.8 RTS-8: Mixed Load

The Petitioner has submitted that the total consumption of mixed load is 65 MU in 2006-07 and has projected the same to be 75 MU in 2007-08.

2.3.2.9 RTS-9: Railway Traction

The Petitioner has submitted that the total consumption of Railway Traction is 6 MU in 2006-07 and has projected the same to be 9 MU in 2007-08 considering an estimated increase in consumption on account of increase in load factor.

2.3.2.10 Total Energy Consumption

The summary of category-wise number of consumers, connected load and sales for 2006-07 and 2007-08 as projected by the Petitioner is given in the following Table:

Table 2.4: Category-wise Consumers, Connected Load and Sales

Category	Consumers		Connected Load (MW)		Demand (MU)	
	2006-07	**2007-08**	**2006-07**	**2007- 08**	**2006-07**	**2007- 08**
RTS-1: Domestic	1001237	1214151	1177.8	1381.5	1,037	1,257
Domestic	*988997*	*1199751*	*1167.3*	1369.1	1,023	1,241
Snowbound Areas	*12240*	*14400*	*10.5*	12.4	14	16
RTS-2: Non Domestic	117095	133035	353.6	401.8	544	618
Educational Institutions	*3540*	*4022*	*2.9*	3.3	11	12
Others	*113555*	*129013*	*350.7*	398.5	533	606
RTS-3: Public Lamps	343	432	9.4	11.9	41	51
RTS-4: Private Tube Wells	19033	23853	97	121.5	154	193
RTS-5: Government Irrigation Systems	854	1036	27.2	33	83	101
Upto 100 BHP	*814*	*987*	*24.2*	29.3	78	95
Above 100 BHP	*40*	*49*	*3*	3.6	5	6
RTS-6: Public Water Works	809	986	44.7	54.5	196	239
RTS-7: Industry	7500	9864	595.6	783.6	1,568	2,053
LT Industry	*6882*	*9051*	*122.8*	161.4	155	204
HT Industry	*572*	*752*	*372.9*	496.4	971	1292
Steel Units	*46*	*60*	*99.8*	125.8	442	557
RTS-8: Mixed Load	26	30	24.9	28.6	65	75
RTS-9: Railway Traction	1	1	6.8	9.4	7	9
Total	**1146898**	**1383388**	**2337**	**2825.9**	**3,694**	**4596**

2.4 Efficiency parameters

2.4.1 Distribution Loss

The Petitioner submitted that in its tariff petition for 2006-07, the Petitioner had requested the Commission to consider a loss level of 34.64% within its distribution network. However, the Commission in the Retail Tariff Order for UPCL for 2006-07 approved a loss level of 30.17%, and pointed out a shortfall of 8.4% from the target levels, after adding the losses in the intra-state and inter-state transmission network. The Petitioner submitted its inability to control the loss levels in either the PGCIL or PTCUL network and requested the Commission to consider the same while setting the distribution loss levels for UPCL.

The Petitioner submitted that the actual distribution loss level during 2006-07 computed as per the norms specified by the Commission for un-metered consumption is 33.20%. The target T&D loss level for 2007-08, as per the trajectory adopted by the Commission works out to 26.17%, which implies a reduction of 7.03% from the base value in March 2007.

The Petitioner emphasized that in view of the quantum of increasing rural supply on account of implementation of RGGVY scheme and considering the condition of the present distribution network and available resources, reduction of 7.03% losses within a year would be a stiff target. The Petitioner has requested the Commission to reconsider the ground realities and fix a target of achievable distribution loss target for the ensuing financial year. The Petitioner for 2007-08 has proposed the distribution loss level of 29.20% for 2007-08 (excluding external transmission loss), considering the annual loss reduction target of 4% set by the Commission.

2.5 Availability of Power and Power Purchase Cost

The Petitioner has estimated power availability during 2007-08 from various firm sources on the basis of indicated availability by various generators and past availability trends and other available information in the absence of specific indication by some generators. The cost estimates for the financial year 2007-08 for the Petitioner have been made on the basis of relevant tariff orders, recent bills, existing arrangements, notifications, etc. for various individual sources. The Petitioner has followed the methodology adopted by the Commission i.e. Merit Order Dispatch in the past for estimating the optimal power purchase cost likely to be incurred by it for meeting the energy requirements within the State.

The Petitioner has not considered any Unscheduled Interchanges (UI) with the regional grid, as by their very nature the quantum or the rate prevailing in real-time for such interchanges cannot be projected.

The projected availability from various firm sources of power and the associated cost estimates are discussed below:

2.5.1 Projected Availability from UJVNL

The Petitioner submitted that UJVNL has informed about indicative availability of 9 out of 11 existing plants and Maneri Bhali II. UJVNL has not submitted indicated availability of SHP's and 2 other existing plants (Mohammadpur and Pathri).

The monthly pattern of availability from various plants considered by the Petitioner is as follows:

- For 9 main UJVNL stations, considering the total annual indicated availability, estimated monthly power availability based on average % monthly availability in past four years
- For remaining 2 main UJVNL stations, considered average of total power availability of individual stations for past four years estimated forecasted monthly power availability based on their average % monthly availability in past four years
- For existing SHPs, considered the availability based on the monthly generation pattern over the last 4 years.

2.5.2 Cost of Power from UJVNL

For estimating the power purchase cost, the Petitioner for 2007-08 has considered the Annual Fixed Costs for the 9 main stations of UJVNL as per Commission Order dated July 12, 2006 and estimated the primary energy rate based on these fixed costs and the estimated generation. Further, the Petitioner has considered the cess and royalty per unit of generation as per latest GoU notifications. The primary energy rate for Mohammadpur and Pathri stations has been considered at 37 paise/unit as per the existing arrangements.

The Petitioner while estimating the power purchase cost for 2007-08 has also considered Rs. 61.21 Crore towards income tax for previous years and Rs. 9.37 Crore towards income tax for 2007-08 as informed by UJVNL.

2.5.3 Projected Availability from NTPC

For projecting the monthly availability from NTPC stations with firm allocations, the Petitioner has considered average monthly PLF achieved during the last 4 years i.e. from 2002-03 to 2005-06 and auxiliary consumption as indicated in power purchase bills. For Anta, Auraiya and Dadri Gas power stations, the Petitioner has considered the availability of these stations on liquid fuel and gas fuel in the ratio of corresponding PLF's over 2004-05.

2.5.4 Cost of Power from NTPC

The Petitioner has estimated cost of power purchase from NPTC based on the following assumptions:

- Average month on month increase in variable cost including FPA over March 2007 rates based on the analysis of monthly rates from April 2004 to March 2007 except for the variable costs of Anta, Auraiya and Dadri stations running on liquid fuel, for which the increase is considered at a uniform level of 1.37% per month.
- Annual Fixed Charges on the basis of CERC Tariff Orders and based on allocation of power to Uttarakhand
- Other Charges/Adjustments as average for the period April 2004 to March 2007
- Cost of power from Kahalgaon-II (Phase-I), new project at the provisional rate of Rs. 2.50/unit as intimated by NTPC, pending final approval

2.5.5 Projected Availability of Power from NHPC

The monthly energy availability for the existing stations based on the monthly design energy for these plants and Uttarakhand's firm share allocation from these stations and the net availability of 72 MU power from Dulhasti, new project of NHPC on the basis of share allocation by MoP, GoI considering the design energy of the project.

2.5.5.1 Cost of Power from NHPC

The Petitioner has estimated cost of power purchase from NPTC based on the following assumptions:

- Annual Fixed Charges on the basis of CERC Tariff Orders and based on allocation of power to Uttarakhand

- Other Charges / Adjustments as average for the period April 2004 to March 2007
- Variable rate based on CERC norms equivalent to the variable cost of thermal station in the region

2.5.6 Projected Availability of Power from Other CGS

Uttarakhand has firm allocation from Narora Atomic Power Plant (NAPP) of NPC. The Petitioner had sought details from NAPP regarding availability from its stations and NAPP indicated availability of 169.93 MU. For 2007-08, generation from NAPP for the month of April & May-07 is considered as nil as informed by NPCIL about the plant shutdown for maintenance purpose for these two months and the net availability from the project during 2007-08 is considered at 63 MU based on past trends.

Uttarakhand has an allocation of 2.7% from Tehri-I station of THDC and an allocation of 12% royalty power from the station. The Petitioner has forecasted availability of power from Tehri-I using the annual design energy of the plant.

2.5.7 Cost of Power from Other CGS

The Petitioner has considered the per-unit cost of power from NAPP at the indicated rate by NAPP. The tentative tariff of Tehri-I has been considered as Rs. 3.5 / kWh as indicated by THDC pending finalisation of tariff by CERC.

2.5.8 Projected availability of Power from IPPs and UREDA Projects

The Petitioner has considered the availability of power from these stations as indicated by generators except for Vishnuprayag station for which the Petitioner has estimated the availability based on capacity of the plant.

2.5.9 Cost of Power from IPPs and UREDA Projects

The Petitioner has considered the cost of the power from Rajwakti (Him Urja) and Hanumanganga station at Rs. 2.50 per unit and the cost of power for UREDA stations has been considered as Rs. 1.64 per unit. For RBNS Sugar Mill station, the Petitioner has taken the cost of power as 3.15 Rs. / unit as per tariff indicated by them.

2.5.10 Banking

The Petitioner had arrangements with Punjab State Electricity Board (PSEB) and Haryana in the past for banking surplus energy during certain months and withdrawing the banked energy along with an extra 5% during the months when the Petitioner faces a deficit energy situation. While estimating the power procurement cost for 2007-08, the Petitioner has considered banking of 206 MU during the surplus months and withdrawal of banked energy to the extent of 213 MU during deficit months. This has been incorporated in the merit order based generation scheduling by considering banking of energy as an extra-State demand/sale at zero cost and withdrawal of banked energy as procurement of power at zero cost. The quantum of banked energy in various months of 2007-08 has been considered proportionate to the surpluses in these months by the Petitioner. Similarly, the Petitioner has considered the withdrawal of banked energy proportionately in various deficit months.

2.5.11 Losses external to UPCL system

The Petitioner has considered the PGCIL losses as 4% in its energy transactions with the Northern Region i.e. while procuring power from Inter-State Generating Stations, withdrawing banked power from other States and trading (selling/purchasing). UPCL has also considered losses in the PTCUL system at 4.5%. PTCUL losses have been considered in all energy transactions except in procurement from SHPs and UREDA stations which are connected directly to the UPCL system.

2.5.12 Total Power Availability

Based on the availability of power from various sources as discussed above and after considering losses external to UPCL system, the net energy availability to UPCL for 2007-08 is estimated at 6114 MU.

2.5.13 Procurement of Deficit Energy

The Petitioner submitted that availability from firm sources of power is not expected to suffice for meeting the State requirement in the winter months and the Petitioner is in the process of contracting for additional power through various trading agencies. The Petitioner has projected a deficit of 590 MU at its boundary during winter months and has projected to meet the deficit power through UI overdrawl. The rate of UI overdrawl is assumed to be Rs.3.45 per unit by the Petitioner at regional interface (cost of UI overdrawl at frequency at 49.5 Hz), i.e. Rs.3.76 per unit at distribution boundary.

The Petitioner requested the Commission that in case cost of procurement of deficit power goes above Rs. 3.76 per unit, the Petitioner shall be either allowed to do load shedding or an appropriate recovery mechanism should be approved to recover the additional cost of power on monthly basis from the consumers as additional surcharge, as it will not be possible for the Petitioner to absorb such additional cost.

2.5.14 Trading

Higher cost energy, not dispatched for meeting the State requirement for 2007-08, has been considered by the Petitioner for sale through traders. The Petitioner has considered the sale rate as Rs. 2.63 per unit at the regional interface on the basis of the rate realized by the Petitioner while trading (selling) energy during the surplus (summer) months of 2006-07.

No trading has been considered by the Petitioner in case of stations whose variable cost is higher than this rate (for instance variable cost per unit of Anta, Auraiya and Dadri stations running on liquid fuel) as this would result in a loss.

As per the methodology followed by the Commission, the fixed cost of power for various stations has been proportionately allocated over the energy dispatched for trading and that dispatched for meeting State demand.

2.5.15 Total Power Purchase Cost

Based on assumptions and methodology discussed above, the Petitioner has estimated the total power purchase costs for meeting the State demand for the year 2007-08 at Rs. 1103 Crore.

2.6 Transmission and LDC Charges

The Petitioner for 2007-08 has considered the PGCIL transmission charges as Rs. 43 Crore. For PTCUL transmission charges, the Petitioner has first arrived at average per unit transmission charge considering the Transmission Charges and power purchase quantum approved by the Commission for 2006-07. On the basis of average rate per unit and estimated quantum of power purchase at PTCUL system, the Petitioner has estimated the PTCUL transmission charges as

Rs. 47.62 Crore.

2.7 Operations and Maintenance Expenses

The Petitioner submitted that the Commission in the Retail Tariff Order for UPCL for 2006-07, has approved a consolidated value of O&M expenses, factoring the effects of inflation, i.e. 4% and the proportionate increase in the number of consumers of UPCL. The actual O&M expenses for UPCL for the previous year 2005-06 have been considered by the Petitioner as the base value to estimate the amount of O&M expenses. With this approach the Petitioner has estimated the O&M expenses for 2006-07 and 2007-08 as Rs. 172.64 Crore and Rs. 215.77 Crore respectively as against the actual O&M expenses of Rs. 152.42 Crore during 2005-06.

2.8 Investment Plan

The Petitioner has submitted that it has executed various capital works amounting to about Rs. 264 Crore on various projects in 2005-06. The investment plans for 2006-07 and 2007-08 have been drawn up by the Petitioner considering the expected investments under various schemes like District Plan, State Plan, RGGVY, APDRP, PMGY and MNP including investment under system improvement works to be carried out by the Petitioner. The funding pattern of these investments has also been identified as per the details of these schemes. The capital investment plans for 2006-07 and 2007-08 have been presented in the Table below:

Table 2.5: Investment Plan for 2006-07 (Rs. Crore)

Sl. No.	Item	Grant / Internal Funds	Loan Amount Received	Utilisation during the year	Funding Agency
A)	**Scheme-Wise Capital Works**				
1	District Plan	-	9.30	14.50	GoU
2	State Plan		-	1.50	GoU
3	Rural Electrification	-	-	-	
a	RGGVY	360.00	44.80	267.00	REC/GoU
4	Private Tubewell	2.00	10.75	18.00	GoU
5	APDRP	-	5.00	40.72	GoI
6	PMGY	-	-	5.80	GoU
7	MNP	-	-	-	GoU
8	Equity	-	-	-	
9	Others (REC & NABARD for PTCUL)	-	-	-	
	Sub-Total (A)	***362.00***	***69.85***	***347.52***	

Table 2.5: Investment Plan for 2006-07 (Rs. Crore)

Sl. No.	Item	Grant / Internal Funds	Loan Amount Received	Utilisation during the year	Funding Agency
B)	**Others - Internal Capital Works**				
1	New / Upgradation of 33/11 kV Sub-Stations	7.80	18.20	19.50	REC / PFC
2	New / Upgradation of Distribution Transformers	3.00	7.00	7.50	
3	33 kV Line (New / Upgradation)	-	-	-	
4	11 kV Line (New / Upgradation)	3.80	8.86	9.49	
5	L.T. System Improvement Works	7.50	17.50	18.75	
6	Commercial System Improvement	9.00	21.00	22.50	
7	GIS Networking / Segregation of Agri feeders	3.60	8.40	9.00	
8	Civil Works / Miscellaneous	1.65	3.85	4.13	
	Sub-Total (B)	***36.35***	***84.81***	***90.86***	
	Total	**398.35**	**154.66**	**438.38**	

Table 2.6: Investment Plan for 2007-08 (Rs. Crore)

Sl. No.	Item	Grant / Internal Funds	Loan Amount Received	Utilisation during the year	Funding Agency
A)	**Scheme-wise Capital Works**				
1	District Plan	-	10.5	10.5	GoU
2	State Plan	-	15.0	13.5	GoU
3	Rural Electrification	-	-	-	
a	RGGVY	225.0	25.0	200.0	REC / GoU
4	Private Tubewell	12.0		9.6	GoU
5	APDRP		-	-	GoI
6	PMGY	-	-	-	GoU
7	MNP	-	-	-	GoU
9	Others	15.0	-	11.3	
	Sub-Total (A)	***252.0***	***50.5***	***244.9***	
B)	**Others - Internal Capital Works**				
1	New / Upgradation of 33 / 11 kV Sub-Stations	6.5	14.5	12.0	REC / PFC
2	New / Upgradation of Distribution Transformers	6.5	14.5	12.0	
3	33 kV Line (New / Upgradation)	4.0	9.5	7.7	
4	11 kV Line (New / Upgradation)	4.0	9.5	7.7	
5	Metering (consumers and others)	4.0	9.5	7.7	
6	L.T. System Improvement Works	39.0	92.5	75.3	
7	Commercial System Improvement	18.0	42.0	34.4	
8	Segregation of Agri feeders	4.0	9.5	7.7	
9	Civil Works / Miscellaneous	4.0	9.5	7.7	
	Sub-Total (B)	***90.0***	***211.0***	***172.5***	
	Total	**342.0**	**261.5**	**417.3**	

2.9 Fixed Assets and Depreciation

The Petitioner submitted that, the division of assets and liabilities between the Petitioner and UPPCL as on 8th November 2001 (i.e. the date of transfer determined by the Government of India) was based on the principles/methodology for the same as specified by GoI vide its Order No. 42/7/2000 R&R dated 5th November 2001 under section 63(4) of the Uttar Pradesh Reorganisation Act, 2000. The Petitioner has subsequently considered additions to the gross block based on capitalisation of works under various schemes and projects carried out by it. The following Tables outline the fixed assets as proposed by the Petitioner for 2006-07 and 2007-08.

Table 2.7: Gross Fixed assets for 2006-07 & 2007-08 (Rs. Crore)

Sl No.	Asset Groups	2005 - 06 (Previous Year)				2006 - 07 (Current Year)			2007 - 08 (Ensuing Year)		
		Opening Balance	Additions during the year	Deductions during the year	Closing Balance	Additions during the year	Deductions during the year	Closing Balance	Additions during the year	Deductions during the year	Closing Balance
1	Land & Rights	7.9	0.4	-	8.22	2.00	-	10.22	3.00	-	13.22
2	Buildings	76.5	0.1	-	76.59	2.70		79.29	6.00		85.29
3	Hydraulic Works	0.4	-	-	0.39	-	-	0.39	-	-	0.39
4	Other Civil works	2.5	-	-	2.52	0.12		2.64	0.15		2.79
5	Plant & Machinery	262.5	52.5	29.0	286.01	142.00		428.01			428.01
6	Lines & Cable Network	922.5	122.7	3.6	1,041.54	225.14		1,266.68			1,266.68
7	Vehicles	3.6	0.0	0.1	3.56	0.30	-	3.86	0.30	-	4.16
8	Furnitures & Fixtures	1.6	0.1	0.0	1.73	0.15		1.88	0.20		2.08
9	Office Equipment	0.7	2.1	0.0	2.74	2.30		5.03	2.95		7.98
	Total	**1,278.1**	**177.9**	**32.7**	**1,423.29**	**374.71**	**-**	**1,798.00**	**12.60**	**-**	**1,810.60**

In compliance to the Commission's direction regarding preparation of fixed assets register, the Petitioner submitted that it had invited bids through open tender basis and the assignment shall be awarded shortly to the successful bidder(s) to complete the detailed fixed asset registers, including identification, physical verification, valuation of all fixed assets; category-wise and location-wise as per the guidelines prescribed in the Companies Act, 1956 in a time-bound period.

Pending the finalisation of the fixed asset registers, depreciation has been computed by the Petitioner based on norms specified in Regulation 15 of Distribution Tariff Regulations issued by the Commission.

2.10 Interest on Loans

The Petitioner has estimated the interest and finance charges separately for each loan availed by it under various schemes.

As regard to loans/liabilities transferred to UPCL under the transfer arrangement as per Government of India order effective from 9th November 2001, the Petitioner submitted that these liabilities have been transferred to it vide the above mentioned transfer arrangement and pending finalisation of various issues between UPCL and UPPCL, the Petitioner is not claiming any interest charges under the heads of GPF liabilities, CPSU dues, and power purchase dues up to 08.11.2001 in this petition. It has been, however, prayed that in case, the Petitioner needs to service these liabilities after final resolution of these issues, the same may appropriately be considered for pass through in tariffs by the Commission in future.

2.10.1 REC Loans

The Commission had disallowed the interest payment of Rs. 12.72 Crore for REC loans and had noted that:

"According to the re-schedulement agreement, the overdue interest to which this amount pertains, is to be repaid in installments spread over five years and does not attract any interest. Further, interest would accrue on the principal amount but its payment will start after 5 years along with repayment of the principal amount for which EMI's have been fixed. This interest liability would have been reflected in the accounts in the relevant year and is not a current item of expenditure; the same is not admissible for tariff purposes."

The Petitioner has created a suitable liability in its books of accounts, for these overdue interest payments, which would be payable at a later date and the Petitioner has requested the Commission to consider and accept the interest payments corresponding to these loans, during determination of tariff, as and when the interest becomes payable.

2.11 Interest on Working Capital

The Petitioner has stated that it has considered working capital and interest cost thereon as per the Regulations. Working Capital has been stated to be calculated based on Regulation 14(2), and includes the following components:

(i) One month O&M expenses inclusive of maintenance spares forming part of R&M expenses

(ii) Capital required for financing the shortfall in collections

(iii) Receivables for sale of electricity equivalent to billing cycle suitably adjusted for security given by consumers and credit given by suppliers

The Petitioner has considered collection efficiency of 92% and 94% for 2006-07 and 2007-08 respectively. The interest on working capital considered by the Petitioner is 10.25% based on short term PLR. The summary of estimated working capital and interest on working capital is given in following Table:

Table 2.8: Working Capital for 2006-07 and 2007-08 (Rs. Crore)

Sl.No.	Item	2006-07	2007-08
		Revised Estimates	Projected
1			
a	O&M expenses	14.33	17.98
b	Collection inefficiency	73.52	69.40
c	Receivables	151.07	190.13
	Sub-Total	**238.93**	**277.51**
2	***Less***:	-	-
a	Adjustments for security deposits & credit by power suppliers	143.88	168.34
	Net Working Capital	**95.05**	**109.16**
3	Interest Rate (Short term PLR)	10.25%	10.25%
	Interest on Working Capital	9.74	11.19

2.12 Provision for Bad & Doubtful Debts

The Petitioner submitted that the Commission in its previous Orders had not allowed any provision for Bad and Doubtful debts on the principle that the Petitioner did not have a policy of actually identifying and writing off bad debts.

The Petitioner has finalised a suitable policy for provisioning for and writing off bad debts for implementation and upon approval of this policy by the Board of Directors, bad debts shall be written off from the books of account. The Petitioner submitted that annual provisioning towards bad and doubtful debts is an accepted method of accounting and also recognised by other State Electricity Regulatory Commissions.

The Petitioner has considered a provision of Rs. 28.92 Crore at a conservative level of 2.5% of the revenue to be billed during the ensuing year, as provision for bad and doubtful debts.

2.13 Return on Equity

The Petitioner submitted that the Commission in its tariff order for 2006-07 disallowed Return on Equity on the account that the company had not invest its equity to meet any part of the capital expenditure. The Petitioner highlighted that as part of the transfer of assets and liabilities from UPPCL, it had been transferred a liability of Rs. 572 Crore for CPSU dues as per the Ahluwalia Committee Report. As noted by the Commission in its Tariff Order for the 2006-07, Government of Uttarakhand has subsequently signed a Tripartite Agreement with Reserve Bank of India and Government of India and has since then issued bonds. The Petitioner has approached GoU for clarification regarding treatment of this arrangement in its books of accounts. Further, the Transfer Scheme of PTCUL and the capital structures of UPCL and PTCUL are under finalisation. The Petitioner submitted that it would approach the Commission on finalisation of its capital structure. Pending finalisation of the capital structure, the Petitioner has claimed the return on equity on the share capital of Rs. 5 Crore as per its audited accounts for 2004-05. The Petitioner submitted that it has spent this money for meeting part of the capital expenditure in 2006-07 on account of Internal Capital (System Improvement) Works.

2.14 Non-Tariff Income

The non-tariff income for the Petitioner primarily comprises meter rent, discount/rebate on timely payment of power purchase bills, income from fixed deposits and delayed payment charges from consumers. The Petitioner has submitted that the income from sale of apparatus and scrap has not been considered as the same cannot be estimated. The Petitioner has estimated share of power trading profits based on detailed computations on Merit Order Based power purchase by UPCL for the year.

The Petitioner has estimated Non-Tariff income for 2006-07 and 2007-08 as Rs. 8.03 Crore and Rs. 3.18 Crore respectively.

2.15 Impact of Reduction in tariff for Steel Units on ARR of 2007-08

On the basis of Appeals filed by some Steel Units, Hon'ble Appellate Tribunal for Electricity (ATE) by its order dated 23 May, 2007 directed the Commission to re-determine the tariff of Steel Units for the period from 1st September 2004 to 31st March 2005 and for the period from 1st April 2005 to 31st March 2006. Accordingly, the Commission re-determined the tariff for Steel Units, which resulted in reduction of 42 paisa/kVAh for the period from 1st Sep 2004 to 31st March 2005 and 32 paisa/kVAh for the period from 1st April 2005 to 31st March 2006.

In Appeal No. 214 of 2006 filed by some Steel Units, Hon'ble ATE vide its order dated 6th

June 2007 directed the Commission to recalculate the tariff of Steel Units fixed by it in the tariff order dated 12th July 2006 for 2006-07 and the Commission has started proceeding to recalculate the tariff of the steel units for 2006-07.

In view of the above judgements, the Petitioner has estimated an amount of Rs. 35 Crore towards impact on account of adjustments for reduction of tariff in respect of Steel Units. The Petitioner submitted that it is being put to unforeseen financial burden on account of refund of such huge amount to steel units for the past periods without any compensation of the same from tariff of other categories of consumers. The Petitioner requested the Commission to allow the impact of reduction in tariff for Steel Units in the ARR for 2007-08.

2.16 Annual Revenue Requirement for 2006-07 and 2007-08

On the basis of revised estimates of various expenses submitted by the Petitioner for 2006-07(discussed above) and projected expenses for 2007-08, the revised ARR for 2006-07 and projected ARR for 2007-08 is summarised in following Table:

Table 2.9: Revised ARR for 2006-07 & Projections for 2007-08 (Rs Crore)

Sl. No.	Item	2006-07 (Revised Estimates)	2007-08 (Projected)
	Expenditure		
1	Power Purchase Expenses	785.70	1102.91
2	Increase in UJVNL power purchase cost due to Income tax payable		61.14
3	Transmission Charges	84.99	90.62
4	O&M expenses	172.01	215.77
5	Interest charges	39.23	39.93
6	Depreciation	103.91	117.06
7	Interest on Working Capital	9.74	11.19
	Gross Expenditure	**1195.57**	**1638.62**
	Less: Expense Capitalization		
8	Interest capitalized	1.59	1.20
	Total Expense Capitalization	1.59	1.20
	Other Expenses / Appropriations		
9	Provision for Bad & Doubtful Debts	22.98	28.92
10	Return on Equity	0.70	0.70
11	Adjustment for reduction of steel units tariffs		35.00
	Net Expenditure	**1217.66**	**1702.03**
12	**Less**: Non Tariff Income	8.03	3.18
13	**Net Annual Revenue Requirement**	**1209.64**	**1698.86**

2.17 Revenue at Existing Tariffs and Revenue Gap

The Petitioner has estimated revenues from existing tariffs based on revised estimates of sales for various categories in 2006-07 as Rs. 919.03 Crore which leads to a revenue deficit of Rs. 290.60 Crore in 2006-07.

The Petitioner submitted that the actual revenue deficit for 2006-07 may be trued up by the Commission in future, based on audited accounts to be submitted by the Petitioner.

The projected revenues for 2007-08 based on existing tariffs and projected sales works out to Rs. 1,156.62 Crore. The Petitioner submitted that the revenue at existing retail tariffs for 2007-08 would leave the Petitioner with a revenue gap of about Rs. 542.23 Crore.

2.18 Past Year Losses

The Petitioner has already submitted its audited accounts for 2001-02, 2002-03, 2003-04 to the Commission, which show the details of income and expenditure as well as losses incurred for 2001-02 (period from 09.11.2001 to 31.03.2002), 2002-03 and 2003-04. The Petitioner has submitted that it will be submitting audited accounts for 2004-05 and management accounts for 2005-06 separately to the Commission. As submitted by the Petitioner, the audited accounts for the year ending 31st March, 2005 show accumulated loss of Rs. 262.48 Crore and the provisional accounts for the year ending 31st March, 2006 (under audit) show an accumulated loss of Rs. 477.76 Crore.

The Petitioner submitted that the losses incurred during 2001-02 to 2005-06 are primarily due to the following reasons which are stated below:

- The Petitioner has submitted that the expenditure incurred by the licensee on account of distribution business has been more than the expenditure allowed by the Commission as part of the Annual Revenue Requirements
- There is a difference between approved distribution loss levels by the Commission and actual distribution loss levels
- The provision for bad and doubtful debts had been disallowed by the Commission, while UPCL has been making a provision in its revenue towards bad and doubtful debts on the basis of prudent accounting practice
- Losses due to change in sales mix approved by the Commission as against the actual sales mix
- Losses due to change in power purchase mix as against the actual power purchase mix and variance in quantity and rate of power purchase

The Licensee has humbly requested the Commission to recognise its financial losses for the past years, based on the audited accounts submitted by it and allow for their inclusion as a part of the Regulatory Asset to be created.

The Petitioner has submitted that in a recent order dated October 19, 2006, the Appellate Tribunal for Electricity has ordered creation of Regulatory Asset for payment of past dues of Karnataka Power Transmission Corporation Limited (KPTCL) towards M/s Tanir Bhavi earlier not recognized by the Commission as inclusion of these dues in tariff would have resulted in steep hike in tariff.

The Petitioner also requested that the Commission may recognise the losses for 2006-07 along with the past years' losses based on the audited accounts submitted /to be submitted by the Petitioner and approve for its inclusion in Regulatory Assets to be created and amortised in future.

2.19 Proposal for Revision in Retail Tariff for 2007-08

The Petitioner submitted that the expected revenue at existing retail tariffs for 2007-08 is Rs. 1,156.62 Crore which would leave the Petitioner with a revenue gap of about Rs. 542.23 Crore.

The Petitioner has estimated the average cost of supply to be Rs. 3.70 per unit in 2007-08. The Table below captures the cost of supply and revenue from existing tariffs for various consumer categories.

Table 2.10: Category-wise Revenue at Existing Tariffs and Cost Coverage

Category	Sales (MU)	Average Tariff (Rs/Unit)	Revenue at Existing Tariff (Rs. Crore)	Total Cost of Supply (Rs. Crore)	Subsidy (Rs. Crore)	Cost coverage (%)
Domestic	1257	1.97	247.55	464.64	217.09	53%
Non-Domestic	618	3.09	191.15	228.44	37.29	84%
Public Lamps	51	2.5	12.75	18.85	6.1	68%
PTW	193	0.63	12.25	71.34	59.09	17%
GIS	101	2.49	25.12	37.33	12.21	67%
PWW	239	2.25	53.78	88.34	34.56	61%
Industry	2,053	2.88	591.85	758.87	167.02	78%
LT Industry	*204*	3.02	*61.67*	75.41	13.74	82%
HT Industry	*1,292*	*2.61*	*336.78*	477.57	140.79	71%
PIU / Steel Units	*557*	*3.47*	*193.41*	205.89	12.48	94%
Mixed Load	75	2.35	17.63	27.72	10.09	64%
Railway Traction	9	5.06	4.55	3.33	-1.22	137%
Total	**4,596**	**2.52**	**1,156.62**	**1,698.86**	**542.23**	**68%**

The Petitioner submitted that the recovery of the entire projected revenue deficit for 2007-08 from the consumers would require a substantial tariff increase. In order to avoid tariff shock to the consumers, the Petitioner has proposed a moderate tariff increase and requested the Commission to allow the un-recovered revenue deficit for 2007-08 to be treated a part of the Regulatory Asset, along with the past years' losses. The Petitioner has also requested the Commission to include the financing costs associated with the Regulatory Asset in the Annual Revenue Requirement of the Petitioner till the same is recovered in the manner to be specified by the Commission.

The Petitioner in its Petition has proposed a tariff increase to cover a gap of around Rs. 301 Crore. The summary of category-wise tariff increase proposed by the Petition is given below:

2.19.1 Domestic

- Slab-wise tariff proposed
- No increase in rates for lifeline consumers and consumers in snowbound areas
- Average increase in tariff for consumption upto 100 units per month by 10%, for consumption from 101 to 200 units per month by 20% and for consumption above 200 units by 50%

2.19.2 Non-Domestic

- Slab-wise tariff proposed
- No increase in rates for consumers in snowbound areas having load upto 1 kW
- Average increase in tariff for consumption upto 100 units per month by 10%, for consumption from 101 to 200 units per month by 16 % and for consumption above 200 units by 33%

2.19.3 Public Lamps

- Average increase in tariff by 22% to increase the cost coverage

2.19.4 Private Tubewells

- Average increase in tariff by 89% to increase the cost coverage from existing 17% to 51%

2.19.5 Government Irrigation Systems

- Average increase in tariff by 24% to increase the cost coverage

2.19.6 Public Water Works

- Average increase in tariff by 24% to increase the cost coverage

2.19.7 Industrial

- Average increase in tariff for LT industry by 28%
- Average increase in tariff for HT industry by 30%
- Average increase in tariff for Steel Units by 8%

2.19.8 Mixed Load

- Average increase in tariff by 32% to increase the cost coverage

2.19.9 Railway Traction

- Average increase in tariff by 16%

2.19.10Other Salient Features of Tariff Proposal

- Introduction of prohibitive tariff for un-metered consumers to encourage metering. For domestic un-metered proposed tariff of Rs. 500/kW/month and for Private tubewells tariff of Rs 175/BHP/month (Rural) and Rs 200/BHP/month (urban)
- Increase in peak hour surcharge from existing 25% to 100% for the industrial consumers
- Monthly fixed charges in range of Rs. 15/kW to Rs. 50/kW for all consumers except Industrial consumers
- Customer Service Charges for Industrial & Railway Traction consumers in range of Rs. 50 to Rs. 500 per consumer per month.

2.20 Proposals for Truing up for the years 2001-02 to 2006-07

Summary of the claims made by the Petitioner for each of the years from 2001-02 to 2006-07 is presented below:

Table 2.11: Statement Showing Year-wise Annual Revenue Requirement & Revenue (Rs. Crore)

Particulars	Actuals considered to be prudent						Total
	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	
Power Purchase Cost Transmission Charges	173.91	323.83	469.26	660.18	751.32	926.92	3,305.42
O & M Expenses	51.68	151.46	161.96	143.54	152.47	164.16	825.27
Interest Charges	8.80	34.44	54.96	45.44	51.31	48.75	243.70
Depreciation	15.67	42.12	48.34	42.36	27.01	32.39	207.89
Provision for Bad & Doubtful Debts	6.44	16.72	18.24	18.39	20.71	22.27	102.76
Gross Expenditure	256.50	568.57	752.76	909.90	1,002.82	1,194.48	4,685.03
Expenses Capitalized							
O & M Expenses	3.32	13.42	28.92	18.99	18.09	11.72	94.46
Interest Charges	5.61	5.40	9.70	11.63	12.35	1.79	46.48
Sub-total	***8.93***	***18.82***	***38.62***	***30.62***	***30.44***	***13.51***	***140.94***
Net Expenditure	247.57	549.75	714.13	879.28	972.38	1,180.97	4,544.09
Add: Reasonable Return on Capital Base	8.00	15.04	40.98	3.48	-	-	67.50
Less: Non-Tariff Income	32.80	80.84	145.95	154.10	124.10	90.73	628.52
Annual Revenue Requirement	222.77	483.95	609.16	728.67	848.28	1,090.24	3,983.07
Tariff Revenue	**257.49**	**668.80**	**729.58**	**735.44**	**828.48**	**890.61**	**4,110.40**
Suplus (+) / Gap (-)	34.72	184.85	120.42	6.77	(19.80)	(199.63)	127.33

3. Stakeholder's Responses and Petitioner's Comments

The Commission has received objections/ suggestions on the ARR and Tariff proposal of UPCL for 2007-08 as well as on *suo-moto* proceedings for ARR and Tariff Determination for 2008-09. 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 comments from UPCL on the responses received from stakeholders. Since several issues are common issues and have been raised by more than one respondent, all responses have been clubbed issue-wise and summarised below. These issues have also been duly considered while analyzing the factors affecting the tariff determination in the later Sections in this Order.

3.1 Domestic Tariff

3.1.1 Tariff Increase

3.1.1.1 Stakeholders' Response

Several respondents opposed the tariff increase proposed by the Petitioner and mentioned that the existing tariff for domestic category is reasonable and any increase is not justified. It has been suggested that the cost of supply for Domestic consumes should be worked out by allocating the cheaper sources of power to domestic consumers.

3.1.1.2 Petitioner's Comments

The Petitioner submitted that it has proposed tariffs for 2007-08 considering its Annual Revenue Requirement of the year. The proposed increase in tariff is required to meet the expenses essential for meeting the power purchase costs and genuine/reasonable running various activities related to the distribution of electricity in the State.

3.1.2 Monthly Demand/ Fixed charges

3.1.2.1 Stakeholders' Response

Several respondents including Jal Kalyan Upbhokta Parishad opposed the introduction of fixed charges for Domestic Category proposed by the Petitioner and submitted that the introduction of Monthly Fixed Charges/customer service charges in not justifiable once the same have been abolished earlier. Some objectors suggested that in place of introduction of these charges the price for consumption of electricity per unit can be increased from existing Rs. 2.00 to Rs. 2.25/unit.

3.1.2.2 Petitioner's Comments

The monthly fixed charges/customer service charges have been proposed to recover part of the fixed costs incurred in providing/ maintaining the distribution system, maintaining consumer records, providing services like meter reading, complaint handling etc. This is required as these expenses are unrelated to the consumption of energy by a consumer. Further, introduction of minimum monthly fixed charges (MMFC) or customer service charges is in line with the provisions of the Electricity Act, 2003 {Section 45(3)} and the practice followed in other States where minimum consumption guarantee had been abolished. This will also discourage the consumer from resorting to theft of electricity.

3.1.3 Slabs for Domestic Category

3.1.3.1 Stakeholders' Response

Several Objectors including Pratinidhi Mandal opposed the slab system proposed by the Petitioner for Domestic category and requested the Commission not to approve slab system for Domestic Category. Shri Gupta submitted that the slab system will lead to possibility of showing less consumption with the help of staff of UPCL, which ultimately would lead to loss to UPCL

3.1.3.2 Petitioner's Comments

UPCL has proposed multiple slabs with different tariffs for domestic consumers to ensure that consumers below the poverty line, as well as those with lower consumption are charged lower tariffs, compared to other consumers who have a large consumption and can also afford to pay more. The slab billing is a standard practice across utilities and, hence, it requests the Commission to approve the same.

3.1.4 Misuse of Electricity by Staff

3.1.4.1 Stakeholders' Response

Mr. J.S.Rana, Dabral Colony, objecting to the tariff proposed by UPCL submitted that the staff of UPCL is misusing the electricity by using heaters etc. He further submitted that the employees of UPCL provide unauthorized extension of their connection for use of power by their relatives and neighbours. He suggested that the Tariff for the staff should be the same as that charged to the other domestic consumers and the staff should be constrained on abuse of this facility not to misuse electricity.

3.1.4.2 Petitioner's Comments

UPCL has taken steps in metering the connections of the departmental employees. Action under Section 126 of Electricity Act, 2003 is also initiated against some consumers for unauthorized use of electricity. The Petitioner, in this regard, elicits information on such connections illegal/unauthorized use of power supply by the departmental employees supplying to neighbors to take legal action.

3.1.5 Differential Tariff for Plain and Hilly Region

3.1.5.1 Stakeholders' Response

Mr. Shyam Lal Shah, District President, Prantiya Udhyog Vyapar Pratinidhi Mandal submitted that tariff hike is inappropriate. The usage of electricity in plain areas is more than usage in the hilly terrain. Higher tariff should be applicable on 36 steel units where intensive use of electricity is baing made and from such industries, 15% extra tariff should be charged. Moreover, no customer service charge should be charged from the consumers and lower Tariff should be applicable on consumers residing in hilly terrain.

3.1.5.2 Petitioner's Comments

The Petitioner has not submitted any comment on this issue.

3.2 Non-domestic Tariff

3.2.1 Hotels

3.2.1.1 Stakeholders' Response

Some of the respondents including Great Value Hotels Ltd submitted that Uttarakhand has been promoted as a Tourism state by the GoU since its inception. The hotel industry by and large is the backbone of the Tourism industry. Hotel industry is proposed to be charged Rs. 7 and Rs. 8 per unit during peak hours whereas Industry is not being proposed a similar tariff hike during peak hours. The proposed exorbitant and unjustified tariff of Rs. 8 per unit would have a severe negative impact on the Hotel and Tourism industry in the State, thus this proposed schedule should be rejected. The existing tariff with applicable surcharge and discount for different hours of supply is very judicious and should continue with no escalation in tariff.

Hotel and Restaurant Association, Rudrapur submitted that commercial rates are being charged to hotels instead of industrial rates. The objector has requested the Commission to kindly grant hotel industry the benefits of reduced electricity tariff.

3.2.1.2 Petitioner's Comments

UPCL has proposed tariffs for 2007-08 considering its Annual Revenue Requirement of the year. The proposed increase in tariffs is required to meet the expenses essential for meeting the power purchase expenses and genuine expenses for running various activities related to the distribution of electricity in the State. However, determination of tariff to be charged from a category of consumer is the prerogative of the Commission, in terms of the provisions of the Electricity Act, 2003.

3.2.2 Educational Institutions

3.2.2.1 Stakeholders' Response

Several respondents including Dr. Bhupinder Kaur Aulkh and Mr. Madan Singh Pratiyal suggested that the government educational institutions should be charged a tariff at the rate of domestic category instead of Non-domestic category. It has further suggested that power to all institutions covered under the 'Computer Aided Learning Program' shall be supplied free of cost or at concessional rates.

3.2.2.2 Petitioner's Comments

UPCL has proposed subsidized tariffs for educational institutions. Any further support to such institutions may be provided by the State Government. Educational institutions are presently cross-subsidized by other categories of consumers that will be eliminated as per guidelines issued by Commission. As per provisions of Electricity Act, 2003, the tariff in each category should be based on average cost of supply and the cross-subsidy should be eliminated in a phased manner. However, determination of tariff to be charged from a category of consumer is the prerogative of the Commission, in terms of the provisions of the Electricity Act, 2003.

3.2.3 Dharamshala and other Charitable Organisations

3.2.3.1 Stakeholders' Response

President, Devbhoomi Dharamshala Prabandhak Sabha has opposed the increase in tariff proposed at Rs. 4/unit for Dharamshala, Ashrams and Trusts. The respondent suggested that the tariff should be reduced for Dharamshala, Ashrams and Trusts which are rendering services to the general public in Haridwar and don't carry out any commercial activity. Some respondents suggested to charge tariff at the rate of domestic category instead of Non-domestic category.

3.2.3.2 Petitioner's Comments

UPCL has not proposed tariffs of Rs. 4/unit for charitable institutions. Slab-wise tariff proposed is as follows in this category:

Table 3.1: Proposed Tariff for Educational/Charitable Institutions

Description	Monthly Fixed Charges per kW or Part thereof of Contracted Load	Energy Charges	
		With ToD Meters	Without ToD Meters
1. Registered Charitable Organizations functioning only for charitable purposes	Rs. 50	Rs. 2.40/kWh	Rs. 2.90/kWh
2. Educational Institutions, Hospitals, Other Charitable Institutions and Other Non Domestic / Commercial Users	Rs. 50		
Upto 100 Units /month		Rs.3.30/kWh	Rs.4.30/kWh
Above 100 Units upto 200 Units		Rs. 3.50/kWh	Rs. 4.50/kWh
All units exceeding 200 Units		Rs. 4.00/kWh	Rs. 5.00/kWh

3.2.4 Peak/Off Peak Tariff

3.2.4.1 Stakeholders' Response

Several respondents including Kumar Oxygen Ltd. has submitted that increase in peak hour tariff for Non-domestic consumers from 25% to 100% is very high. Mr. Pradeep Dutta, Convenor, Panel on energy, CII and Prantiya Udyog Vyapar Pratinidhi Mandal has objected that the proposed tariff leads to exorbitant and unjustified rates of upto Rs. 8 per unit in peak hours. He suggested that the peak hours should be limited to only evening peak hours. Some of the hotel consumers including representative of Hotel Madhuban and Atta Chakki consumers submitted that as it is not possible to shift the demand for non-domestic consumers, the concept of ToD charges for this category should be abolished.

3.2.4.2 Petitioner's Comments

UPCL has determined time differential tariffs considering the load curve of the state. Despite existing rates for peak hours, the consumption pattern has not been moderated to a desirable extent. The peak hours have been determined considering the period when the frequency of the grid has been observed to be low in comparison to other periods in the day. So it is in the interest of grid and Transmission & Distribution system to discourage the consumption during this period. Moreover the Petitioner is required to buy power at high rate during this period. Keeping the above in view, higher rate has been proposed during the peak hours.

3.2.5 Fixed charges/Customer Service Charges

3.2.5.1 Stakeholders' Response

Several respondents opposed the introduction of fixed charges for Non-Domestic Category proposed by the Petitioner and submitted that the introduction of Monthly Fixed Charges/ customer service charges in not justifiable once the same have been abolished earlier.

3.2.5.2 Petitioner's Comments

The monthly fixed charges/customer service charges have been proposed to recover part of the fixed costs incurred in providing/ maintaining the distribution system, maintaining consumer records, providing services like meter reading, complaint handling etc. This is required as these expenses are unrelated to the consumption of energy by a consumer. Further, introduction of minimum monthly fixed charges (MMFC) or customer service charges is in line with the provisions of the Electricity Act, 2003 {Section 45(3)} and the practice followed in other States where minimum consumption guarantee had been abolished. This will also discourage the consumer from resorting to theft of electricity.

3.2.6 Utilisation of Domestic Connection for Non Domestic Purpose

3.2.7 Stakeholders' Response

Mr. Vinod Kumar Joshi submitted that the connection taken for Domestic purposes should be allowed to be used for Non-Domestic purpose too and no penalty should be charged which is being done on the basis of excess load. He further submitted that the electricity consumption in household and shops is from fans and tube-lights whose tariff should be the same. The tariff for these appliances has been divided into domestic and Non-Domestic categories for which separate tariff is charged. Separate connection has been provided for both the categories for which expenses are incurred by the Petitioner and for recovering the same tariff is increased which is not justifiable. The objector has suggested that as the connections for non-domestic categories are less as compared to domestic categories so if the tariff for both the categories are kept same than separate connection for both the categories will not be required.

3.2.7.1 Petitioner's Comments

The Petitioner has not submitted any comment on this issue.

3.3 Agricultural Tariff

3.3.1 Stakeholders' Response

Several respondents including Sanyukt Kisan Sangharsh Committee and Bhartiya Kisan Union opposed the tariff proposed from 70 paisa to 120 paisa per unit and submitted that the tariff in other States is lower for farmers as compared to the State of Uttarakhand. Uttarakhand State Kisan Congress submitted that the Commission has fixed tariff of Rs. 545 per year for the farmers but they are charged a tariff of Rs. 650 per year. The extra tariff charged to farmers should be refunded to them. They further submitted that the tariff for farmers should be fixed at Rs. 300 per year as is being recovered from farmers in the state of UP and un-metered connections should also be granted keeping small farmers in view and fixed charges should be recovered from the farmers.

It was further suggested that in case of drought temporary connections should be provided by collecting certain amount which would help in reducing theft.

3.3.2 Petitioner's Comments

The aggrieved consumers have been requested to submit details of the excess billing to the concerned office of UPCL, which would be rectified and corrected suitably and the amount of excess recovery, if any, would be refunded to consumers.

As per provisions of Electricity Act, 2003, the tariff in each category should be based on average cost of supply and the cross-subsidy should be reduced in phased manner. Private tube-wells category is presently cross-subsidized by other categories of consumers that will be reduced as per guidelines issued by Commission. However, determination of tariff to be charged from a category of consumer is the prerogative of the Commission, in terms of the provisions of the Electricity Act, 2003.

3.4 Industrial Tariff

3.4.1 Exorbitant Tariff Increase

3.4.1.1 Stakeholders' Response

Several respondents including Kumar Oxygen Ltd. submitted that increase in tariff being proposed by the Petitioner for Industrial consumers by 60% is exorbitant and any increase should at most be based on inflation. Kumaon Garhwal Chambers of Commerce and Industry (KGCCI) submitted that such a high tariff increase has been proposed due to inflated ARR proposed by UPCL which needs to be clearly examined by the Commission. Some respondents submitted that actual hike as per the proposed tariff by UPCL is more than what has been submitted in the Petition. For instance, the licensee has indicated proposed hike of 28% for LT industries, 30% for HT industries and 8% for steel mills ignoring the proposed increase in fixed charges, demand charges, peak hour rates and considering the impact of all such components, the tariff increase proposed works out to be substantially higher than that submitted in the Petition. Some of the respondents submitted that the industrial tariff in Uttarakhand is quite high as compared to tariff in the adjoining States of Himachal Pradesh and Uttar Pradesh. Industries Association of Uttarakhand opined that when the rate of LT consumers is almost close to cost of supply then why the increase of 27% has been proposed, which is against Section 61 of the Act in terms of Tariff reflecting cost of supply.

3.4.1.2 Petitioner's Comments

UPCL has proposed tariffs for 2007-08 considering its Annual Revenue Requirement of the year. The proposed increase in tariffs is required to meet the expenses essential for procurement of power and running various activities related to the distribution of electricity in the State.

3.4.2 Supply during Restricted Hours

3.4.2.1 Stakeholders' Response

Several respondents have submitted that in RTS-7 tariff proposal for opting of continuous supply by industries, electricity load shedding period provides for 20% increase in energy charges throughout the year instead it may be 25% higher but for the period of load shedding and not for the whole year.

3.4.2.2 Petitioner's Comments

The Petitioner has not submitted any comment on this issue.

3.4.3 Small Industries

3.4.3.1 Stakeholders' Response

Mr. Jaan Ali, Gram Bahadarpur Khadar opposed the increase in Tariff for small and medium scale industries (Atta-Chaaki consumers) and submitted that the increase in tariff will lead to closure of these units.

3.4.3.2 Petitioner's Comments

The Petitioner has not submitted any comment on this issue.

3.4.4 Special Tariff

3.4.4.1 Stakeholders' Response

Mr. Kamal Raj, General Manager from IDPL has requested Commission to decide tariff policy for IDPL in view of Order issued by Hon'ble Supreme Court of India. He also suggested to fix special concessional tariff for IDPL for Industrial/Water Purification/Biological Treatment, Water Intake purposes and to issue direction to UPCL to raise separate bills for Colony under

Township/mixed load and not to include colony consumption in bills for industrial use as per provisions in the tariff. He also requested for fixation of special tariff based on the Section 62(3) of the Electricity Act, 2003 which covers the factors like geographical position, the nature of supply and purpose for which supply is required.

3.4.4.2 Petitioner's Comments

UPCL has proposed tariffs from different consumer categories, considering the existing tariffs and the effect of increasing costs. As per provisions of Electricity Act, 2003, the tariff in each category should be based on average cost of supply and the cross-subsidy should be reduced in a phased manner.

3.4.5 Peak/ Off Peak Hour Tariff

3.4.5.1 Stakeholders' Response

Morning peak hours should not be considered. The Petitioner has proposed peak hours for a period of 8 hours while in other States peak hours are between 3 to 5 hours during evening hours. Some respondents suggested that the peak hours should only be for three and a half hours from 1800-2130 hours during winter months and 1830-2200 hours during summer months. The peak hour load requirement of the units having continuous processes should be studied in detail by a technical committee. In order to ensure that only the bare minimum required load is drawn during the peak hours by such industry, the tariff for power consumed during this period may be fixed at 75% higher than the regular tariff.

Some respondents suggested that UPCL should make available the actual procurement cost through UI for the period April to December 2007 in order to make a correct assessment for fixing Peak Hour Charges as asking a 100% additional charges for peak hour consumption as compared to existing 25% is totally arbitrary and without any basis. Further, UPCL has not proposed any rebate during off peak hours which should also be considered to motivate the consumers for using more power during off peak hours. It was submitted that the Commission should analyse the entire data of the industries consumption viz a viz state demand in peak hours to find out whether the increase in peak demand in peak hours is from industries or general consumers.

3.4.5.2 Petitioner's Comments

UPCL has determined time differential tariffs considering the load curve of the state. Despite existing rates for peak hours, the consumption pattern has not been moderated to a desirable extent. The peak hours have been determined considering the period when the frequency of the grid has been observed to be low in comparison to other periods in the day. So it is in the interest of Grid and Transmission & Distribution system to discourage the consumption during this period. Moreover, the Petitioner is compelled to buy the power at high rate during this period. Keeping the above in view, higher rate has been proposed during the peak hours.

3.4.6 Monthly Demand/ Fixed charges and Customer Service Charges

3.4.6.1 Stakeholders' Response

Himalaya Food Products Industry submitted that the Monthly Demand/fixed charges of Rs. 45/BHP for LT Industries (upto 100 BHP) has already over-burdened the industries and has requested the Commission that these fixed charges should be abolished and any further increase in the Fixed Charges will adversely affect the consumers.

Several respondents submitted that introduction of the monthly customer service charges of Rs. 50/Connection proposed by the Petitioner are not justified as it is just like dual charges when the Petitioner is charging Fixed/Demand Charges. Some of the respondents submitted that the expenses proposed to be recovered through Customer Service Charges are already covered under O&M expenses of the Petitioner.

Industries Association of Uttarakhand has opposed monthly fixed charges/customer service charges been proposed by the Petitioner for any category as after lot of deliberation in the past the Commission have reached the stage of Rationalized tariff structure. The objector has submitted that this was also envisaged in the Electricity Act, 2003. The objector has submitted that deviating from simplified tariff structure at this stage by introducing any additions in terms of Minimum Fixed Charges/customer service charges etc. is not advisable and this is like going backward in days of rationalization.

It was submitted that in winter months from October to March generation of Hydro Power is less and UPCL has to purchase costly electricity to meet the demand of the State. During these six months if any industrialist wants to shut its unit, demand charges/MCG should not be charged by UPCL.

3.4.6.2 Petitioner's Comments

It may be appreciated that a major portion of the cost incurred by the Petitioner is fixed in nature comprising of cost towards power purchase, operations and maintenance expenses, interest. These costs have to be incurred whether or not the consumer actually draws energy. UPCL is of the view that once a consumer has been sanctioned a particular load, it is to be expected that he would consume a certain amount of power based on his sanctioned load. Further, introduction of minimum fixed charges or customer service charges is in line with the provisions of the Electricity Act, 2003 {Section 45(3)} and the practice followed in other States where minimum consumption guarantee had been abolished. This will also discourage the consumer from resorting to theft of electricity.

3.4.7 Categorisation of Industrial Consumers

3.4.7.1 Stakeholders' Response

Mr. Pradeep Dutta of CII suggested that there should be a category – Industry furnace, Arc Furnace, Ferro Alloys with load exceeding 1000 kVA. The supply for this category should be on 33 kV upto 1000 kVA and beyond that supply should be on 132 KV. There should be a single part tariff with fixed per unit tariff. Tariff for HT consumers should be 7.5% less than the LT consumers. Minimum Charges should be fixed for all consumers depending on past consumption data and also the statistics of other States. A higher minimum charge should be fixed for the Induction Furnace, Arc Furnace, Ferro Alloys category – with connected load exceeding 1000 kVA. No HT & LT industry should be allowed to draw more than 15% of their contract demand during peak hours which should be billed at 175%of normal tariff. The continuous loads should be sanctioned by a committee of UPCL officials consisting of Zonal GM, Director – Operations & Director – Commercial. Approval of continuous process should also be communicated to UERC and put up on the UPCL website for the information of the general public.

3.4.7.2 Petitioner's Comments

The Petitioner has not submitted any comment on this issue.

3.4.8 Billing Demand

3.4.8.1 Stakeholders' Response

It was suggested that the Billing demand should be actual recorded maximum demand or 70% of contracted load, whichever is higher, instead of 80% as proposed by UPCL.

3.4.8.2 Petitioner's Comments

The Petitioner has not submitted any comment on this issue.

3.4.9 Tariff for Steel Industries

3.4.9.1 Stakeholders' Response

Some steel industry consumers including M/s Uttaranchal Steel Manufacturers Association cited Hon'ble Appellate Tribunal of Electricity (ATE's), judgment in Appeal No. 214 of 2006 of M/s Shree Dhanvarsha Steels Pvt. Ltd. that for all HT industries and steel units same Load Factor Based Tariff should be applied. The respondents further objected that UPCL for 2007-08 has projected steel industries as separate category and projected higher tariff for steel industries than HT Industries and suggested that Load Factor Based Tariff of HT Industries and Steel Industries should be the same in accordance with the Hon'ble ATE Judgment.

Some respondents submitted that the demand charges for steel industry are disproportionately high and the reasons for classifying steel units as Power Intensive Units (PIU) has not been specified. Power Intensive units should be the ones whose load factor is very high say 65% or above and there are various manufacturing units in HT category where consumption is on the higher side than the consumption of steel industry.

3.4.9.2 Petitioner's Comments

The HT Steel Units have been kept as a separate category as determined by the Commission in the previous tariff order issued for 2006-07. In addition, the Electricity Act, 2003 also provides for differential tariffs on the basis of load factor, so this is not a violation of any Act/ Policy pertaining to the electricity sector.

3.4.10 Rebate for Supply at Higher Voltage

3.4.10.1 Stakeholders' Response

Steel Industries have demanded higher rebate for supply at higher voltage levels.

3.4.10.2 Petitioner's Comments

As per existing tariff, there is provision of high voltage rebate in RTS-7 category and accordingly UPCL have proposed to continue the same high voltage rebate.

3.4.11 Promotion of Industry

3.4.11.1.1 Stakeholders' Response

It was suggested that in view of cheaper and surplus power available in the State, there should be reduction in industrial tariff so as to promote new industries in the State.

3.4.11.2 Petitioner's Comments

The Petitioner has not submitted any comment on this issue.

3.5 Tariff for MES

3.5.1 Stakeholders' Response

The Respondent has stated that it has been awarded deemed licensee's status by Ministry of Power, who have advised MES to approach the Regulatory Commission for issuing a separate concessional tariff structure to MES. It has, accordinly, requested for a concessional tariff for MES.

3.5.2 Petitioner's Comments

The Petitioner has not submitted any comment on this issue.

3.6 Railway Traction

3.6.1 Stakeholders' Response

Shri J.S.P. Singh, Chief Electricity Distribution Engineer from Northern Railway submitted that the Hon'ble Appellate Tribunal has set aside the impugned order for Traction Tariff for 2006-07 and directed UERC to re-determine the Railway Traction Tariff for 2006-07. Therefore, it is requested that UERC should also determine traction tariff for 2007-08 in line with directives of Hon'ble Appellate Tribunal at reasonable Level, which is commensurate with cost of Supply for Railway Traction. ToD tariff should not be applied for railway traction and normal hour charges should be applicable throughout the day in all seasons. The objector suggested that the cost of realization for railway traction should be brought down by taking into account the NTPC/ NHPC i.e. Central Generating Agencies rate of supply @ Rs 2.09/ 2.00 per unit to UPCL for 2007-08.

The rebate for availing supply at higher than base voltage is proposed to be given to HT consumers, but Railways is not covered in this rebate. This rebate should also be extended to Railways because base voltage for Railways is 25 kV and Railways is availing supply at 220 kV. For demand charges, the billing demand should be 65% of the contract demand or recorded demand during the month whichever is higher for traction load.

3.6.2 Petitioner's Comments

The Petitioner has not submitted any comment on this issue.

3.6.3 Reduction in Cross-Subsidy

3.6.3.1 Stakeholders' Response

Several Industrial and Non-Domestic consumers submitted that the cross-subsidy should be reduced in phased manner as per the National Electricity Policy. Industries Association of Uttarakhand submitted that the views of the Commission as in Tariff order dated 8th September 2003 gets more force from the recent Tariff Policy where stress has been given on the issue of cross-subsidy reduction. It was submitted that the Tariff Policy also stipulates roadmap to be set up within six months for bringing the tariff within +/- 20% of average cost of supply by 2011-12.

3.6.3.2 Petitioner's Comments

The Petitioner has not submitted any comment on this issue.

3.7 Disconnection Notice & Unexpected Demand Raised

3.7.1 Stakeholders' Response

Mr. Pawan Agarwal, Vice President, M/S Uttaranchal Steel Manufacturers Association has suggested that for connection above 1000 kVA, Billing and Demand Cum Disconnection Notice should be issued only by G.M, or any other person above this rank. Apart from routine monthly bill before raising any other kind of demand, UPCL should issue a notice to the concerned industry elaborating the reason. Any decision on the notice or replies to the notice should be taken by a person of Director level. He cited examples that Executive Engineer under pressure or influence of any officer or Audit Party generally puts certain dues in the bill and for solving such disputes certain court cases are proceeded and if higher rank officer settles such cases then such disputes can be avoided.

3.7.2 Petitioner's Comments

UPCL has noted the suggestions on this issue and shall consider implementation of the same, after detailed internal discussions on the matter.

3.8 Late filing of Tariff Application and Revision of Tariff from Prospective Effect

3.8.1 Stakeholders' Response

Several objectors including KGCCI Industrial Estate submitted that as per the Conduct of Business Regulations, Licensee is required to file tariff proposal for the ensuing year before the Commission by November 30 of the previous year. Accordingly, the proposal in question was required to be filed by UPCL by 30.11.2006. It was suggested that due to late filing of the proposal by UPCL, the tariffs should not be increased from retrospective effect i.e. 1.04.2007 but the tariff increase should be made effective from the date of the Order of the Commission. Industrial categories highlighted that any differential in tariff cannot be taken care of by manufacturing industry for the goods manufactured in the past and which have already been sold out.

Some of the respondents suggested that as the Commission is also determining the tariffs for 2008-09 through *suo-moto* proceedings, it will be preferable to make the tariff revision effective from April 1, 2008.

3.8.2 Petitioner's Comments

The Petitioner has not submitted any comment on this issue.

3.9 Distribution Losses/ Line Losses

3.9.1 Stakeholders' Response

Several respondents objected the high level of distribution losses proposed by the Petitioner and submitted that the financial losses faced by UPCL are due to higher line losses and not due to the low Tariff rate for all the categories. The theft in rural areas is higher than theft in urban areas and due to shortage of staff and remote geographical locations, raids for prevention of theft is not possible in the hilly terrain. Another reason for high losses pointed out is due to the fact that Patwari system people are not scared of law and every village has 10 regular connections and 30 connections through hooking. It has been suggested that efforts should be made by UPCL for prevention of theft. All meters of the consumers should be sealed and in case of broken meters such connections should be declared direct connection. Meter reader should be made responsible for the condition of the seal. Several respondents highlighted that the UPCL in its Petition had not mentioned about the measures being taken to curb theft of electricity and reducing the line losses.

Mr. Pradeep Datta highlighted that lines losses of UPCL are rising in select circles like Rourkee and Kashipur instead of decline as claimed by the Petitioner. Moreover, due to very low line losses in the hilly areas which are then clubbed and averaged with higher line losses of predominantly industrialized plain areas UPCL is showing averaged losses of 34%.

It was submitted that as per the trajectory fixed by the Commission in Tariff Order for 2003-04, loss reduction @ 4% year from the opening level of 46.17% was to be achieved i.e. target loss level for the 2007-08 would be 26.17%. The licensee has reported actual loss level for 2006-07 as 33.20% against 30.17% target as per trajectory and approved by UERC in Tariff Order 2006-07 and has requested to allow a loss level of 29.2% i.e. 3% higher than the loss as per trajectory in its proposal. Respondents submitted that the losses as per 5 year trajectory approved by Commission should be considered for working out power purchase requirement of the Licensee and the consumers should not be burdened for the inefficiencies of the licensee in controlling its distribution losses considering the fact that huge expenditure has already been made in Distribution system in the past years under APDRP and from its internal resources on system improvement works.

3.9.2 Petitioner's Comments

In order to reduce non-technical losses, UPCL has taken several steps like regularization of unauthorized connections/load, bringing un-ledgers consumers to the billing fold, replacement of defective meters, ensuring accurate and complete meter reading and billing.

The Petitioner is also planning to introduce pre-paid meters on a pilot basis in a few urban sub-divisions. Based on the results of the pilot project the same may be rolled out in other urban distribution centers. While the use of pre-paid meters will improve the billing and collection efficiency of UPCL, it will also increase consumer convenience by avoidance of security deposit, bill payment, etc. To target reduction of theft and pilferage of power, vigilance and raid activities are being undertaken. Further, a focused program for theft prevention adopting new technology is being taken up for implementation in 2008-09 under Loss Reduction Project.

The loss reduction targets specified by the Hon'ble Commission (4% reduction annually) are very stiff, which is higher than the levels recommended by the P Abraham Committee report. Since, the licensee has been achieving realistic targets regularly; it requests the Hon'ble Commission to consider its loss targets for approval of power purchase costs.

3.9.3 External Transmission Losses

3.9.3.1 Stakeholders' Response

Prantiya Udhyog Vyapar Pratinidhi Mandal has raised concern on the losses external to UPCL system at 4% as high and opined that it should not be more than 3%.

3.9.3.2 Petitioner's Comments

UPCL has no control over the losses in the external system, which has been determined to be 4%, as submitted in the ARR and tariff petition.

3.9.4 Electricity Duty

3.9.4.1 Stakeholders' Response

Mr. Pawan Agarwal submitted that electricity duty charged (which finally passes to the Government) to consumers is a charge to the consumers above the charges determined by the

Commission and has mentioned examples of other States where maximum electricity duty charged from industries is 9 paise/kWh but in Uttarakhand the electricity duty charged is 25 paise/kWh. It was suggested that the tariff should be determined considering the electricity duty payable.

3.9.4.2 Petitioner's Comments

Electricity duty is imposed by State Government on the consumption of electricity and the revenue from the same goes to GoU. UPCL, as a distribution licensee, doesn't have any say on this aspect.

3.9.5 Financial Losses for Previous years and Creation of Regulatory Asset

3.9.5.1 Stakeholders' Response

Several respondents including KGCCI Industrial Estate submitted that the past financial losses as indicated in the proposal have been attributed by UPCL to the Commission for various reasons like approving less expenditure as part of ARR in the past, difference in target loss level fixed by Commission and actual high loss level, disallowing bad and doubtful debts, losses due to change in sales mix and power purchase mix approved by UERC as against actual sales and purchase mix. The objectors submitted that all these factors were to be controlled by UPCL which it failed to and incurred losses. Thus, it has to bear the impact of the same.

As per annual accounts for 2005-06 UPCL has been incurring losses while the previous years annual accounts indicates that UPCL is earning profit. An agency should be appointed to scrutinize this issue.

It was further submitted that there are very few instances in which other Regulatory Commissions have considered the past losses and such instances are on account of factors beyond control of the licensees. It was suggested that the creation of Regulatory asset may be allowed in exceptional circumstances and not as a routine activity. The objectors further submitted that the Commission should take a broader view on the issue after final order on the Appeal of UJVNL and UPCL rather than creating any regulatory asset as requested by UPCL to be passed on to tariff for following years.

3.9.6 Petitioner's Comments

The Annual Revenue Requirement for the past years is being trued up by the Hon'ble

Commission on the basis of audited accounts and the Regulations and norms approved by the Commission.

3.10 Actual expenses for 2006-07 against those approved in ARR

3.10.1 Stakeholders' Response

Industries Association of Uttarakhand requested the Commission to approve the actual expenses of 2006-07 considering the uncontrollable factors and suggested that these trued up expenses should form the basis of projections for 2007-08.

3.10.2 Petitioner's Comments

UPCL has properly justified the expenses incurred / revenue and the proposed action plan in the current financial year 2005-06 and 2006-07 in the ARR and Tariff proposal in the write-up as well as in the relevant Tables. For substantiating the above, further detail has been furnished to the Commission. It has also requested the Commission to approve its expenses for the year considering the actually incurred values.

3.11 Sales Forecast

3.11.1 Stakeholders' Response

Several respondents submitted that large variation in total approved sales of 5537 MU and actual sales of 3694 MU for 2006-07 is observed. Similarly, against approved sales of 2448 MU to steel mills actual sales during 2006-07 is 442 MU i.e. only 18% of approved level. The respondents submitted that such huge variations in projections cause inflated power purchase cost and ARR. It was highlighted that the CS-3 statements that have been used to arrive at the forecasts do not indicate the figures of consumers lying disconnected separately and unless such consumers are deducted, realistic sales cannot be estimated and quoted. The respondents have requested the Commission to analyse this aspect and consider while projecting category-wise sales in the ARR.

3.11.2 Petitioner's Comments

UPCL has projected its category-wise sales forecast considering the existing sales and the expected increase of each category. The same has been subsequently modified based on actual sales achieved so far, in 2007-08.

Consumers may appreciate that forecasting of sales is difficult with complete accuracy, and various unforeseen factors can cause variations in certain consumer categories.

3.12 Investment in distribution

3.12.1 Stakeholders' Response

Several respondents including KGCCI submitted that the benefit of the huge capital expenditure already undertaken by UPCL under APDRP scheme for improving commercial and technical efficiency including achievement in reduction in AT&C losses (which is the main objective of APDRP scheme) has not been mentioned in the Petition. Further, UPCL has envisaged Rs. 660 Crore in the current financial year for up-gradation of the system indicating that there is thrust on investment and expenditure and not on the benefit and return thereof to the consumers and State. The projections of spending Rs. 301 Crore in the current year appear to be overestimated. The respondent questioned the capability of UPCL to execute work in one year considering the past performances and requested the Commission to examine the need of such huge investment vis-à-vis benefits/return from the same to the State. KGCCI suggested that regarding rural electrification under RGGVY, a Central Government sponsored scheme, the investment of Rs. 643.83 Crore for electrification of un-electrified villages/hamlets in the form of 90% capital subsidy is the need of the State to provide electricity to every household by the year 2012.

3.12.2 Petitioner's Comments

UPCL has consistently improved its performance in the past few years, through reduction of distribution losses, increase in collection efficiency and greater rural electrification in the State. It has also planned its investments in future considering the existing infrastructure in the State and envisaged performance improvements, which would accrue to consumers in the form of better quality and reliability of service.

3.13 Fixed Assets and Depreciation

3.13.1 Stakeholders' Response

The opening GFA of Rs. 1058.18 Crore as proposed by UPCL is inflated as against the approved GFA of Rs. 508 Crore. The respondents highlighted that in the previous Tariff Orders, the Commission had directed UPCL to maintain fixed assets register so as to clearly define assets in the class and age and also warned that if the licensee defaults in this respect, the claim of depreciation will be totally disallowed. However, UPCL has not submitted the fixed asset register in 2007-08 Petition. The respondents requested the Commission to take a view whether depreciation should be allowed for such default or not and further requested that depreciation should not be allowed on assets received/created by grant.

Industries Association of Uttarakhand submitted that as against the approved depreciation of Rs. 24.27 Crore for the year 2006-07, UPCL is claiming actual depreciation of Rs. 103.91 Crore for the year 2006-07 and now for the year 2007-08 they are claiming Rs. 117.06 Crore and such huge difference is being claimed without proper explanation and reasoning. The respondent opined that the earlier stand taken by UERC for Depreciation should hold good for this year also.

3.13.2 Petitioner's Comments

The Transfer Scheme of assets and liabilities between UPPCL and UPCL was executed on 12-10-2003 as per provisions of Uttar Pradesh Reorganization Act, 2000 and the assets as per this Transfer Scheme have been shown by UPCL in its books and, accordingly, depreciation has been calculated and claimed.

Hence, it is not correct to say that the assets considered by Commission for the purpose of fixation of tariff should be reflected in the books of UPCL.

3.14 Interest and Finance Charges

3.14.1 Stakeholders' Response

KGCCI Industrial Estate submitted that in Previous Tariff Orders, UPCL in its ARR has not claimed any interest charges on the liability/loan transferred by UPPCL under Transfer Scheme. The objector requested the Commission to consider the same as pass through in Tariff if actually required to be serviced by UPCL in future.

3.14.2 Petitioners' Comments

UPCL has claimed interest expenses based on actual interest liabilities from various sources of funding, including loans from the Transfer Scheme.

3.15 Bad & Doubtful Debts

3.15.1 Stakeholders' Response

It was submitted that the licensee has made provision of Rs. 28.92 Crore for bad and doubtful debts. In the earlier years' ARRs' the licensee had made provisions which were disallowed by the Commission. The respondents submitted that UPCL has not provided any information on the quantum of dues written off against this provision so far and, accordingly, further provision of Rs. 28.92 Crore in the proposal has no justification.

Industries Association of Uttarakhand submitted that UPCL is trying to move in its own direction without taking in to consideration the observation of UERC on bad and doubtful debts. It is common practice to take utmost care to realize the money due from its customers. Nowhere a provision as a %age is allowed for bad debt and the view taken by the Commission in previous Orders on Bad Debts should hold good for this year also.

Some respondents citing examples of Maharashtra Electricity Regulatory Commission and Haryana Electricity Regulatory Commission of waiving the outstanding dues and surcharges suggested to waive off the surcharge on outstanding dues of domestic and non-domestic consumers to recover outstanding dues.

3.15.2 Petitioner's Comments

In an electricity distribution retail business of UPCL's magnitude, spanning both urban and largely rural areas, it is normal to expect a small proportion of debtors turning bad and doubtful. Non-recognition of this in tariff determination leads to a cash gap for UPCL.

Other State Regulatory Commissions have consistently permitted 2.5% of gross billing for distribution utilities in their respective States, to be allowed as bad and doubtful debts. UERC has disallowed similar provision applied for by UPCL in the last tariff orders.

3.16 Non-Tariff Income

3.16.1 Stakeholders' Response

Some of the respondents including KGCCI industries submitted that UPCL has only considered the discount/rebate of timely payment of CGS bills, income from fixed deposits and delayed payment surcharge for projecting Non-tariff income of Rs. 3.18 Crore in ARR. The objector inquired whether disposal of scrap material is not being undertaken or the income from such disposal is not being shown in the ARR. The respondents requested the Commission to ask for the value of scrap/unserviceable items from the licensee and account for the same in the non-tariff income and also issue directions for time bound disposal of such items.

3.16.2 Petitioner's Comments

UPCL had considered its non-tariff income for 2007-08 based on the sources of non-tariff income, as observed from trends for previous years. The suggestions regarding sale of scrap / unserviceable items shall be duly considered and the income from the same shall be considered in future.

3.17 Power Purchase Expenses

3.17.1 Stakeholders' Response

Industries Association of Uttarakhand submitted that power purchase expenses are very closely related to Transmission and Distribution losses and pointed out that in the estimate of power requirement for 2007-08, UPCL is envisaging an increase of 585 MU sales for industrie due to upcoming industries in Uttarakhand. Sales to industrial consumers involves minimum losses and, therefore, loss reduction target for the year 2007-08 should be more than the earlier years and this would lead to lower power purchase cost than that projected by UPCL.

3.17.2 Petitioner's Comments

The power purchase for 2007-08 had been planned considering the expected increase in the number of consumers and the corresponding increase in demand during the year. Since, the actual information is now available; the same has been forwarded to the Commission for determination of the Annual Revenue Requirement for 2007-08. The power purchase costs as approved by the Commission are subject to truing-up based on actuals. Hence, the licensee does not recover higher costs from consumers than its actual expenses.

3.18 Free Power

3.18.1 Stakeholders' Response

Industries Association of Uttarakhand submitted that against purchase of total 3145 MU from UJVNL in 2006-07, UERC fixed AFC of Rs. 82.96 Crore as per the Order of 12th July 2006 at approximately 26.38 paisa per unit. However, against purchase of only 647 MU of free power in 2007-08, the power purchase cost is projected at Rs. 132 Crore at approximately Rs. 204 paisa per unit. The respondent has suggested that the cost of free power should be fixed at the pooled approved tariff of UJVNL stations. Some respondents submitted that the Petitioner has not considered free power available from new station Maner-Bhali II.

3.18.2 Petitioner's Comments

UPCL has considered the power available from various sources, including Maneri Bhalli–II, in determination of its power purchase requirement for the year. The power available from MB-II is not free but on tariff to be decided by Commission.

3.19 Income Tax due to UJVNL

3.19.1 Stakeholders' Response

Industries Association of Uttarakhand requested the Commission to analyse from where the profit has come to have such huge tax liability and if the profits are due to higher tariff then the same should not be allowed and similarly if the tax liability is out of profit from sale of power to Himachal Pradesh then also the same should not be allowed. Similarly, the income tax on any income that is out of other works/consultancy taken by UJVNL, should not be allowed. It was suggested that the income tax should only be allowed on RoE and if the profit is more than the allowed RoE then the same may be investigated as that will show the difference between the projections and actual.

Uttarakhand Committee has objected that the Licensee has included Rs. 61.21 Crore as income tax payable to UJVNL for the period 2002-03 to 2006-07 as extra-ordinary power purchase expense during the current year and further UJVNL income tax for 2007-08 for Rs. 9.37 Crore has been included in the power purchase of the current year. The ARR has been increased by about Rs. 70 Crore on this account for which no explanation/justification has been provided in the proposal. The request of the licensee to consider the same as pass through in tariff if actually required to be serviced by them may be considered in future.

3.19.2 Petitioner's Comments

The licensee has included the amounts corresponding to the income tax of UJVNL from 2002-03 to 2006-07 and for 2007-08 based on the bills submitted by UJVNL to UPCL. Since the amount is payable on account of power purchased in the previous years, the same has been included in the power purchase cost of 2007-08.

3.20 Employee Cost

3.20.1 Stakeholders' Response

Industries Association of Uttarakhand observed that employee cost projection is based on actual expenditure for previous year and not on the expenses approved by UERC. Further, increase in expenses is estimated based on projected consumer increase and increase in consumers has been projected on higher side as compared to past years to estimate higher employee expenses.

3.20.2 Petitioner's Comments

The licensee has not made any separate projection for its employee expenses, but has proposed consolidated O&M expenses, using the approach adopted by the Commission in the previous tariff order.

3.20.3 Impact of Reduction of Tariff of Steel Mills on current ARR

3.20.3.1 Stakeholders' Response

As per the order of Hon'ble ATE the Commission has re-determined the Tariff for steel mill from 01.08.2004 to 31.03.2005 and 01.04.2005 to 31-03-2006 and allowed to pass on credit to them in the current bills @ 42 paise/kVAh and @32 paise/kVAh for the respective periods. The Commission may expeditiously decide the issue of recalculation of tariff for steel industries for the period 01.04.2006 to 31.03.2007 to find out the exact quantum of such refunds and consider the total impact accordingly rather than Rs. 35 Crore proposed by the Licensee in the ARR. Further, this refund should be set off against the accumulated Revenue Surplus as indicated by UERC in the Tariff Order for 2006-07.

3.20.3.2 Petitioner's Comments

UPCL has calculated the impact of the reduction in tariffs of steel mills and included the same in the ARR for 2007-08. The Commission is requested to consider it as part of the ARR and approve the same.

3.20.4 Proposed Annual Revenue Requirement

3.20.4.1 Stakeholders' Response

Several respondents submitted that the annual revenue requirement projected for 2007-08 by UPCL as Rs. 1698.86 Crore is irrelevant and the Petitioner has over-projected expenses under various heads such as Depreciation and Equity which should not be allowed. UPCL has proposed net ARR of Rs. 1698.86 Crore against the proposed revenue of Rs. 1156.62 Crore from existing tariff, thereby resulting in a gap of Rs. 542.23 Crore. All India Consumer Council submitted that projected ARR of UPCL for the year 2007-08 when reviewed against the actual projected for the year 2006-07 show vast variations which have been projected as safeguards and not as likely expenditure and can be reduced to reduce the high increase in tariff proposed by UPCL.

Khatema Fibres Ltd. submitted that the ARR and Tariff proposal of UPCL for 2007-08 contains only the financial parameters of cost and projections of revenue and does not contain the Commercial parameters like collection efficiency, aggregate technical and commercial losses, status of meter reading, billing and collection and quality of supply/services parameters such as voltage profile, tripping & interruptions and transformer failure rate. Moreover, UPCL estimated average cost of supply of Rs. 3.70/unit for 2007-08 on the basis of its inflated ARR and has shown cost coverage at existing tariff for various consumer categories in Table 24 which shows that except Railway Traction all categories are getting supply below cost.

3.20.4.2 Petitioner's Comments

No comment has been given by the Petitioner on this issue.

3.21 Multi Year Tariffs

3.21.1 Stakeholders' Response

As per National Tariff Policy, the Multi Year Tariff (MYT) regime was to be adopted from April 01, 2006 and the same has not been proposed by UPCL. The Commission should direct the UPCL suitably.

3.21.2 Petitioner's Comments

No comment has been given by the Petitioner on this issue.

3.22 Energy Audit and Efficiency improvement

3.22.1 Stakeholders' Response

Regarding energy audit and non-technical loss reduction, some of the respondents submitted that the licensee has given its plans to identify high loss areas while few areas/divisions where losses are very high are well known and the action taken so far for such loss making divisions and achievements thereof have not been mentioned in the ARR. This clearly indicates that no concrete plan for energy audit and efficiency improvement was initiated in the past. Regularization of unauthorized connections/load, bringing unledgerised consumers to billing fold, replacement of defective meters etc. are the works of continuous and routine nature to be undertaken by UPCL. Neither any account nor achievements of the past years has been given in the proposal nor quantitative projections for the current year have been indicated which could be measured at the end of the year. Similarly, the achievements of its vigilance unit in curbing theft and pilferage since its establishment in 2004 have not been highlighted in the proposal or otherwise made public.

3.22.2 Petitioner's Comments

UPCL has been assessing losses at all 33 kV and some 11 kV feeders. The analysis of energy losses at 11 kV and LT voltage at Distribution Transformer (DT) level through energy audit is under progress through consumer indexing and binder creation of the consumer database in Dehradun (Urban), Roorkee, Rudrapur and Haldwani Circles.

The licensee also proposes to dedicate a team of officers at the corporate office to continuously analyse the outputs of the energy audit exercise. This will be used to take specific measures on high loss feeders / distribution transformers.

UPCL has also taken several steps for efficiency improvements, which has resulted in increase in its collection efficiency from 67% in 2003-04 to 88% in 2006-07. Details of the steps taken for efficiency improvement have been provided in the ARR and tariff petition submitted to the Commission.

3.23 Status of Metering

3.23.1 Stakeholders' Response

Some respondents cited the inefficiency of UPCL of not achieving 100% metering by 10th June 2005 as mandated under the Electricity Act, 2003 and it was suggested that the proposal of licensee for introducing prohibitive tariff for unmetered supply may be considered by the Commission.

3.23.2 Petitioner's Comments

UPCL has taken sufficient steps to meter all consumers in the State and has also completed 100% metering in all categories except domestic (rural) and private tube-wells category due to various logistical and local issues. It has, therefore, proposed prohibitive tariffs for un-metered consumers to accept installation of meters.

3.23.3 Consumer Servicing

3.23.3.1 Stakeholders' Response

Several respondents objected to the consumer services provided by UPCL and highlighted various consumer related issues like Load Sanction, release of connections, reduction of loads. The respondents also cited examples of non-adherence of the orders, deliberate delay in decision on issues by keeping matters in correspondence from one office to other, no accountability and responsibility for not doing the same, functioning of CGRF cell without technical members, no secretarial/support office to the Forums for speedy disposal of consumer complaints.

3.23.3.2 Petitioner's Comments

UPCL has taken several new steps to improve the service provided to its customers. This includes the development of the online billing system and implementation of a Customer Relations Management (CRM) system in certain circles. It has also improved its meter reading, bill distribution system and bill collection system to provide better service to customers.

The Petitioner has also created a High-Value Consumer Cell at its Corporate Office to ensure centralized billing and monitoring of large industrial/non-domestic consumers. This cell would be made responsible for centralised processing of bills, analysis of consumption patterns, MIS of all high value consumers and would help in ensuring better service to these consumers.

UPCL has also constituted a Corporate Level Dispute Settlement Committee in its head office for speedy out-of-court settlement of consumer disputes.

3.24 Power Development Cess

3.24.1 Stakeholders' Response

It has been suggested that the hydro potential of the State should be fully exploited and as of now only 1000 MW has been developed out of 15000 MW as planned. The advice of UERC as given while fixing the ARR & tariff of UPCL for the year 2003-04 was accepted by the Uttarakhand Government and this was followed up by levy of royalty of 10 paise/unit and cess of 33 paisa/unit. The Cess was subsequently revised to 40 paisa. In the changing scenario of increasing cost of supplies, while fixing tariff it is requested that the amount of 40 paisa/unit should also be reviewed and if there is any upward revision in per unit cost of UJVNL, the cess may be reduced to keep the cost to consumers under control.

3.24.2 Petitioner's Comments

This is a matter for decision of the State Government whether to forgo the Cess and PDF funds, UPCL has nothing to say in the matter.

3.25 Delayed Payment Surcharge (DPS)

3.25.1 Stakeholders' Response

Some respondents have suggested that the delayed payment surcharge should be computed on number of days basis as was being done earlier instead of monthly basis.

Mr. Pradeep Datta submitted that late payment surcharge should be 3% of bill amount for payment within 1 week after due date and 6% for payment within 1 week thereafter. After 2 weeks, in addition to late payment surcharge interest @ 15% p.a. should be charged with disconnection of supply after 30 days.

3.25.2 Petitioner's Comments

This is a general commercial practice to levy surcharge/interest if the bills are not paid in time. The logic for levy of late payment surcharge is that in absence of receipt of amount of sales, the company is required to arrange money from different sources at cost, to incur its day to day expenses/obligations like payment of power purchase bills, wage and salaries, repairs and maintenance etc. It is, therefore, necessary to levy this surcharge if the bills are not paid in time. UPCL shall consider the suggestions submitted for modification of late payment surcharge and make changes to the existing methodology considering them.

3.26 Metering & Billing

3.26.1 Stakeholders' Response

UPCL, under Kutir Jyoti Yojna, has given 700 connections but neither raised any bill nor metered these consumers leading to misuse of electricity. Moreover, for the connections given for Tubewells no bills have been raised and they are using the electricity without installation of meter at their premises.

Several respondents pointed out the billing deficiencies and submitted that the procedure of preparation and distribution of bill is not completed within one month due to which the bills are not received by the consumers on time. Some consumers suggested that billing cycle should be bi-monthly instead of monthly.

3.26.2 Petitioner's Comments

No comment has been given by the Petitioner on this issue.

3.27 Interest Rate on Security Deposit

Interest rate for interest payable on security deposit is very low and the same should be equal to rate of surcharge on bills i.e. 15% or at least the bank rate of 12%.

3.27.1 Petitioner's Comments

UPCL shall pay interest equivalent to bank rate or more, as may be specified by the Commission.

3.28 Views of Advisory Committee

During the Advisory Committee meeting held on January 22, 2008, the members made the following suggestions:

- Tariff proposed by UPCL is not in the interest of the consumers and consumers should not be burdened due to late filing of the Annual Revenue Requirement by UPCL for 2007-08.
- Expenses proposed by the Petitioner are not in line with the levels approved by the Commission during the previous year.
- Petitioner has not shown any progress in improving the T&D losses.
- Free power provided by the Government should be regulated by the Commission and in turn UPCL should be charged a tariff on basis of average pooled rate for UJVNL.
- Depreciation should be allowed on the basis of rates specified by the Commission in its Regulations.
- Bad debts should be approved as per the Regulations and Policy of the Commission.
- Power cuts should be scheduled in such a manner that the industries are able to carry out there operation for one shift during the day.
- As proposed by UPCL, increase in tariff by 27% in case of LT industries is inappropriate.
- As proposed by UPCL, the Commission should not approve the Billable Demand of 80% and the Demand Charges should also not be increased.
- The Consumer service charges proposed by UPCL are not appropriate and should not be applied on the consumers.
- UPCL should improve its billing, metering and collection efficiency which can reduce the losses. UPCL should take steps to ensure consumer satisfaction.

- ToD surcharge for peak hour usage should not be increased and off peak hour rebate should continue.
- The Commission should only increase the tariff of the Licensee in case it is able to reduce the T&D losses.
- Single part tariff should be specified for consumers.
- Tariff for Domestic category should not be increased.
- The tariff should be charged on basis of cost and usage of electricity by the consumer and Railways should be billed at a concessional tariff on basis of availing power at high voltage.
- Tariff for Railway Traction should be same as Tariff for HT Industry Category.
- Agricultural supply should be improved in Udham Singh Nagar & Haridwar. Agricultural Tariff should be kept uniform for all consumers.
- Continuous process industries should be defined for continuous supply and continuous supply surcharge to industries should be levied only during such period of restriction.

3.29 Commission's Views

The Commission has taken note of the various suggestions/objections made and appreciates the keen interest and participation by various stakeholders to provide feedback to the Commission on various issues. The Commission has also realised that the foundation stone of any meaningful regulation of the Utilities is to have an effective platform for exchange of operational and performance related information with the Utilities throughout the year, rather than the interactions being limited to year-end submission of filings. In certain cases, the Commission also undertook actual ground verification of the information being submitted by the Utilities and made the Utilities aware of the shortcomings in their information systems and processes.

The Commission has addressed the issues raised by the respondents on the aspects of tariff rationalisation and category-wise tariffs such as Increase in Tariff, Fixed Charges, Minimum Charges, ToD Tariffs, Continuous Supply Surcharge, Customer Service Surcharge, Slab-wise Tariffs, Reduction in Cross Subsidy, etc. in Section 8 (Tariff Rationalisation and Design) of the Order. Several respondents from consumer categories have opposed the increase in tariff proposed by the Petitioner and submitted that the existing electricity tariffs in the State of Uttarakhand are 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 expenses and ARR projections of the Petitioner for 2007-08 such as Power Purchase Cost, O&M expenses, capital related expenditure, Non-Tariff Income, etc. the Commission has carried out the detailed analysis of each element of ARR and Revenue as elaborated in Section 7 (Analysis of Annual Revenue Requirement).

On the issues related to actual expenses and losses against those approved for previous years and creation of Regularity Asset, the Commission based on supplementary Petition filed by the Petitioner for truing up of ARR and Revenue has carried out the truing up of ARR and Revenue for the period 2001-02 to 2006-07 based on audited / provisional accounts submitted by the Petitioner subject to prudence check as elaborated in Section 6 (Truing-up for the period 2001-02 to 2006-07).

The Commission's views on other issues raised by the stakeholders in writing as well as during Public hearings are discussed in subsequent paragraphs. .

3.29.1 Late filing of Tariff Application and Revision of Tariff from Prospective Effect

The Commission agrees with the view of the respondents that the tariff should not be changed from the retrospective effect due to delay in submission of the Petition by the Petitioner. Accordingly, the Commission has made the retail tariff approved in this Order effective from March 1, 2008 and the shortfall in balance revenue recovery during 2007-08 has been adjusted against the trued-up revenue surplus of previous years as elaborated in Section 8 of the Order.

3.29.2 Differential Tariff for Plain and Hilly Region

As regard to the respondents' suggestion that the usage of electricity is less in hilly terrain as compared to plain areas and, hence, the tariff for hilly terrain should be low, the Commission would like to clarify that the tariff is determined on per unit basis and consumers belonging to different categories are billed on the basis of usage of electricity by applying per unit tariff. The Commission has already provided for concessional tariff to consumers in snowbound areas. Any further sub-categorisation would not only complicate tariff structure but would also be a regressive step for tariff simplification, which is one of the requirements of existing Regulations.

3.29.3 Misuse of Electricity by Staff

Regarding the issue of misuse of electricity by the staff of the Petitioner, the Commission agrees with the views of the respondent that analysis of data submitted by the Petitioner indicates monthly consumption of around 675 units/month in the staff category as against average consumption of around 86 units per month for the entire domestic category. The Commission in the ARR has considered the average monthly consumption of 86 units per month for staff category equivalent to average monthly consumption of domestic category. The consumption of electricity by staff beyond the consumption of 86 units per month will be to the Petitioner's account. **The Commission directs the Petitioner to take appropriate steps on the issues raised by the respondents to avoid the misuse of electricity by UPCL staff.**

3.29.4 Industrial Rates for Hotel Indusry

The Commission would like to clarify that as per the existing tariff schedule, there is no commercial category and hotel industry is being charged under the tariff approved for Non-Domestic Category. In this context, Hon'ble Appellate Tribunal of Electricity (ATE) in its Order has highlighted that only the consumers involved in the activity of manufacturing of goods are to be considered and billed as industrial units. Further, manufacturing process industries are required to pay excise duty, whereas service sector organizations/units such as hotels pay service tax. As evident, the operation of hotel business does not involve carrying out any kind of manufacturing activity and, hence, the Commission is of the view that the current categorisation of Hotel Industry in Non-Domestic Category is appropriate and does not warrant any change.

3.29.5 Educational Institutions

The Commission would like to highlight that Educational Institutions are already getting concessional tariff under Non-Domestic Category. Further, the Petitioner's cost of supply has increased substantially over a period of time and the Commission has to design the category-wise tariffs to meet the approved ARR of UPCL and to avoid tariff shock to any consumer category.

3.29.6 Utilisation of Domestic Connection for Non-Domestic Purposes

As regards to suggestion for providing common connection for Domestic and Non-Domestic category, the Commission would like to clarify that tariff is charged from the consumers under different categories on basis of purpose of supply of electricity which is in accordance with the provisions of Section 62(3) of Electricity Act, 2003, which stipulates as follows :

"62 (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."

On the issue of penalty for load violation, the Commission would like to emphasise that if a consumer is using domestic connection having contracted load upto 2 kW and if overall consumption for domestic and other purpose is less than 200 units per month, no penalty is applicable on usage of electricity for non-domestic purpose. In this context, the relevant provision of the Commission's Tariff Order for 2006-07 is reproduced below:

"RTS-1 Domestic Applicability

This schedule shall apply to:

Residential premises for light, fan, power and other domestic purposes including single point bulk supply above 50 kW for residential colonies/townships, residential multi-storied buildings where energy is exclusively used for such purpose.

(This rate schedule shall also be applicable to consumers having contracted load upto 2 kW and consumption less than 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.)"

3.29.7 Special Tariff for IDPL

As regards to issue of Special Tariff for IDPL, the Commission is of the view that specifying differential tariff for them will be against the provisions of Section 62(3) of the Act, which prohibits any differentiation between individual consumers. On the issue of combined billing for its connection by clubbing colony consumption with industrial consumption, the respondent is advised to obtain separate connection for colony to facilitate the billing of consumption for specific purpose under the relevant category.

3.29.8 Concessional Tariff for MES

As regards to issue of Concessional Tariff for MES, the Commission is of the view that as a deemed licensee, MES is entitled for purchase of power directly from any generating company or a licensee, including UPCL. For purchase of power from UPCL, the Commission has to decide the tariff for such sale at cost of supply to MES. From the details worked out in Section 7, the cost of power at nominal 15% losses works out to Rs. 1.83/unit. Adding to it the wheeling charges of Rs. 0.85/unit towards other costs detailed in Section 7, the cost of supply to MES works out to Rs. 2.68/unit. However, in order to simplify the tariff structure, the Commission has approved the tariffs applicable to mixed load consumers to MES also.

3.29.9 Distribution Losses/ Line Losses

As regards the concerns raised by the respondents relating to high distribution losses for 2007-08, the Commission has specified the loss reduction target as elaborated in Section 4 (Commission's Approach) of the Order and the Commission would like to clarify that it has restricted considering the losses as per loss reduction trajectory approved by the Commisison in its Order dated 08.09.2003.

3.29.10External Transmission Losses

The Commission has considered the external transmission losses based on the actual data provided by NRLDC for previous years as the Petitioner does not have any control on the external transmission losses.

3.29.11Electricity Duty

The issue of electricity duty does not fall under the purview of the Commission as the same is being levied by the State Government.

3.29.12Sales Forecast

The Commission would like to highlight that it has carried out an exhaustive exercise of compilation and analysis of the UPCL's billing system as discussed in Section 5 (Analysis of Billing Data). The Commission has duly scrutinized and analysed the sales projected by the Petitioner and has approved the category-wise sales based on past trends and considering the other factors submitted by the Petitioner as elaborated in Section 7 (Analysis of Annual Revenue Requirement).

3.29.13Free Power

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 Commission is examining this issue of rate of free power and would take up this matter separately. For the purpose of this Order, the status-quo is being maintained.

3.29.14Multi Years Tariff

The Commission is fully conscious of the fact that the National Tariff Policy (NTP) mandates it to adopt Multi-year tariff (MYT) framework for determination of tariff from April 1, 2006 (para 5). The Commission is, however, not in a position to introduce MYT regime at this stage in the State mainly because of lack of requisite baseline data. The Commission while analysing the billing data of the Petitioner has identified several discrepancies in the metering, billing and collection process as elaborated in Section 5. With several deficiencies in metering and billing, the 'actual loss' levels reported by the Petitioner are only estimates based on certain assumptions. Further, the consumer categories recorded in the commercial data base (CS-3 and CS-4) are different from those prescribed by the Commission in its Orders. The Commission is of the view that in the absence of sound baseline data, it will not be appropriate to introduce Multi Year Tariff regime at least till the billing system of the Petitioner is set in order and streamlined.

3.29.15Rebate for Supply at Higher Voltage

As per the existing tariff schedule, the voltage rebate/surcharge on energy charges is applicable, if actual supply voltage is higher/lower than the base voltage prescribed in respective

Rate Schedule. The Commission would like to clarify that the voltage rebate/surcharge is applicable for all the categories of consumers and not only for Industrial Category.

The Commission would like to clarify that specification of base voltage is based on system's technical requirement and not on the actual votage of use for end equipment. Techno-economically, a load of 1000 kVA cannot be supplied at 400 Volts. Similarly, load exceeding 3000 kVA cannot be techno-economically supplied at 11 kV. Accordingly, considering the technical requirements of the system, the Commission has revised the base voltage for some of the categories, which have been specified in the revised Rate Schedule.

3.29.16Status of Metering

The Commission has taken note of status of metering as submitted by the Petitioner and has considered the suggestion of prohibitive tariff for un-metered categories while designing the category-wise tariffs.

3.29.17Late Payment Surcharge (LPS)

Late Payment Surcharge is intended to act as a deterrent to the consumers and inducing them for making the payments on time. The Commission in its previous Tariff Order dated July 12, 2006 considering the requests of consumers introduced grace period of 15 days beyond the last date for payment printed on the bill for payment of bills without any late payment surcharge. On the issue of applicability of Late Payment Surcharge linked to number of days of delay of bill payment, the Commission, in its Tariff Order for 2006-07, in order to simplify the procedure specified that the DPS shall be calculated taking month as a unit. The Commission is of the view that as the Commission has already provided for grace period of 15 days, there is no need to change the basis of calculating surcharge linked to number of days of delay instead of taking month as a unit. No late payment surcharge is applicable if the consumer pays the bill even within 15 days from the last date of payment and at the same time if the consumer delays the payment beyond the grace period, penalty for entire month should be applicable to motivate the consumers to make the payment within the grace period itself.

3.29.18Disconnection Notice and unexpected Demand Raised

The Commission directs the Petitioner to take appropriate action for implementing the

suggestions of the respondents on these aspects.

3.29.19Consumer Servicing

The suggestions of respondents are well accepted and **the Commission directs the Petitioner to take appropriate action for implementing the suggestions of the respondents to improve the services to its consumers.**

3.29.20Interest Rate on Security Deposit

The Commission has already deliberated on this issue in its Order dated July 27, 2007 and has approved the interest rate on security deposit as 6% per annum.

3.29.21Promotion of Industry

Some stakeholders have suggested that as cheaper and surplus power is available to the state, there should be a reduction in industrial tariff so as to promote new industries. The Commission is of the view that the industries are continuously growing in the State of Uttarakhand and for supply of power to industries during period of shortages, UPCL has to resort to purchase of power at higher rate. In such a scenario, reduction in tariff for industry would lead to losses to the Petitioner and hinder its operations and financially turn around.

4. Commission's Approach

As per the statutory requirements, determination of tariff by the Commission is to be done as per the Uttaranchal Electricity Regulatory Commission (Terms & Conditions for Determination of Distribution Tariff) Regulations, 2004 (Regulations) issued under Section 181 of the Act. In framing these Regulations, the Commission is to be guided by the National Electricity Policy and the Tariff Policy issued by the Central Government amongst other factors listed out in Section 61(a) of the Electricity Act, 2003. The Commission has, therefore, ensured that its Regulations are in conformity with this provision of the Electricity Act, 2003. The Commission's approach having already been defined in its Regulations, in the present exercise, the Commission proposes to and is indeed obliged to abide by them.

During the previous tariff determination exercises, some inevitable relaxations in these requirements were allowed and reasons for doing so were clearly spelt out in Commission's previous Orders. These relaxations will have to be continued as long as the reasons for making such relaxations continue to persist. The Commission has analyzed the information provided by the Petitioner in its Petition as well as the information submitted subsequently including actual figures of 2006-07 and for first six months of 2007-08, i.e., for the period April to September 2007 and estimated expenditure under different heads to arrive at the Annual Revenue Requirement for 2007-08 and 2008-09.

4.1 Sales Forecast, Energy Losses and Power Purchase Requirement

Regulation 6 stipulates that monthly sales forecast has to be done on the basis of past trend with norms for un-metered sales as may be approved by the Commission. The Commission has analysed the past trends of category-wise sales including actual sales for 2006-07. The Commission also obtained the category-wise actual sales figures during first six months of 2007-08 (April to September 2007). The Commission has, accordingly, projected the category-wise sales for 2007-08 and 2008-09 based on past trends, actual sales during first six months of 2007-08 and additional sales projected by UPCL. The approach adopted by the Commission for projecting category-wise sales is discussed in Section 7 of this Order.

The Commission has already fixed a trajectory of combined transmission and distribution

(T&D) losses for the 5 year period 2003-04 to 2007-08 with opening loss level of 46.17% and target reduction of 4% each year with an overall 20% reduction in 5 years. The overall T&D loss target to be achieved for the year 2007-08 is 26.17%. During various submissions, UPCL highlighted that the opening loss level of 46.17% for 2002-03 fixed by the Commission includes the central sector transmission losses and PTCUL transmission losses on which UPCL have no control. UPCL has, therefore, proposed to segregate opening loss level of 46.17% into transmission and distribution losses. The level of opening distribution losses have been worked out as 44.32% and UPCL has proposed to consider 4% p.a. reduction from this level. Details are available in Section 6. The Commission noted that the trajectory was fixed at a time when UPCL was handling both the transmission and distribution network. Further, the regulations, which have been issued subsequently also require the Commission to fix targets for distribution loss only. Since the proposal of UPCL is in line with Regulation 7(6) on loss reduction targets, the Commission agrees with the view of UPCL in this regard and, hence, the Commission has considered the opening loss level of UPCL's distribution business for 2003-04 as 44.32%. For 2007-08, the Commission proposes to adhere to the predetermined trajectory of 4% reduction p.a. in the opening distribution losses. With this approach the distribution loss target for 2007-08 works out to 24.32% against Petitioner's proposal of 29.20% in the Petition. The Commission believes that the trajectory specified by the Commission was an achievable one as has been brought out in Section 5 later that the licensee has not been able to correctly capture and control the level of losses simply because its metering and billing system is in complete mess. The licensee itself is responsible for the present level of losses, which can improve dramatically if corrective action for its metering and billing system is taken in due earnest manner. Therefore, the Commission has stuck to the target level of 24.32% for 2007-08.

However, the trajectory specified by the Commission for reduction of distribution losses by 4% every year is applicable for 5 year period only i.e. till 2007-08. As the Commission is also determining UPCL's ARR and Retail Supply Tariff for 2008-09, the Commission directed UPCL to submit a loss reduction trajectory from 2008-09 onwards. In reply, the Petitioner has submitted the following opening loss for 2007-08 and loss reduction targets for the years 2008-09 to 2012-13:

Table 4.1:Opening Loss Level and Target Loss Reductions proposed by Petitioner

Financial Year	PGCIL	PTCUL	UPCL	Reduction
2007-08 (Base Year)	4%	2.50%	32.84%	-
2008-09	4%	2.50%	29.84%	3%
2009-10	4%	2.50%	27.34%	2.5%
2010-2011	4%	2.50%	24.84%	2.5%
2011-2012	4%	2.50%	22.84%	2%
2012-2013	4%	2.5%	20.84%	2%

It is noted that the Petitioner on its own has revised the opening level of losses for 2007-08 to actual level of 32.84% against the approved trajectory level of 24.32% without seeking Commission's prior approval. The Commission does not wish to review the opening level of losses until actual losses are worked out and reported by the Petitioner by correcting the pitfalls in its metering, billing and collection systems as brought out in Section 5. Further, based on the detailed analysis of metering, billing and collection system and discrepancies observed in the metering, billing and collection as detailed in Section 5, the Commission apprehends that the current loss levels as reported by UPCL are not correct. **The Commission directs UPCL to correct the billing discrepancies and work out the actual distribution losses in the system and submit the same to the Commission within 6 months time**.

The task force (Abraham Committee) constituted by Ministry of Power, Government of India on APDRP Programme has recommended 2% reduction in losses per annume for licensees having distribution losses in the range of 20 to 30%. Therefore, in the meantime, as an interim measure **the Commission directs UPCL to reduce the distribution losses by a modest target of 2% in 2008-09 and, hence, specifies the distribution loss target of 22.32% for 2008-09.**

The total power to be purchased is to be determined on the basis of sales forecast and loss target. Thereafter, as stipulated in Regulation 10, its cost is to be worked out on the basis of merit order principle after ascertaining availability as per Regulation 8. The Commission would follow the above approach in estimating the power purchase cost and revenue from sale of power.

4.2 Operation & Maintenance (O&M) Expenses

Regulation 11 stipulates that for the tariff year O&M expenses shall be calculated on the basis of historical costs and the prevailing norms with appropriate validated changes in the same subject to prudence check by the Commission.

Prior to separation of its transmission business UPCL's operations had been with UPSEB, UPPCL and then monolithic UPCL, each one of them being the combined utility of transmission and distribution functions. Subsequently, UPCL got bifurcated into UPCL, the distribution licensee, and PTCUL, the transmission licensee. Proper apportionment of O&M expenses between the distribution and transmission operations was not available. Therefore, while determining the Petitioner's distribution tariff for the year 2005-06, the Commission had relaxed the relevant Regulations and determined the O&M expenses for the year 2005-06 after such validation and prudence check as was possible. Having once fixed the base O&M expenses for the distribution licensee for the year 2005-06, the Commission in its Tariff Order for 2006-07 approved the O&M expenses for 2006-07 considering the approved O&M expenses for 2005-06 as base value and factoring the changes in the scale of operation and inflation. The Commission increased the base value of O&M expenses by percentage increase in number of consumers to capture the increase in scale of operation and then escalated the increased base by another 4% to account for inflation.

The Commission proposes to follow the same approach for 2007-08 and 2008-09.

Further, the Commission is approving the total O&M expenses for the Petitioner and refraining from sub-dividing it under specific sub-heads. Allocation of this amount to specific expenditure heads may be done by the Board of Directors of the Petitioner Company. While doing so, the Board is expected not only to suitably prioritise individual expenditure items but also to check wasteful and avoidable expenditure. The Board also shall ensure that disproportionate allocation towards long term commitments like employee costs are not made at the cost of other crucial components, like R&M expenses.

4.3 Capital Cost

The original cost of the Petitioner's capital assets is important as it determines crucial cost elements like depreciation and normative O&M expenditure. The Petitioner's assets were originally created by the erstwhile Uttar Pradesh State Electricity Board (UPSEB), then transferred to the successor transmission and distribution company of Uttar Pradesh i.e. Uttar Pradesh Power Corporation Limited (UPPCL), then on creation of the Uttaranchal State to the new State's transmission and distribution company namely Uttaranchal Power Corporation Limited (UPCL) and finally on its separation from PTCUL, leaving only distribution assets with UPCL, the Petitioner Company. For tariff determination, what is relevant is the original cost of acquisition / creation of such 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. Their value as per the Transfer Scheme notified by UP Government at the time of unbundling of UPSEB is substantially different from the value agreed to between the concerned companies for the purposes of their transfer from UPPCL to UPCL. The Commission in its earlier Tariff Orders has already detailed upon the approach followed for considering the value of opening GFA. As the Transfer Scheme is yet to be finalized, the Commission continues with the approach adopted in previous Orders with respect to opening GFA of UPCL. Upon finalization of Transfer Scheme, the Commission may consider the opening asset value of assets transferred to UPCL as per Transfer Scheme subject to prudence check.

4.4 Capitalisation of New Assets

For determining capital related expenditure, in the last Tariff Order, the Commission had accepted and taken into account the actual cost of the completed works. Further, the Commission in its Order dated July 12, 2006 for 2006-07 considered the actual asset capitalisation till 31.03.2005 and not the projected asset capitalisation. The relevant extract of the Order is given below:

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

The Commission during the ARR and tariff determination process obtained the details of scheme-wise assets capitalized and completed during each of the year from 2004-05 to 2006-07. As the Commission is also determining the tariff for 2008-09, the Commission directed UPCL to submit the details of assets completed and capitalized during nine months of 2007-08 i.e. April to December 2007 and the projected asset capitalisation during January to March 2008 alongwith progress made in respect of schemes projected to be capitalized. UPCL submitted these details to the Commission and the Commission has analysed the details. The Petitioner was asked to certify that mandatory clearance of Electrical Inspector has been obtained for HT & EHT works claimed for capitalization before putting these assests to use. No such certificate has been submitted by the Petitioner. The Commission has, therefore, considered the actual asset capitalisation from 2005-06 to 2006-07 for estimating the capital related expenses for 2007-08 on provisional basis. **The Petitioner is directed to submit certificates, in prescribed formats forwarded to Petitioner earlier, that such clearances had been obtained along with next filing.** On Similar lines, as the Commission is also determining the tariff for 2008-09, the Commission has considered the additional capitalization as per Petitioner's reduced projection for the 2007-08 on provisional basis based on the actual capitalization undertaken from April to December 2007 and analyzing the physical progress of the remaining works.

4.5 Interest during Construction

As a well settled principle, interest on loans for a project is treated as capital expenditure and is added to the cost of the project till the project is ready for use and is capitalised, where after interest is treated as revenue expenditure. Accounting Standard-16 on Borrowing Cost also states that:

"Borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset should be capitalised as part of the cost of that asset."

Accordingly, the cost of a project includes interest during construction and is normally financed by the concerned Financial Institution. This ensures that if no moratorium is available for payment of interest, the borrower does not face hardship as the interest during construction period is already included in the project cost and funded. Therefore, the Commission has not allowed Interest during Construction as revenue expense while estimating the ARR for 2007-08 and 2008-09.

4.6 Interest on Loans

In this regard, Regulation 14(1) stipulates that:

"Interest on loan capital shall be computed loan-wise including on loans arrived at in the manner indicated in regulation 13(4)".

Interest on such portion of the outstanding loan that is used for financing works still in progress is to be funded through the capital cost financing and is to be capitalised. Therefore, only that part of any loan which has been used for financing the assets already capitalized is eligible for inclusion as interest costs. Accordingly, the Commission has admited interest only on the loan component that pertains to assets that have been capitalized till 31.03.2007 for 2007-08 and projected to be capitalized till 31.03.2008.

4.7 Depreciation

The principles to be followed for calculating the depreciation and the rates applicable for it have already been spelt out in the Commission's Regulations. An important feature of these Regulations is that while calculating the value of capital assets, any subsidy or grant received for this purpose is to be reduced from the value of the Asset. The Commission proposes to abide by and follow the Regulations on the subject and exclude the assets received by way of grants/subsidies etc. for the purposes of estimating depreciation to be allowed as part of Annual Revenue Requirement. This is important in view of the fact that large number of capital assets have been created by the Petitioner through consumer contributions and further Plan Assistance is flowing by way of 90% grant and 10% loan.

4.8 Tariff Design

Regulation 25 specifies in this regard that:

"20. Cost standard

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. 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 category-wise/voltage-wise cost to supply may factor in such characteristics as the load factor, voltage, extent of technical and commercial losses etc.

21. Rationalization of the tariff structure

Suitable mergers of categories and of sub categories may be done to evolve a simple, easy to comprehend and logical tariff structure.

22. Peak and Off-peak Tariffs

A differential tariff for peak and off-peak hours may be designed to promote demand side *management."*

"2. Amendment of Regulation 20:

After the last line of the existing regulation the following shall be inserted, namely:

"Provided that for protecting interest of other consumers, tariff for any category of consumers could be evolved in a manner that prevailing market conditions get reflected in it suitably."

Accordingly, the Commission has designed tariff for various categories of consumers considering average cost of supply at approved sales and expenses. The Commission has also attempted to bring down the level of cross-subsidies for cross-subsidising consumers as has been discussed in detail in Section 8. Simultaneously, the Commission has tried to reduce the impact of tariff shock to each category of consumers.

Before coming to analysis of Petitioner's proposals for ARR & Tariff, the Commission has analysed Petitioner's performance in its billing system in Section 5, whereafter Petitioner's proposals for truing up the expenses and revenues for previous years have been examined in Section 6.

5. Analysis of Petitioner's Metering, Billing and Collection System

5.1 Background

The Commission had been receiving numerous complaints about arbitratory and irregular billing by UPCL from consumers of most of the categories. On receipt of such complaints, the Commission in July-August 2006 randomly picked up sample billing data and upon analysis of this data it was observed that there are major irregularities in the billing system. Considering the nature and enormity of such irregularities, the Commission decided to carry out a detailed analysis of UPCL's billing data and in this connection directed UPCL to submit complete billing data for the period April 2005 to June 2006 in soft form. The Commission also appointed IIT Roorkee as Consultant for carrying out the detailed analysis of the billing data for the period April 2005 to June 2006.

Upon analysis of the billing data for the period April 2005 to June 2006, IIT Roorkee submitted its report. As per the report, only half of the consumers were billed on actual consumption basis and the remaining consumers were billed either on assumed consumption or normative consumption basis over the years. The analysis revealed that meters of large number of consumers have not been read for years and such consumers were being billed a normative fixed amount. Large number of meters were categorized as 'Appears Defective' and remained as such for more than a decade. Interestingly, meter was categorized as 'Appears Defective' when current reading was either equal to previous reading or when meter showed recorded consumption (difference between previous and current readings) as more than 800 units/kW/Month. In all such cases, consumers were billed at fixed normative amount. Thus, a dishonest consumer who had underdeclared his load was being benefited by charging a fraction of his actual consumption. Analysis also revealed that a large number of meters even after identified as defective were not replaced for years and consumers were billed at fixed normative amount during the period defective meter remained on site. Similarly, there had been large number of consumers whose reading has been shown defective continuously for long periods. Ideally, any meter or reading which appeared to be defective should have been checked by field staff with in one billing cycle and if found defective should have been replaced/corrected immediately. There is no rationale for allowing identified defective meters on site for long periods. Billing on normative basis for long duration results in inaccurate estimation of T&D losses and also revenue loss to licensee as consumers billed on fixed normative amount tend to waste energy.

Further, the analysis unveiled an unethical practice followed by Petitioner by wrongly showing a large number of un-metered consumers as metered ones with fictitious meter numbers and all such consumers were billed a fixed normative amount on NR, ADF, IDF basis. Analysis further disclosed that UPCL has continued to supply electricity to the consumers who had not made any payments for years and huge arrears had accumulated towards such consumers. The study also divulged that there has not been any improvement in any segment, be it meter reading, billing or realization, during the 15 month period under study.

5.2 Commission's Directions and proposed action plan

After receiving the detailed report from IIT Roorkee on UPCL Billing System, the Commission decided to take up the matter with the UPCL's Board and copies of IIT Report was forwarded to each member of Board of Directors followed by a meeting with them on February 13, 2007. During this meeting, the Commission directed the Petitioner to frame an appropriate action Plan to remove or at least reduce these billing inefficiencies in a fixed time-frame. UPCL's Board agreed to discuss the action plan internally and submit a time bound Action Plan to the Commission by March 13, 2007. However, the Commission did not receive any action plan approved by the Petitioner's Board by March 13, 2007.

As no response was received from the Board of Directors in due time, the Commission passed an order on April 5, 2007 directing the Petitioner to follow the following time bound action plan for efficiency improvement in its billing system:

- ***Meter Appears Defective (ADF)*** – To eliminate this category with in next 6 months by physically checking and replacing meter if found defective.
- ***Meter Identified as Defective (IDF) -*** To replace identified defective meters of non-domestic and industrial consumers (i.e. subsidizing categories) on top priority within next two months and the meters of other categories within next six months.
- ***Reading Defective (RDF) Cases*** –To verify readings of non-domestic & industrial consumers on top priority and necessary correction be made in the Petitioner's billing data base and

billing to resume on actual reading basis within next two months. Similar action plan for other categories within next 6 months.

- ***Meter Not Read (NA) –*** To read all such meters which had not been read for more than 2 years on top priority with in next one month and billing of all such consumers be resumed on actual reading basis. Meters not read for more than one year to be taken up with in next two months and thereafter remaining meters to be read. Thus, NR category should be eliminated by October 2007
- ***Billing without any basis*** – Necessary changes in the billing software should be done immediately for all the consumers for which billing is being done without any basis.
- ***Not Billed*** – Consumers not billed should be verified and corrected immediately.
- ***Pending Huge Arrears*** –Disconnection of supply of all consumers be done within 1 month whose dues are more than Rs. 1 lakh or pending for more than 1 year. The same process of disconnection of supply of all other consumers be done within 2 months.
- ***Fictitious Meters*** – To provide correct meters at all installations where meters are found fictitious and the address of the meter so replaced should be mentioned and updated in the database within 3 months.

The Commission also directed the Petitioner that this matter relating to wrong reporting including fictitious purchases and installation of meters should be properly investigated at the earliest and the responsibility for handling such misreporting should be fixed immediately.

5.3 Commission's Analysis

It was noted that the Petitioner had not responded on the suggested measures and even did not submit any report on the progress made by them on any of the measures. After lapse of six months i.e. the period by which Petitioner was required to remove all deficiencies in its billing system, the Commission itself took up a comprehensive task of analysing billing data for all the 28 Divisions for all the categories to ascertain the progress made by the Petitioner in this regard and find out as to whether the scenario has improved or otherwise. For the purpose of this exercise, the Commission collected soft copies of complete billing data from all the 28 Divisions of the Petitioner for all Categories of consumers for the period April 2006 to October 2007. Data was available on different platforms. The Commission transported it to one platform for proper detailed analysis. The Commission also developed software for analysis and generation of reports thereon as discussed hereunder:

- Month-wise, division-wise and category-wise status of billing giving number and percentage of consumers being billed under different billing basis such as NR, NA, ADF, IDF, RDF etc. It also prints list of consumers who have been billed on 'normative basis' for longer period, say for more than a year, 5 years, 10 years etc.
- List of un-metered consumers who are billed as metered consumers with fictitious meter numbers.
- Impact of proposed tariff based on slab-wise consumption to facilitate Commission to take a view on Petitioner's proposal in this regard.
- Slab-wise connected load on the system
- Details of pending arrears including sorting of defaulting consumers with pending arrears of more than Rs. one Lakh.
- List of consumers who are billed on lower tariff (e.g non-domestic consumers billed as domestic category).
- Impact of Time of Day Tariff on revenue
- Load factor of all consumers and also slab-wise load factor summary
- Impact of Load factor based Minimum Consumption Charges

The Commission analysed the Category-wise data for all the 28 divisions and observed that there has not been any appreciable improvement in Petitioner's billing system during the entire period between April' 05 to October'07. The summary of the Commission's findings for various categories of consumers is discussed below:

5.3.1 Billing of HT Industrial Consumers

Greater emphasis was laid on analysis of data of HT consumers. Petitioner was directed to submit contacted load and actual consumption during 2006-07 for each HT Industrial consumer. Upon analysis of this data, the Commission found that there are only about 800 plus consumers in this category out of the total of about 12 lakh consumers. These consumers account for more than 40% consumption of electricity in the State. Time of Day tariff is applicable to this category and all consumers have been provided with ToD compliant meters. Despite being directed by the Commission to read these ToD meters through Meter Reading Instruments (MRI) only, the Petitioner continued to read these meters manually till January 2007. It was also observed that the load factor of many HT industrial units was extremely poor. It was found that the bills for these high end consumers involving huge payments are made at division level manually and are neither verified nor checked at corporate level.

Considering the fact that the bills for these high end consumers are made manually at Divisional level and also low load factor of HT Industries, the Commission decided to further analyse the HT consumption pattern and collected copies of manual bills of all HT Industrial consumers for the period April 2006 to October 2007 (i.e. for 19 Months) from all Divisions. The relevant information from the bills was entered in the computer database and detailed analysis was carried out by the Commission. The analysis revealed certain facts which are detailed below:

- All HT Industries operate round the clock (on 3 shift basis)
- Load Factor of many industries has been extremely low (in some cases even less than 5%). One of the reasons for abysmally low Load Factor could be due to tampered/slow meter. Such a low load factor of **many industries is highly alarming especially when the concerned industry operates round the clock. This instance itself indicates towards the lackadaisical approach of Petitioner regarding billing of high end industrial consumers**.
- The Commission's Supply Code Regulations, effective from April 2007, provide for testing of Bulk Consumer's Meters at least once in a year. During the eleven months since the notification of these Regulations, normally speaking more than 90% of bulk consumer meters should have been tested, but till date the Commission has not received any report or information from the Petitioner of any such meter testing. The Commission had even facilitated the Petitioner by extending help in arranging meter testing through CPRI, Bangalore and had meeting on January 2, 2008 with DG, CPRI at Bangalore along with MD, UPCL. Unfortunately, nothing further appears to have been done in this matter by the Petitioner.
- In one particular case it was observed that billing had been done on kWh basis instead of kVAh basis resulting in negative bill for one particular month. The bill was signed by four officers including concerned Division Executive Engineer which shows that the bills, after having been prepared by the Bill preparation desk, are not checked at all.
- In another particular case it came to light that a Hospital was being billed under HT Industrial Category instead of non-domestic category entailing higher tariff.
- A few cases of under billing were detected.

- It was also found that different rates for peak-hour consumption had been used by the Petitioner. Some Divisions have adopted rate of Rs 2.40/kVAh for peak hour consumption against approved rate of Rs 2.38/kVAh.
- In some of the cases Electricity Duty has been calculated on kVAh consumption instead of kWh consumption.

The Commission further observed that complete load-shedding of industrial loads during evening peak hours was enforced from January 15, 2007 to April 16, 2007. The peak hour consumption during month of February 2007 should have been less as compared to November 2006 and December 2006 when there was no peak hour restrictions. However, on the contrary it was observed that peak-hour consumption of some of the HT industries had increased considerably in the month of February for which UPCL was not able to provide any explanation. This gives rise to the suspicion that local staff of the Petitioner responsible for preparation of bills manually, had been favoring these industries in more than a way.

The Commission also found from actual bills for October'07 that there are 890 HT Industrial consumers consuming 1257.94 MkVAh during April'07 to October'07. However, Petitioner's statement CS-3, one of the main basis for preparation of ARR, indicates that there were only 855 HT Industrial Consumers consuming 1149.44 MkVAh during the period. Petitioner has failed to provide any explanation for this discrepancy. This instance reflects poorly on the reliability of Petitioner's commercial statements and highlights the lackdascial attitude of the Petitioner even towards basic functions affecting its finances directly. The reliability of ARR and tariff petiton, which has been based on such statements, would also be poor.

The above analysis has unearthed some serious maladies of Petitioner's billing system, resulting in huge revenue loss to the Petitioner.

5.3.2 LT Consumers

Commission noted that computerized billing for most of the LT Consumers is being done by out-side agencies situated at Meerut and Delhi. The consumer categories and the number of consumers being billed under this computerized billing system are:

- Domestic – More than 11 lakh
- Non-domestic - About 1 Lakh

- LT Industry (up to 100 BHP) - About 5000
- Public Water Works - About 400
- Private Tube wells - About 20000

As the billing for other LT categories such as Government Irrigation System, Public Lighting etc is still being done manually, no analysis could yet be done by the Commission for these categories. **The Commission hereby directs the Petitioner to raise only computerized bills for all categories of consumers w.e.f. 01.07.2008, whereafter no bill shall be raised manually.**

The summary of the Commission's findings on category-wise billing for LT Consumers is discussed below:

5.3.2.1 LT Industrial Consumers

The Commission observed that there has not been any improvement in billing of this subsidizing category and only 75-80% of LT industrial consumers are billed on actual meter reading basis and about 13% meters are not read and 3% meters remained defective and another 1% meters 'appeared defective' throughout this period. The findings of the billing of LT Industrial Consumer's billing data for the period April 2007 to October 2007 is summarised in the Table below:

Table 5.1: Billing Analysis of LT Industrial Consumers (Upto 25 BHP)

Billing basis	April	May	June	July	Aug.	Sept	Oct.
Number of consumers	4848	4868	4717	4750	4702	4736	4849
Actual reading	76.6%	79.7%	78.9%	80%	79.8%	78.5%	79.9%
Not read (NR)	13.9%	12.6%	13%	11%	12.9%	14.7%	12.8%
Not accessible (NA)	1.96%	2.61%	1.99%	3.09%	2.81%	2.74%	2.87%
Appeared defective (ADF)	0.52%	0.51%	0.81%	0.67%	0.83%	0.7%	0.78%
Identified defective (IDF)	2.7%	2.49%	2.61%	2.61%	2.74%	2.68%	2.87%
Reading defective (RDF)	1.01%	0.97%	1.25%	1.03%	0.91%	0.7%	0.74%
Minimum charges	2.1%	-	-	-	-	-	-
With out basis	-	-	0.02%	0	-	-	-
Perm. Disconnected(SB)	0.04%	-	0.06%	0.11%	-	-	0.02%
Temp. Disconnected (NB)	1.11%	1.15%	1.31%	1.52%	-	-	-

The analysis further revealed that there are as many as 10 Industrial Consumers whose meters have not been read for more than 90 billing cycles and another 22 consumers whose meters have not been read for more than 60 billing cycles. It also emerged through the study that more than 320 meters have been identified defective but remained on site for more than 60 billing cycles. In other words meters of these consumers have not been read/checked/replaced since inception of State of Uttaranchal (now Uttarakhand). The summary of analysis giving number of consumers continued to be billed under same group (NR, NA, ADF, IDF etc.) in October 2007 is given in Table below:

Table 5.2: Age-wise Analysis of Consumers Billed under Same Group

Billing Status	Billing Cycles						TOTAL
	>90	60-90	30-60	12-30	6-12	1-6	
Meter Not Read	10	22	29	116	127	532	836
Meter Not Accessible (NA)	0	0	0	19	34	112	165
Meter Appear Defective	1	3	8	5	31	6	54
Reading Defective	0	1	1	7	27	3	39
Meter Identified as Defective	7	317	28	77	45	67	541
Total	**18**	**343**	**66**	**224**	**264**	**720**	**1635**

5.3.2.2 Domestic Consumers

The study brought out that in case of Domestic consumers, only 70% of about 11 lakh domestic consumers in the State are being billed on actual meter reading and the remaining about 3 lakh consumers are billed on some assumed normative basis. It further disclosed that the Meters of about 16-17% i.e. more than 1.6 lakh consumers are not read month after month and meters of 5% i.e. more than 55,000 consumers remained defective and had not been replaced. It was also observed that other 2-3% meters appear defective. The analysis also brought out that about 12% or 1.2 lakh consumers are wrongly shown as metered consumers with fictitious meter numbers such as “DDDDDD” or “DR0001” etc. UPCL had been clarifying that deficiencies in its metering and billing system are due to vast sparcily inhebited topology in hilly areas. The analysis has revealed that on the contrary, the gravity of situation is critical in many Divisions in Plain areas of the State. Performance in hilly divisions is comparatively better. Performance of Haridwar, Roorkee, Vikas Nagar and Kashipur Divisions is the worst. One of the data file pertaining to Haridwar division showed that as many as 99.73% meters had not been read. On an average 65% meters were not read in Roorkee Division month after month. It was noted that while there has been some improvement in some of the divisions, situation deteriorated in other divisions. Thus, overall there has not been any discernible improvement in billing system for domestic consumers since April 2005 i.e. for around 30 months. The Commission observed that number of consumers whose usage appeared to be non-domestic has been billed as Domestic Category which is resulting in Revenue Loss to the Petitioner. The summary of the Domestic consumer’s billing data for the period April 2007 to October 2007 is given in the Table below:

Table 5.3: Analysis of Billing Data for Domestic Consumers

Billing On Basis	Billing Cycle-I				Billing Cycle-II		
	April	June	Aug.	Oct.	May	July	Sept.
Actual Reading	72.4%	71.9%	71.03%	71.39%	70.6%	70.4%	69.21%
Meter Not Read (NR)	13.5%	14.7%	16.34%	15.17%	16.1%	16.2%	17.59%
Meter not accessible (NA)	3.72%	3.71%	3.14%	2.89%	3.06%	3.24%	2.84%
Appeared Defective (ADF)	1.29%	1.42%	1.43%	1.38%	1.71%	1.7%	1.72%
Identified Defective (IDF)	6.4%	6.51%	6.74%	7.37%	6.65%	6.61%	6.98%
Reading Defective (RDF)	1.33%	1.33%	1.26%	1.34%	1.5%	1.45%	1.58%
Minimum Charges (MIN)	0.7%	0.05%	0.04%	0.04%	0.03%	0.01%	0.01%
Perm. Disconnected(SB)*	0.45%	0.06%	0.01%	0.39%	0.07%	0.14%	0.62%
Temp. Disconnected (NB)*	0.22%	0.3%	0.01%	0.03%	0.31%	0.3%	0.01%

**Consumption has been shown against these dis-connected consumers*

Analysis further revealed that there are as many as 367 domestic consumers whose meter have not been read for more than 15 years and another 1346 consumers whose meters have not been read for more than 10 years. Study also disclosed that more than 6000 meters had remained on site for more than 10 years after identified as defective. In other words, meters of these consumers have not been read/checked/replaced since inception of State of Uttaranchal (now Uttarakhand). Summary of analysis giving number of consumers continued to be billed under same group (NR, NA, ADF, IDF etc.) in October 2007 is given in Table below:

Table 5.4: Age-wise Analysis of Consumers billed under Same Group in Domestic Category

Billing Status	Years						Total
	>15	10-15	5-10	2-5	1-2	0.1-1	
Meter not read (NR)	367	1346	36923	15477	23146	79383	156642
Meter not accessible (NA)	56	161	728	3119	4213	19841	28118
Meter appear defective (ADF)	341	1405	3137	2735	4718	2481	14917
Reading defective (RDF)	12	58	491	2677	7543	3155	13936
Meter identified as defective (IDF)	2118	4238	9953	18989	14350	19230	68878
Total	**2894**	**7208**	**51232**	**42997**	**53970**	**124090**	**282491**

5.3.2.3 Non-Domestic Consumers

It was noted that the highly subsidizing Non-domestic consumers paying highest tariff have also not escaped the Petitioner's billing maladies. The analysis brought out that only 75% consumers are billed on the basis of actual meter reading and balance consumers are billed on Normative Assumed Basis. Meters of about 16% consumers under this category are not read as a practice and 6-8% meters remained on site even after identified as defective. No attempt was made to verify 2-3 % meters which were categorized either as 'Appear Defective' or as 'Reading Defective' and were allowed to remain as such and consumers were billed on assumed consumption month after month. The summary of the Non-Domestic consumers' billing data for the period April 2007 to

September 2007 is shown in the Table below:

Table 5.5: Summary of Analysis for Non-Domestic Consumers

Billing group	April	May	June	July	August	Sept.
Total no. Of consumers	92235	90946	88304	88755	88527	94651
Actual reading	74.75%	74.17%	76.48%	75.3	74.41	75.14
Meter not read (NR)	9.22%	9.18%	8.5%	9.37	11.57	10.6
Meter not accessible (NA)	5.44%	5.58%	5.12%	5.33	4.21	4.12
Appeared defective (ADF)	1.14%	1.13%	1.2%	1.18	1.28	1.24
Identified defective (IDF)	6.76%	6.7%	6.86%	6.92%	7.15%	7.37%
Reading defective (RDF)	1.44%	1.36%	1.29%	1.32%	1.32%	1.52%
Minimum charges (MIN)	0.66%	0%	0%	0%	0.01%	0%
With out basis	0.01%	0.21%	0.01%	0.01%	0.01%	0.01%
Perm. Disconnected(SB)	0.16%	1.21%	0.05%	0.04%	0.02%	0%
Temp. Disconnected (NB)	0.41%	0.45%	0.49%	0.53%	0.03%	0.01%

It was also revealed that there had been as many as 26 non-domestic consumers whose meter had not been read for more than 90 billing cycles and another 165 consumers whose meters not read for more than 60 billing cycles. Study also disclosed that more than 600 meters of this subsidizing category had remained on site for more than 5 years (60 billing cycles) after being identified as defective. Summary of analysis giving number of consumers continued to be billed under same group (NR, NA, ADF, IDF etc.) in October 2007 is given in Table below:

Table 5.6: Age-wise Analysis of Conusmers Billed under Same Group in Non-Domestic Category

Billing Status	Billing Cycles						Total
	>90	60-90	30-60	12-30	6-12	1-6	
Meter not read (NR)	26	165	339	1291	1379	5668	8868
Meter not accessible (NA)	8	28	61	380	854	2923	4254
Meter appear defective (ADF)	20	47	105	188	620	178	1158
Reading defective (RDF)	4	6	25	178	996	243	1452
Meter identified as defective IDF)	50	606	865	1551	1873	2516	7461
Total	**108**	**852**	**1395**	**3588**	**5722**	**11528**	**23193**

5.3.2.4 Public Water Works

Only departments and corporations of Government of Uttarakhand are consumers in this category having subsidized tariff. Shockingly, only 14-18% consumers in this category are billed on actual consumption contributing about 40% of consumption by this category. Study brought out that around 50% meters of this category are not read and contribute less than 30% of consumption by this category. **In other words, such consumers whose meters are not read (NR) are being under-billed month after month**. In terms of defective meters, more than 25% of meters under this category remained defective and 3-5% meters remained ‘Appears Defective’. Study also unearthed that there are few number of ‘favored’ consumers who appear to belong to Subsidizing LT Industrial category but were being billed under this subsidized category by the Petitioner resulting into substantial revenue loss to the Petitioner. The Commission's analysis further revealed that about 380 consumers have been consuming 3.5-4.5 MU/month during October'07 against more than 850 consumers consuming more than 17 MU/month as been indicated in Petitioner's CS-3 statement for the same month. Petitioner was asked to reconcile the difference in the two and the Commission was appalled to note that even Management of Petitioner Company was not aware that billing for most of these consumers is being done manually at the Division level. Petitioner could reconcile only the number of consumers and consumption could not be reconciled as copies of mannaully prepared billed could not be compiled. The reasons for raising bills for some consumers of same category through computerized billing system and other through manual billing system could not be explained by Petitioner.

5.3.2.5 *Private Tube Wells*

During the public hearings many consumers of this category submitted, that though the meters are provided at their premises but the same are not being read at all and they are continued to be billed for high consumption on some assumed normative basis. This has been confirmed by this analysis carried out by the Commission which revealed that only 10-12% consumers are billed on actual reading basis and meters of 65-70% consumers are not read. Surprisingly, less than 1% meters have been identified as defective and only 0.4% meters appeared defective. About 19% consumers were being billed arbitrarily without any basis. The Consumers also complained that though their lands are in rural areas, they are being billed on higher Urban Tariff, which has again been confirmed by the analysis of the data for this category. Further, the study revealed that metered consumers whose meters are not being read (NR group) are being billed at lower Fixed Monthly Charges than their Un-metered counterparts. The summary of the Private Tube Wells category billing data for the period April 2007 to October 2007 is presented in the Table below:

Table 5.7: Summary of Analysis for Public Tube Wells Category

Billing Basis	April	May	June	July	August	September	October
Actual reading	12.00%	9.50%	11.00%	11.00%	9.00%	9.70%	13.00%
Not read (NR)	61.00%	67.00%	67.00%	68.00%	70.00%	70.00%	68.00%
Not accessible (NA)	1.90%	0.60%	1.60%	1.30%	1.20%	1.30%	1.10%
Appeared defective (ADF)	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%
Identified defective (IDF)	0.80%	0.70%	0.80%	0.90%	0.90%	0.90%	1.00%
Reading defective (RDF)	0.40%	0.50%	0.40%	0.30%	0.30%	0.30%	0.30%
Minimum	3.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
With out basis	19.00%	19.00%	18.00%	18.00%	18.00%	17.00%	16.00%
Perm. Disconnected (SB)	0.20%	1.70%	0.00%	0.00%	0.00%	0.00%	0.00%
Temp. Disconnected (NB)	0.30%	0.40%	0.40%	0.40%	0.00%	0.00%	0.00%

Analysis further revealed that there were only 14 PTW consumers whose meter had not been read for more than 60 billing cycles. This is perhaps due to the fact that earlier, before formation of the State, most of the consumers were un-metered. There are more than 6000 consumers whose meters have not been read for more than 12 billing cycles. Summary of analysis giving number of consumers continued to be billed under same group (NR, NA, ADF, IDF etc.) in October 2007 is given in Table below:

Table 5.8: Age-wise Analysis of Consumers Billed under Same Group in Public Tube Wells Category

Billing Status	Billing Cycles						Total
	>90	60-90	30-60	12-30	6-12	1-6	
Meter not read (NR)	4	10	1887	4250	3227	5898	15276
Meter not accessible (NA)	0	0	12	36	25	143	216
Meter appear defective (ADF)	0	0	23	15	18	14	70
Reading defective (RDF)	0	0	13	8	16	23	60
Meter identified as defective (IDF)	0	2	15	42	46	95	200
Total	**4**	**12**	**1950**	**4351**	**3332**	**6173**	**15822**

5.4 Low Load Factor

Software developed by the Commission also calculated monthly load factor of every consumer. From this analysis it is observed that Load Factor of large number of consumers in every category has been abysmally low. The Load factor details in regards to different categories are presented in the table below:

Table 5.9: Load Factor Details for Different Consumer Categories

Load Factor	Unit/month	Non-domestic		LT Industry		Domestic		PTW	
		%	No.	%	No.	%	No.	%	No.
Less than 1%	7.44	4.06	3514	2.59	212	3.19	14969	0.79	227
Less than 5%	37.2	31.5	27288	21.2	1737	33	154988	3.53	1012
Less than 10%	74.4	55.6	48146	51.4	4209	55.2	258783	6.44	1846
Less than 15%	111.6	67.2	58151	70.8	5800	77.9	365534	51	14611
Less than 20%	148.8	73.1	63231	80.4	6586	82.4	386697	52.2	14955
Less than 25%	186	88.7	76741	91.1	7467	85.3	400117	52.8	15130
More than 25%	186	11.3	9806	8.89	729	14.7	69118	47.2	13539

From the above table it may be noted that load factor of more than 50% consumers in all categories, except PTW was as low as 10%. Load factor of 3514 non-domestic consumers and 212 LT Industrial consumers was even less than 1% which means that these consumers consumed less than 7.44 units/kW/Month. This is beyond any one's imagination and requires immediate attention and implementation of Commission's directions made from time to time. Such abysmal low load factor could be due to tampered/stopped meters. Regulation 3.1.3 of Commission's Supply Code provides periodic testing of meters. Commission is not aware of any such testing undertaken by the Petitioner. **Petitioner is directed to undertake testing of meters of all such consumers in non-domestic and LT Industrial categories whose monthly load factor is less than 1% within six months from issue of this order and report compliance along with results of such testing by the following month end**. Commission's Software has sorted out list of such consumers and the same has already been handed over to Petitioner vide Commission letter No. 1079/UERC/07 dated 07.02.2008.

5.5 Mounting Arrears

Financial health of any organization depends upon its efficiency in collecting its dues. The Commission is constrained to note that Petitioner has completely failed on this account. The study reveals that arrears have been mounting in all the categories. Table given below indicates the position of arrears as on April 2007 and October 2007 against various categories.

Table 5.10: Arrears on bills under different consumer categories (Rs.)

Category	April-07	October-07	Increase
Domestic	1,304,731,622	1,402,381,956	97,650,334
Non-domestic	940,106,895	1,035,758,032	95,651,137
LT Industry	266,879,890	267722887	842,997
PWW	408,164,084	479,797,470	71,633,386
PTW	563,713,126	581,255,449	17,542,323
Total	**3,483,595,617**	**3,766,915,794**	**283,320,177**

It is clear from the above Table that Petitioner has not made any attempt to recover its legitimate dues and had allowed arrears to mount to new heights. The analysis further showed that supply of consumers with arrears amounting to about Rs. 79 Crores only has been disconnected by the Petitioner whereas supply of consumers having arrears amounting to about Rs. 300 Crores out of Rs. 376 Crores has been left untouched as evident from the Table given below. The table also highlights the fact that most of the arrears are against consumers whose billing is done on assumed Normative Basis i.e. under NR/NA/ADF etc. groups. It also brings out that even Government Agencies such as Jal Nigam fail to pay their bills regularly and arrears of such agencies are also mounting. **The Commission advises the Government of Uttarakhand to make a separate provision in the State budget towards electricity bills of Government Departments/local bodies and devise a suitable mechanism for ensuring that the payments of their electricity bills are made in timely manner.**

Study also indicated that arrears in divisions in plain areas are much higher than those in hilly areas and Roorkee Division tops the list of maximum pending arrears.

Table 5.11: Pending arrears of different categories as on October 2007 (Rs.) on bill basis

Bill Basis	Domestic	Non-Domestic	LT Industries	PWW	PTW	TOTAL
AcRd	291,359,111	192,175,445	28,356,985	50,623,546	12,925,277	575,440,364
NR	353,506,002	145,180,028	23,594,694	89,593,048	401,845,199	1,013,718,971
NA	82,628,168	49,649,772	14,151,869	25,812,034	2,658,655	174,900,498
ADF	28,907,061	22,927,445	4,144,441	21,707,620	2,181,888	79,868,455
IDF	192,895,523	139,081,247	25,602,146	172,023,503	1,229,692	530,832,111
RDF	23,029,325	25,752,110	1,890,286	4,506,479	507,882	55,686,082
MIN	1,971,123	2,800	0	0	0	1,973,923
W/O	227,517,184	114,218,373	31,552,751	55,735,941	116,093,953	545,118,202
SB	125,091,424	231,872,445	95,050,706	52,959,849	30,533,507	535,507,931
NB	75,648,157	114,901,168	43,379,009	6,835,451	13,279,395	254,043,180
Total	**1,402,553,078**	**1,035,760,833**	**267,722,887**	**479,797,471**	**581,255,448**	**3,767,089,717**

| Ac Rd = Actual reading | NR = Not Read | NA = Not Accessible |

| ADF = Appear Defective | RDF = reading defective | IDF = Identified Defective |

| Min = Min Charges | W/O = without any basis | SB/NB= Perm/Temp Disconnected

The Commission had forwarded list of consumers in various categories whose arrears (excluding surcharge accrued so far) exceeded Rs. one Lakh vide its letter no. 1177/UERC/08 dated 07.03.2008. **The Commission, hereby, directs the Petitioner to recover its legitimate arrears (exceeding Rs. 1 Lakh) from such consumers within six months from issue of this order and report compliance**.

The Commission in its tariff order for 2006-07 had abolished the concept of Minimum Charges. However, on analysis the data and bills it is observed that UPCL has continued to bill some of the consumers on Minimum Charges Basis which is violative of Commission's Tariff Order and the Commission has taken a serious view of this violation on the part of the Petitioner.

The Commission recognises that Metering, Billing and Collection are most crucial activities for efficient operation of any Distribution Business but as revealed through this detailed study the Petitioner is deficient in all these areas. The Commission takes a serious note of this and calls for time bound action plan from the Petitioner for correcting the exisiting deficiencies together with mile-stones for efficiency improvement in all these three areas. The Commission notes that if the corrective steps are not immediately taken towards improving the metering, billing and collection, the consumers will have to bear the brunt of UPCL's inefficiencies through increase in tariffs on year to year basis. These deficiencies in metering and billing systems results in higher distribution losses in the Petitioner's system and the targets specified for reduction in losses by the Commission may not be achieved unless concerted efforts are made by the Petitioner straight away for improving metering and billing and in turn towards reduction in commercial losses.

With the view to facilitate the Petitioner in identifying the trouble areas, the Commission vide its letter no. 1079/UERC/07 dated 07.02.2008 forwarded the following (these results are also available on Commission's website www.uerc.in):

1. Division–wise, Month-wise, Category-wise summary of analysis of billing data giving %age of ADF,IDF,RDF, NA and NR cases, arrears and Delayed payment surcharge.
2. Division-wise, Month- wise, Category wise list of consumers having extremely poor load factor,
3. Division-wise, Month- wise, Category wise list of consumers having pending arrears more than Rs one lac,
4. Division-wise, Month- wise, Category wise list of unmetered consumers shown as metered consumers with dummy meter numbers.
5. List of consumers who apparently belong to but non-domestic category being billed as domestic consumers
6. List of consumers who apparently belong to but non-domestic category being billed as domestic consumers

The Commission, in order to share the problem for major areas of concern of billing data and to find its remedy through the consultative process with the licensee, went further and convened a meeting with Board of Directors of UPCL. **The Board of Directors during the meeting held on 22nd February 2008 unanimously, recognized the need for initiating urgent corrective measures on time bound basis by UPCL to streamline their metering and billing system on sound principles and lay down milestones for efficiency improvement in each of these areas of crucial importance and make available the same to the Commission. Action plan as recognized by UPCL's Board has since been submitted by the Petitioner to the Commission on 12th March 2008. The Commission directs the Petitioner to also put in place an adequate monitoring mechanism for implementation of proposed action plan at higher echelon of UPCL management and same shall be over-seen at**

the level of Secretary (Energy) who is also Chairman of the Petitioner. Further, periodical reports–quarterly basis, on its implementation both quantitatively and qualitatively, shall be submitted by the Petitioner to the Commission.

6. Truing-up for the Period 2001-02 to 2006-07

6.1 Background

Truing-up of various heads of expenses and revenues approved for the preceding year is the exercise, which is generally required to be carried out by State Electricity Regulatory Commission along with the ARR and Tariff proceedings for the ensuing financial year. In the State of Uttarakhand, no such exercise was undertaken in the past as the licensee neither filed any such Petition giving justifications nor supporting data nor the reliable/audited data was available for such a truing up. Notwithstanding this, the Commission had, in the year 2006, on its own, got an audit of UPCL's accounts conducted through an independent expert audit agency for the years 2001-02 to 2004-05 and taken the same into account in the previous Tariff Order dated 12.07.2006.

In the previous Tariff Order, the Commission had recognized a surplus of Rs. 654.94 Crore realised by UPCL from its consumers from 09.11.2001 to 31.03.2005 based on the investigation carried out by M/s Amit Ray and Company, Allahabad (Consultant), a reputed firm of auditors. After hearing the stakeholders and giving an opportunity to the Petitioner, the Commission accepted consultant's report and held that during the period 2001-02 to 2004-05, UPCL realized excess revenue of Rs. 755.53 Crore from consumers of the electricity in the State. Out of this amount, an amount of Rs. 100.61 Crore related to UJVNL's appeal pending before the Hon'ble Appellate Tribunal and a view on the same was to be taken by the Commission only after the matter was disposed off by the Hon'ble Appellate Tribunal. Thus, the net surplus amount, available with UPCL worked out to Rs. 654.94 Crore. The excess amount of Rs. 654.94 Crore was refundable to the State consumers with interest. However, considering the fact that refund of this amount to each consumer in proportion to their consumption would pose serious administrative and accounting difficulties, the Commission directed the Petitioner to transfer the surplus amount of Rs. 654.94 Crore to a separate Network Development Fund (NDF) which would be kept in the separate bank account. This fund was to be utilised only for leveraging funds available from Government and financial institutions for strengthening and up-gradation of the distribution system.

The Petitioner aggrieved by the Order dated 12.07.2006 filed an Appeal (No. 225 of 2006) before the Hon'ble Appellate Tribunal particularly in the matter of surplus revenue determined by the Commission. The said Appeal is still pending. During the course of the hearing, the Petitioner submitted before the Hon'ble Appellate Tribunal that it is in the process of filing a truing up application before the Commission in the matter of disputed surplus revenue of Rs. 654.92 Crore and accordingly Hon'ble Tribunal has adjourned the hearing of this matter to 24.03.2008.

The Petitioner vide its letter no. 22/UPCL/UERC dated 25-01-2008 filed an application before the Commission for truing up of its ARR and Revenue for the period from 09-11-2001 to 31-03-2005. The Commission vide its letter dated 28-12-2007 & 08-01-2008 had directed the Petitioner to submit the details of truing up of ARR and revenue of UPCL for past years including 2006-07. Accordingly, the applicant also filed an application before the Commission for truing up of its expenses and revenues for 2005-06 and 2006-07 on 22.02.2008. The Petitioner was asked to validate the submissions made through substantial records, supporting documents and calculation sheets. Based on the detailed calculations, supporting documents along with audit certificates, the revised calculations of ARR and Revenues in respect of 2001-02 to 2006-07 was submitted by the Petitioner through its Petition dated 05.03.2008.

It may be noted that the Consultant, while determining the expenses had restricted them to the level of expenses approved by the Commission as the scope of its assignment was to determine the variation in the UPCL's expenses from those as allowed by the Commission. Consultant's findings were based on audited accounts of UPCL for the period 2001-02 to 2003-04 and unaudited accounts for 2004-05. Now since the audited Balance Sheets of UPCL are available for 2001-02 to 2004-05, the Commission is considering the claims of expenses incurred during these years in light of the audited Balance Sheets of the Petitioner and reasons given by it for their variations from approved levels.

Further, Hon'ble Appellate Tribunal for Electricity has observed in para 21 of their Order dated 23.05.2007 in Appeal No. 269 of 2006 and Appeal No. 12 of 2007 that:

> *"……Normally, truing up exercise is undertaken on the basis of available data and information. Second and subsequent truing up exercises can be taken up when audited account figures are available……"*

Accordingly, the Commission is also carrying out provisional true up of the expenses and revenues for years 2005-06 and 2006-07 on the basis of provisional Balance Sheets and available data and disposing off all the above Petitions filed by Petitioner for truing up together. Head-wise details of costs submitted by the Petitioner alongwith the Commission's analysis is presented in the succeeding paragraphs.

6.2 Truing up of Surplus till 31.03.2005

6.2.1 Power Purchase Expenses

The power purchase costs for 2001-02 to 2004-05 have been calculated by the Petitioner on the basis of actual bills received from the generating companies. Energy purchased through UI overdrawal during the year is considered towards State consumption. Fixed costs towards fixed charges and energy charges for underdrawals under UI scheme of ABT has also been considered in power purchase costs and revenue from such UI underdrawal has been shown separately on revenue side as non-tariff income on accrual basis. Power purchase cost has been calculated on monthly merit order basis to allocate highest cost towards trading of electricity. Transmission charges payable to PGCIL and PTCUL have been included in the total power purchase cost for the year and allocated to State cost in proportion of State consumption. Accordingly, the Petitioner has claimed a power purchase cost of Rs. 1420.84 Crore for State consumption and Rs. 206.34 Crore for UI underdrawals for the period upto 31.03.2005.

The Commission observed that power purchase cost claimed by UPCL includes Rs. 100.61 Crore which was excess paid to UJVNL and was not interfered with by the Commission in its previous tariff order as the matter was sub-judice. This matter is still pending before Hon'ble Supreme Court and a view on the same shall be taken separately for UJVNL. Hence, the Commission is allowing this expense as legitimate expense to UPCL. Further, the revenue received by UPCL on account of banked energy during these years was deducted by the Consultant for deriving the cost attributable to State consumption is being considered as non-tariff revenue subsequently, the same has not been deducted by the Petitioner. After carrying out these adjustments, the total power purchase cost attributable to State consumption considered by the Consultant worked out to Rs. 1411.09 Crore against Petitioner's claim of Rs. 1420.84 Crore. Since the Petitioner has calculated the power purchase cost on the principles laid down by the Commission in its previous Orders and is verified by supporting data, the Commission accepts the power purchase cost determined by the Petitioner.

Further, the Consultant had not included the cost of UI underdrawals as cost attributable to State consumption. The Commission is of the view that UI is an incidental activity to the business of distribution and supply of electricity as actual UI overdrawal or underdrawal are dependent on scheduling done by the licensee and actual State load coming on the inter state grid. Any gains or losses on this count have to be passed on to consumers unless it is proved that the licensee has not done scheduling as per reasonable prediction of demand. The licensee cannot be faulted for marginal variations in actual drawals as no forecast can be an accurate one. Since losses / gains in UI each year are marginal, the Commission for the present exercise is considering the costs of UI underdrawals and also taking the revenues earned on this count in the non-tariff income as per Petitioner's submissions. Accordingly, cost of power injected to grid through UI has been allowed at Rs. 206.34 Crore and its corresponding revenue of Rs. 207.17 Crore, both as claimed by UPCL, has been considered in Non-tariff income.

A comparison of the year-wise costs found by Consultant, claimed by UPCL and admitted by the Commission is given hereunder:

Table 6.1 : Power Purchase Details till 31.03.2005 (Amount in Rs. Crore)

Particulars	2001-02			2002-03			2003-04			2004-05			Total upto 31.03.2005		
	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable
State Consumption	159.73	173.91	173.91	240.79	297.90	297.90	372.09	385.54	385.54	502.96	563.49	563.49	**1275.57**	**1420.84**	**1420.84**
Excess Paid to UJVNL	14.18	*0.00	*0.00	51.91	*0.00	*0.00	20.60	*0.00	*0.00	13.92	*0.00	*0.00	**100.61**	**0.00**	**0.00**
Banked Energy	0.00	#0.00	#0.00	2.03	#0.00	#0.00	0.00	#0.00	#0.00	8.89	#0.00	#0.00	**10.92**	**0.00**	**0.00**
PTCUL Charges	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.99	*0.00	*0.00	**23.99**	**0.00**	**0.00**
Sub-total	**173.91**	**173.91**	**173.91**	**294.73**	**297.90**	**297.90**	**392.69**	**385.54**	**385.54**	**549.76**	**563.49**	**563.49**	**1411.09**	**1420.84**	**1420.84**
UI underdrawals	-	-	-	-	25.93	25.93	-	83.72	83.72	-	96.69	96.69	**0.00**	**206.34**	**206.34**
Total Power Purchase	**173.91**	**173.91**	**173.91**	**294.73**	**323.83**	**323.83**	**392.69**	**469.26**	**469.26**	**549.76**	**660.18**	**660.18**	**1411.09**	**1627.18**	**1627.18**

** Included above*
 # Taken in Non-tariff revenue

6.2.2 Operation & Maintenance (O&M) Expenses

The Petitioner has submitted the O&M expenses on the basis of actual expenses as shown in audited Annual Accounts for the years 2001-02 to 2004-05.

The Commission noted that for the years 2001-02, 2002-03 and 2003-04, the expenses claimed by the Petitioner and considered by the Consultant are exactly same except the payment of terminal benefits towards GPF of retiring employees which was not considered by the Consultant.

The Petitioner has submitted that terminal benefits of Rs. 27.09 Crore are estimated to be included in employee costs for the period from 09-11-2001 to 31-03-2007, which are incurred in the absence of availability of funds in the GPF Trust and has requested to pass through this expenditure incurred by UPCL provisionally, which will be adjusted against ARR of the future years on receipt of the said amount to UPCL from GPF Trust in respective years. In a similar matter, Hon'ble ATE has directed in case of UJVNL to consider all such claims and, accordingly, the Commission has allowed the same to UJVNL in its tariff order. Since, the claim of Rs. 27.09 estimated to have been incurred towards terminal benefits is very close to the excess payments of Rs. 27.18 Crore worked out by the Consultant and the same is required to be discharged by the Petitioner pending any decision on the funding of the same from GoU / GoUP / UPPSET, the Commission is allowing the amount of Rs. 27.09 Crore as an expense during these years, which will be adjusted in future ARR's when either the State Government takes over the liability or the money is transferred from UP Power Sector Employees Trust.

For 2004-05, the Petitioner has claimed an amount of Rs. 124.54 Crore as net O&M expenses for UPCL only. The expenses for 2004-05 considered by the Consultant also included the expenses for PTCUL, which have been considered as part of power purchase cost above, these expenses considered by the Consultant need to be excluded for its meaningful comparison with the claimed expenses. Since the Consultant had limited the total actual net O&M expenses of Rs. 142.62 Crore for UPCL (Rs. 125.79 Crore) and PTCUL (Rs. 16.83 Crore) to Rs. 136.24 Crore, the restricted amount of UPCL's expenses considered by the Consultant works out to Rs. 120.16 Crore. This amount, as stated earlier, does not include excess payments of Rs. 1.06 Crore considered by Consultant based on provisional accounts while the actual excess as per audited accounts was Rs. 2.21 Crore. As this excess expenditure has been considered as allowable subject to adjustments subsequently, the allowable expenses based on Consultant's report work out to Rs. 122.37 Crore. In addition, there have been variations in actual R&M expenses, A&G expenses and capitalisations, which account for the balance excess of about Rs. 2 Crore. As R&M expenses are necessary for reliable supply hence the Commission accepts the expenditure claimed by UPCL towards R&M expenses. The Commission is, however, not satisfied with regard to steep increase in A&G expenses. But considering the fact that the ceiling for approved expenses for 2004-05 was kept by the consultant at the levels approved for 2003-04 in the absence of any approval for 2004-05, which should have increased due to inflation and increase in scale of operation, the Commission has allowed the same.

Capitalisations are to be considered on actual basis. Thus, the Commission accepts Petitioner's claim of Rs. 124.54 Crore for 2004-05.

The year-wise expenses so furnished by Petitioner and admitted by the Commission as given hereunder:

Table 6.2 : Summary of O&M expenses till 31.03.2005 (Amount in Rs. Crore)

Particulars	2001-02			2002-03			2003-04			2004-05			Total upto 31.03.2005		
	Considered by Consultant	Sought by UPCL	Allowable	Considered by Consultant	Sought by UPCL	Allowable	Considered by Consultant	Sought by UPCL	Allowable	Considered by Consultant	Sought by UPCL	Allowable	Considered by Consultant	Sought by UPCL	Allowable
Employee costs													-		-
Other than terminal benefits	33.43	33.43	33.43	89.47	89.47	89.47	90.33	90.33	90.33	93.19	84.75	84.75	**306.42**	**297.98**	**297.98**
Terminal Benefits	5.37	5.60	5.60	14.16	25.77	25.77	14.55	27.68	27.68	15.03	17.47	17.47	**49.11**	**76.52**	**76.52**
Gross	***38.80***	***39.03***	***39.03***	***103.63***	***115.24***	***115.24***	***104.88***	***118.01***	***118.01***	***108.22***	***102.22***	***102.22***	***355.53***	***374.50***	***374.50***
Less: capitalisations	2.93	2.93	2.93	11.88	11.88	11.88	24.90	24.90	24.90	-	17.46	17.46	**39.71**	**57.17**	**57.17**
Net cost	***35.87***	***36.10***	***36.10***	***91.75***	***103.36***	***103.36***	***79.98***	***93.11***	***93.11***	***108.22***	***84.76***	***84.76***	***315.82***	***317.33***	***317.33***
R & M costs	*10.11*	*10.11*	*10.11*	*24.56*	*24.56*	*24.56*	*29.67*	*29.67*	*29.67*	*17.18*	*27.19*	*27.19*	**81.52**	**91.53**	**91.53**
A & G costs	*2.55*	*2.55*	*2.55*	*11.66*	*11.66*	*11.66*	*14.27*	*14.27*	*14.27*	*10.84*	*14.11*	*14.11*	**39.32**	**42.59**	**42.59**
Less: capitalisations	0.39	0.39	0.39	1.54	1.54	1.54	4.02	4.02	4.02	-	1.52	1.52	**5.95**	**7.47**	**7.47**
Net cost	***2.16***	***2.16***	***2.16***	***10.12***	***10.12***	***10.12***	***10.25***	***10.25***	***10.25***	***10.84***	***12.59***	***12.59***	***33.37***	***35.12***	***35.12***
Gross O&M expenses	**51.46**	**51.69**	**51.69**	**139.85**	**151.46**	**151.46**	**148.82**	**161.95**	**161.95**	**136.24**	**143.52**	**143.52**	**476.37**	**508.62**	**508.62**
Less: capitalisations	3.32	3.32	3.32	13.42	13.42	13.42	**28.92**	**28.92**	**28.92**	**0.00**	**18.98**	**18.98**	**45.66**	**64.64**	**64.64**
Net O&M expense	**48.14**	**48.37**	**48.37**	**126.43**	**138.04**	**138.04**	**119.90**	**133.03**	**133.03**	**136.24**	**124.54**	**124.54**	**430.71**	**443.98**	**443.98**

6.2.3 Interest & Finance Charges

The Petitioner has submitted that it has not claimed any interest on GPF Loan, CPSU's dues, CPSU's Liabilities and U.P. Government Loans including liabilities of power purchase due to UPPCL, UPRVNL and UPJVNL, pending finalization of the Transfer Scheme with UPPCL. Interest on GoU Loans, REC Loans and NABARD Loans has been claimed on the basis of actual interest accrued (net of capitalisation of IDC) during the respective financial years, which are supported by an independent audit and certificate from an external Auditor alongwith detailed interest calculations for each loan for the period 2001-02 to 2006-07 from the date of actual receipt of each loan. Government guarantee fee on loans is claimed year-wise based on actual during the respective years. Other interest and finance charges under this head are claimed on the basis of amount shown in Annual Accounts for the respective years. The Petitioner has requested the Commission to allow interest on these loans on the basis of Auditor's Certificate and has submitted that necessary correction in respect of interest on these loans shall be made in the Annual Accounts for 2005-06 & 2006-07 before finalization of the same. The Petitioner has submitted that most of its loan assistance is by way of State Government Loans and loans under Central Government-assisted designated schemes. These Schemes with components of grants and loans or exclusively loans were formulated without considering the impact/financing of IDC during the period of execution of these Schemes. Most of the loans sanctioned by the State Government, i.e. District Plan, State Plan, energisation of PTW are annual in nature and executed every year and, therefore, the impact of IDC is nominal. The Petitioner has, however, submitted that this IDC has been funded from internal sources.

The Consultant, while determining the interest expenses, had restricted the same to the level of expenses approved by the Commission although it mentioned that actual accrued interest on loans was higher. The level of data maintained in this regard by the Petitioner was also unsatisfactory for the Commission to consider the expenses finding place in the Petitioner's statement of accounts. Now since the Petitioner has conducted an independent audit for actual interest accrued during the year and the interests now being claimed are almost matching with accrued interest found by the Consultant earlier, the Commission accepts the interest calculations submitted by the Petitioner on the basis of auditor's report and certificate on the same except the loans discussed hereunder for which treatment to be given is also specified.

6.2.4 REC Old Loan

As per the terms of reschedulement given in the MoA of this loan with REC, even though interest is accruing each year, no interest payment is to be made uptill December 2007 and the accrued interest gets capitalised and added to loan. The Commission and the Consultant had, accordingly, not considered this interest. The interest on this loan is payable from January, 2008 and is included in the EMIs fixed for balance 15 years of loan period. While the Petitioner has claimed this interest as accrued interest and supported it by a letter from REC but has not capitalised the same as per terms of this MoA. The year-wise interest on this loan shown by REC in this letter includes interest on the capitalised portion of interest also and is indeed as per the terms of MoA.

The Commission is of the view that if interest on this loan is allowed as expense and not capitalised as proposed by the Petitioner, it would mean that interest is not converted to loan and no further interest can be allowed on this interest in future. This would not only tantamount to deviation from the approved terms of loan, but would also put the Petitioner under hardship if the accrued interests allowed by the Commission for past are not set aside by it and are used to service or repay this part of capitalised loan. The Commission has, therefore, decided to abide by the terms of MoA and, accordingly, the accrued interest on this loan has first been allowed as expense during these years and then subtracted as capitalised interest. However, considering the fact that such capitalisation is not resulting into creation of any physical asset, the repayment of this capitalised interest converted to loan is not possible through depreciation available from physical assets. The Commission is, therefore, allowing additional depreciation for repayment of this loan in balance fifteen years of the repayment schedule w.e.f. 01.01.2008. The additional impact of this allowance in gross interest upto 2004-05 is Rs. 40.16 Crore but after capitalisation the same is zero.

6.2.5 Guarantee fee payable to Government

A Guarantee fee @ 1% p.a. is payable to the Government on the outstanding loans taken by Petitioner for which counter-guarantee has been provided by the Government. The Commission and the Consultant had not considered this as a valid expense in the absence of any documentary proof being provided by the Petitioner for its terms and payments made. However, the Commission had specifically stated in the previous Tariff Order that it shall consider these claims on production of such documentary evidence. Since the Petitioner has now provided the requisite details, Government guarantee fees on loans have been allowed on the basis of calculations and Government's letter in this behalf specifying terms of the fee. However, the Petitioner has erred slightly in calculating the guarantee fees for 2002-03 and 2004-05 by calculating the Guarantee fee for REC (New) loan, taken for transmission assets now with PTCUL, for entire year 2004-05, while even as per its books of accounts interest on transmission loans has been taken for 2 months only i.e. till 31.05.2004 when PTCUL got separated from UPCL. The Commission has, therefore, allowed Guarantee fee for 2004-05 for 2 months only for this loan. The total impact of inclusion of Guarantee fee is Rs. 6.54 Crore.

6.2.6 Interest on security deposit etc.

Interest on security deposit, rebate to consumers and other finance charges have been allowed on the basis of annual accounts of the Petitioner.

6.2.7 Interest on AREP loans

The Petitioner has claimed interest on AREP loans which is actually not payable. According to the terms and conditions of the above mentioned loan, no interest is to be paid by UPCL if works are completed within stipulated time and only the penal interest of 2.75% is to be paid when the loan is not repaid according to the terms. Both the above eventualities would be on part of any lapse by UPCL and cannot be passed on to consumers. Thus, the Commission has not allowed any interest on AREP loans.

6.2.8 Treatment of Interest during Construction (IDC)

The Petitioner has submitted that in the absence of financing of IDC, it has utilised its internal resources in funding the same which may be considered by the Commission. Interest during construction is of a capital nature and is normally transferred to Capital works in progress. This cannot be a part of revenue expenditure and allowed as pass through in tariffs and has, accordingly, deducted the same from gross revenue interest expenses. However, considering the difficulty explained by the Petitioner that the funding for all its projects is made available without considering the component of IDC, which is a valid expenditure, the Commission has considered funding of IDC through the surplus calculated by it for each year as brought out in detail subsequently. **The Petitioner is, however, directed to ensure that any scheme, which is envisaged now onwards, should include the component of IDC in its financing mix. The Petitioner is also advised to allocate this IDC to its CWIP so that it gets transferred to Fixed Assets and the Petitioner is able to claim depreciation on this amount**. The capitalised interest expenses considered by the Consultant and proposed by the Petitioner upto 2003-04 are same and are accepted. However, the Petitioner has claimed lower value of interest capitalisation of Rs. 11.63 Crore against capitalisation of Rs. 19.81 Crore considered by the Consultant. Considering the fact that the capitalised interest claimed by the Petitioner is based on actuals reflected in audited accounts and the fact the Consultant’s findings were not only based on provisional accounts but also included capitalisation for PTCUL portion as well, the Commission has accepted the capitalisation claimed by Petitioner. This has further increased the net interest expenses by Rs. 8.18 Crore.

The year-wise interest expenses uptill 2004-05 as per Consultant’s findings, furnished by Petitioner and admitted by the Commission are as given hereunder:

Table 6.3 : Interest & Finance Charges till 31.03.2005 (Amount in Rs. Crore)

Particulars	2001-02				2002-03				2003-04				2004-05				Total upto 31.03.2005			
	Consultant's finding	**Considered by consultant**	**Sought by UPCL**	**Allowable**	**Consultant's finding**	**Considered by consultant**	**Sought by UPCL**	**Allowable**	**Consultant's finding**	**Considered by consultant**	**Sought by UPCL**	**Allowable**	**Consultant's finding**	**Considered by consultant**	**Sought by UPCL**	**Allowable**	**Consultant's finding**	**Considered by consultant**	**Sought by UPCL**	**Allowable**
Interest on loans																				
REC-Old	-		-	-	-		4.19	4.04	-		17.19	17.19	-	-	18.93	18.93	**-**		**40.31**	**40.16**
IDBI	0.42		0.42	0.42	1.07		1.07	1.07	1.07		1.07	1.07	-	-	-	-	**2.56**		**2.56**	**2.56**
PFC	0.15		0.15	0.15	0.39		0.39	0.39	0.39		0.39	0.39					**0.93**		**0.93**	**0.93**
CBI	0.53		0.54	0.54	1.38		1.38	1.38	1.38		1.38	1.38	-	-	-	-	**3.29**		**3.30**	**3.30**
HDFC	0.01		0.01	0.01	0.03		0.03	0.03	0.03		0.03	0.03	-	-	-	-	**0.07**		**0.07**	**0.07**
REC (New)	-		-	-	-		0.35	0.35	3.89		3.05	3.05	3.44	3.44	4.48	-	**7.33**		**7.88**	**3.40**
AREP	-		-	-	-		-	-	-		0.00	-	-	-	0.47	-	**-**		**0.47**	**0.00**
RGGVY	-		-	-	-		-	-	-			-	-	-	-	-	**-**		**-**	**0.00**
APDP	0.13		0.13	0.13	0.44		0.55	0.55	1.88		2.06	2.06	2.22	2.22	2.26	2.26	**4.67**		**5.00**	**5.00**
APDRP			-	-			-	-							0.05	0.05	**-**		**0.05**	**0.05**
District Plan	0.35		0.36	0.36	1.94		1.14	1.14	1.78		1.00	1.00	1.56	1.56	0.91	0.91	**5.63**		**3.41**	**3.41**
MNP	0.01		0.01	0.01	1.44		1.56	1.56	8.23		8.25	8.25	8.03	8.03	8.05	8.05	**17.71**		**17.87**	**17.87**
PMGY	0.00		0.00	0.00	0.17		0.20	0.20	0.60		0.48	0.48	0.59	0.59	0.51	0.51	**1.36**		**1.20**	**1.20**
PTW			-	-			-	-				-			-	-	**-**		**-**	**0.00**
State Plan	0.05		0.31	0.31	1.32		1.89	1.89	1.06		1.80	1.80	0.86	0.86	1.60	1.60	**3.29**		**5.60**	**5.60**
NABARD	-				-		-	-	0.04		0.13	0.13	1.29	1.29	1.79	-	**1.33**		**1.92**	**0.13**
MISC. Intt.							-	-				-	1.34	1.34	-	-	**1.34**		**-**	**0.00**
Sub-Total	**1.65**	**-**	**1.94**	**1.94**	**8.18**	**-**	**12.74**	**12.59**	**20.35**		**36.83**	**36.83**	**19.33**	**19.33**	**39.05**	**32.31**	**49.51**		**90.56**	**83.67**
Rebate	6.38		6.38	6.38	18.41		18.41	18.41	13.94		13.95	13.95	2.32	2.32	2.32	2.32	**41.05**		**41.06**	**41.06**
Guarantee Fees	-		-	-	-		1.99	1.43	-		2.71	2.71	-	-	2.32	2.40	**-**		**7.02**	**6.54**
Bank Charges	0.02		0.02	0.02	0.03		0.03	0.03	0.03		0.04	0.04	0.03	0.03	0.04	0.04	**0.11**		**0.13**	**0.13**
Interest on S.D.	0.46		0.46	0.46	1.27		1.27	1.27	1.43		1.43	1.43	1.71	1.71	1.71	1.71	**4.87**		**4.87**	**4.87**
Sub-Total	**6.86**	**-**	**6.86**	**6.86**	**19.71**	**-**	**21.70**	**21.14**	**15.40**		**18.13**	**18.13**	**4.06**	**4.06**	**6.39**	**6.47**	**46.03**		**53.08**	**52.60**
Gross Interest	**8.51**	**2.41**	**8.80**	**8.80**	**27.89**	**6.16**	**34.44**	**33.73**	**35.75**	**15.25**	**54.96**	**54.96**	**23.39**	**23.39**	**45.44**	**38.78**	**95.54**	**47.21**	**143.64**	**136.27**
Less: Tfd. To CWIP	5.61	-	5.61	5.61	5.40	-	5.40	5.40	9.70	-	9.70	9.70	19.81	19.81	11.63	11.63	**40.52**	**19.81**	**32.34**	**32.34**
Less: REC interest Capitalsed	-	-	-	-	-	-	-	4.04	-	-	-	17.19	-	-		18.93	**-**	**-**	**-**	**40.16**
Net Interest	**2.90**	**2.41**	**3.19**	**3.19**	**22.49**	**6.16**	**29.04**	**24.29**	**26.05**	**15.25**	**45.26**	**28.07**	**3.58**	**3.58**	**33.81**	**8.22**	**55.02**	**27.40**	**111.30**	**63.77**

6.2.9 Depreciation

The Petitioner has considered 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 previous Orders. However, the Petitioner has submitted that the value of GFA as on 08-11-2001 has been taken at Rs. 1058.18 Crore in the provisional Transfer Scheme and, therefore, the same value is reflected in the Annual Accounts for the financial years from 2001-02 to 2006-07. The Petitioner has requested the Commission to recognize the actual value of GFA as on 08-11-2001 on finalization of Transfer Scheme and allow depreciation accordingly on the value of final GFA. The Petitioner has calculated depreciation for the period from 08-11-2001 to 31-03-2005 as per rates notified by Ministry of Power, Government of India. The Petitioner has however wrongly calculated depreciation for 2004-05 as

Rs. 42.36 Crore which actually works out to Rs. 48.97 Crore.

The Commission accepts the claims of GFA and depreciation based on opening of GFA of Rs. 508 Crore 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. Further, as depreciation was allowable even on assets funded from consumer contribution as per provisions of Electricity (Supply) Act, 1948, no adjustment for the same has been carried out in GFA value.

Table 6.4: GFA & depreciation till 31.03.2005 (Amount in Rs. Crore)

Particulars	2001-02			2002-03			2003-04			Consultant allowed	Sought by UPCL		Allowable		Total upto 31.03.2005		
	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	As on 01.04.2004	As on 01.04.2004	As on 01.06.2004	As on 01.04.2004	As on 01.06.2004	Allowed by Consultant	Sought by UPCL	Allowable
GFA	508.00	508.00	508.00	508.00	533.80	533.80	508.00	612.70	612.70	519.40	727.88	581.73	727.88	581.73			
Rates	5.44%	7.87%	7.87%	5.44%	7.89%	7.89%	7.86%	7.89%	7.89%	7.69%	5.82%		7.86%	6.78%			
Depreciation	10.82	15.67	15.67	27.63	42.12	42.12	39.93	48.34	48.34	39.93	42.36		9.53	39.43	**118.31**	**148.49**	**155.10**

6.2.10 Provision for Bad & Doubtful Debts

The Petitioner has 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 provision of bad & doubtful debts has been considered @ 2.50% on the sales revenue. The Commission had not recognized this expense earlier as UPCL failed to provide and implement a transparent policy for identifying and writing-off bad debts. The Petitioner has submitted that the policy for annual provisioning for bad & doubtful debts and writing off bad debts against the provisions alongwith the detailed procedure for the same duly approved by the Board of Directors in accordance with the directions of the Commission shall be submitted to the Commission shortly.

The Commission recognises that annual provisioning towards bad & doubtful debts is an accepted method of accounting. The amount, if any, written off towards bad debts is only adjusted against the accumulated provisions, irrespective of the actual amount of bad debts during any particular financial year. If there is no existing provision, then the entire amount of bad debts written off would have to be allowed as pass through in the tariffs. In such a case, considering the magnitude of licensee's receivables, the accumulated amount written off in future years could be significant and could impact the tariffs substantially in those years. Thus, recognising this fact and Petitioner's undertaking for framing a transparent Policy on this issue, pending formal submission of the same, the Commission is allowing the Petitioner a provision of 1.5% on the sales revenue in each financial year for the period from 2001-02 to 2006-07 and not at 2.5% claimed by the Petitioner. This is also the usual level of provisionally allowed in other States. The total claimed provision of Rs. 59.79 Crore upto 2004-05 is, therefore, being restricted to Rs. 35.86 Crore, which is another reason for variation in expenses considered by the Consultant.

Table 6.5 : Provision of Bad & Doubtful Debts till 31.03.2005 (Amount in Rs. Crore)

Particulars	2001-02		2002-03		2003-04		2004-05		Total upto 31.03. 2005	
	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable
Provision for Bad debts	6.44	3.86	16.72	10.03	18.24	10.94	18.39	11.03	**59.79**	**35.86**

6.2.11 Total Expenses

Based on the above discussion, total expenses recognised by the Commission for the period upto 2004-05 work out to Rs. 2325.89 Crore against a claim of Rs. 2390.74 Crore. A summary of total expenses giving comparison of Consultant's findings, Petitioner's proposals and Commission's approval is presented below:

Table 6.6 :Summary of expenses till 31.03.2005 (Amount in Rs. Crore)

Particulars	2001-02			2002-03			2003-04			2004-05			Total upto 31.03.2005		
	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable
Power Purchase	159.73	173.91	173.91	240.79	323.83	323.83	372.09	469.26	469.26	502.96	660.18	660.18	***1,275.57**	**1,627.18**	**1,627.18**
O&M expense	48.14	48.37	48.37	126.43	138.04	138.04	119.90	133.03	133.03	136.24	124.54	124.54	**430.71**	**443.98**	**443.98**
Interest	2.41	3.19	3.19	6.16	29.04	24.29	15.25	45.26	28.07	3.58	33.81	8.22	**27.40**	**111.30**	**63.77**
Depreciation	10.82	15.67	15.67	27.63	42.12	42.12	39.93	48.34	48.34	39.93	42.36	48.97	**118.31**	**148.49**	**155.10**
Provision for Bad debts		6.44	3.86		16.72	10.03		18.24	10.94		18.39	11.03	**-**	**59.79**	**35.86**
Total Expenses	**221.10**	**247.58**	**245.00**	**401.01**	**549.75**	**538.31**	**547.17**	**714.13**	**689.64**	**682.71**	**879.28**	**852.94**	**1,851.99**	**2,390.74**	**2,325.89**

** As explained, this does not include Rs. 100.61 Crore excess paid to UJVNL, Rs. 23.99 Crore of PTCUL charges and Rs. 10.92 Crore of banked energy revenue.*

6.2.12 Tariff and Non-Tariff Revenue

The tariff revenue from sale of energy to State consumers has been considered as per actual value of sales revenues reflected in the annual accounts of respective financial years.

The income from non-tariff sources, such as meter rent, late payment surcharge, interest on deposits and other miscellaneous income are taken as per the figures shown in the annual accounts of the respective financial years. Other non-tariff income, i.e. share of trading income and UI revenue are taken as per actual calculations on accrual basis which is the main reason of difference in the figures considered by the Consultant and those allowed by the Commission. Summary upto 2004-05 is presented below:

Table 6.7 : Revenues till 31.03.2005

Particulars	2001-02			2002-03			2003-04			2004-05			Total upto 31.03.2005		
	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable
[A] Tariff Revenue	***257.49***	***257.49***	***257.49***	***668.80***	***668.80***	***668.80***	***729.59***	***729.58***	***729.58***	***741.29***	***735.44***	***735.44***	***2,397.17***	***2,391.31***	***2,391.31***
[B] Non-tariff revenue															
Share in Trading	0.20	0.19	0.19	6.75	10.56	10.56	2.61	3.83	3.83	1.75	-	-	**11.31**	**14.58**	**14.58**
UI Revenue	-	-	-	-	13.55	13.55	-	77.48	77.48	-	116.14	116.14	**-**	**207.17**	**207.17**
Meter Rent	1.23	1.23	1.23	5.28	5.27	5.27	15.00	14.99	14.99	15.01	14.76	14.76	**36.52**	**36.25**	**36.25**
DPS	20.74	20.73	20.74	7.20	7.20	7.20	1.44	1.44	1.44	1.52	2.57	2.57	**30.90**	**31.94**	**31.95**
Interest on F.D.	9.51	9.51	9.51	26.50	26.50	26.50	30.87	30.87	30.87	20.04	4.26	4.26	**86.92**	**71.14**	**71.14**
Others	1.14	1.14	1.14	15.64	17.76	17.76	17.34	17.34	17.34	10.57	16.37	16.37	**44.69**	**52.61**	**52.61**
Sub-total	***32.82***	***32.80***	***32.81***	***61.37***	***80.84***	***80.84***	***67.26***	***145.95***	***145.95***	***48.89***	***154.10***	***154.10***	***210.34***	***413.69***	***413.70***
Total Revenue	**290.31**	**290.29**	**290.30**	**730.17**	**749.64**	**749.64**	**796.85**	**875.53**	**875.53**	**790.18**	**889.54**	**889.54**	**2,607.51**	**2,805.00**	**2,805.01**

6.2.13 Surplus before Appropriation of Reasonable Return

The calculation of trued-up surplus without considering any reasonable return for the period 2001-02 to 2004-05 is presented below:

Table 6.8 : Calculation of surplus till 31.03.2005 (Amount in Rs. Crore)

Particulars	2001-02			2002-03			2003-04			2004-05			Total upto 31.03.2005		
	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable
Expenses	221.10	247.58	245.00	401.01	549.75	538.31	547.17	714.13	689.64	682.71	879.28	852.94	**1,851.99**	**2,390.74**	**2,325.89**
Revenues	290.31	290.29	290.30	730.17	749.64	749.64	796.85	875.53	875.53	790.18	889.54	889.54	**2,607.51**	**2,805.00**	**2,805.01**
Surplus/(Gap)	**69.21**	**42.71**	**45.30**	**329.16**	**199.89**	**211.33**	**249.68**	**161.40**	**185.89**	**107.47**	**10.26**	**36.60**	**755.52**	**414.26**	**479.12**

6.2.14 *Return on Capital Base*

The Petitioner has submitted that it is entitled to return on Capital Base as per the provisions laid down in the Schedule VI of the Electricity (Supply) Act, 1948 till the applicability of Regulations approved by the Commission. Accordingly, return on capital base has been considered by the Petitioner for the period 08.11.2001 to 31.05.2004 as Rs. 67.50 Crore as shown below:

Table 6.9 : Capital base and Reasonable Return claimed by the Petitioner till 31.05.2004 (Amount in Rs. Crore)

Item	31-03-2002	31-03-2003	31-03-2004	31-05-2004
GFA	533.80	612.70	727.88	581.74
Intangible Assets	-	-	-	
Less: Consumer Contribution	23.45	41.81	58.49	60.90
Capital work-in-progress	75.13	75.77	149.68	131.31
Investment made out of contingency reserve	-	-	-	-
Stores	44.46	61.37	114.26	123.05
Cash & bank balances (i)	197.83	474.54	605.08	577.41
One quarter Expenditure (ii)	15.73	43.35	43.11	37.23
Min. of (i) & (ii)	15.73	43.35	43.11	37.23
Sub-total (A)	***645.67***	***751.38***	***976.43***	***812.43***
Accumulated Depreciation	206.31	248.43	296.77	306.30
Loan advanced by the Board	-	-	-	-
Loan from organizations / institutions approved by State Govt.	280.86	376.03	384.92	334.10
Debentures issued by the licensee	-	-	-	-
Consumers' security deposit	39.71	44.68	50.65	51.84
Sub-total (B)	***526.88***	***669.14***	***732.34***	***692.23***
Capital base = A – B	***118.79***	***82.24***	***244.09***	***120.20***
Reasonable Return				
(i) 16% on Capital base	7.45	13.16	39.05	3.21
(ii) 0.50% on the amount borrowed from Organizations or Institutions approved by the State Government	0.55	1.88	1.92	0.28
Total	**8.00**	**15.04**	**40.98**	**3.48**

The Schedule VI of the Electricity (Supply) Act, 1948 lays down the principles based on which the Capital Base is to be computed and for the said period the licensee was eligible for Reasonable Return on Capital Base. The Petitioner has excluded the inclusion of processing charges collected from consumers in the consumer contribution. This has been included in the consumer's contribution. The Petitioner has included in capital works in progress the amount of advances to suppliers and contractors and revenue expenditure pending allocation over capital works. These items have been excluded from the calculation of capital base as the Sixth Schedule only refers to original cost of works in progress. Further, in calculating one quarter expenditure the Petitioner has included the provision for bad and doubtful debts without actually writing-off any bad debt and, without, incurring expenditure on this count. As the Sixth Schedule allows only the expenditure properly incurred on bad debts, the Commission has excluded this from the calculation of one quarter expenditure.

Further, while calculating loan borrowed from organisations or institutions approved by the State Government, the Petitioner has excluded the receipts from REC of Rs. 48.38 Crore in 2002-03. While the auditor's certificate attached by the Petitioner shows this loan as received in 2002-03, the Balance Sheet of the Petitioner shows this loan in 2003-04. The Commission has considered this loan as received in 2002-03 as per auditor's certificate. The Petitioner has not deducted the amount carried forward at the beginning of the year of account for distribution to consumers, which is referred to as clear profit in the Sixth Schedule and is equal to the surplus for each year calculated above. The Commission has made this correction in the computation of Capital Base. The Petitioner is entitled to a return on Capital Base as computed on the last date of the previous year of account. However, the Petitioner has calculated return on Capital Base at the end of the current year.

After making these corrections, the return on Capital Base works out to Rs. 22.93 Crore, which includes 5% of the amount of reasonable return which according to the Sixth Schedule will be at the disposal of the undertaking, for the period 09.11.2001 to 31.05.2004 against a claim of Rs. 67.50 Crore. Capital base and return on Capital Base allowed by the Commission is given in the Table hereunder:

Table 6.10 : Capital base and Reasonable Return allowed till 31.05.2004 (Amount in Rs. Crore)

Particulars	08-11-2001	31-03-2002	31-03-2003	31-03-2004	31-05-2004
GFA	508.00	533.80	612.70	727.88	581.74
Intangible Assets	-	-	-	-	
Less: Consumer Contribution	17.50	23.65	42.37	59.57	62.04
Capital work-in-progress	73.50	64.99	54.34	97.04	77.15
Investment made out of contingency reserve	-	-	-	-	-
Stores	41.50	44.46	61.37	114.26	123.05
Cash & bank balances (i)	45.50	197.83	474.54	605.08	577.41
One quarter Expenditure (ii)		12.21	34.83	33.62	32.70
Min. of (i) & (ii)		12.21	34.83	33.62	32.70
Sub-total (A)	***605.50***	***631.80***	***720.86***	***913.22***	***752.60***
Accumulated Depreciation	190.64	205.77	243.99	277.65	287.18
Loan advanced by the Board	-	-	-	-	-
Loan from organizations / institutions approved by State Govt.	253.53	280.86	424.41	384.92	334.10
Debentures issued by the licensee	-	-	-	-	-
Clear Profit		45.30	211.33	185.89	6.10
Clear Profit in excess of 5% of reasonable return		44.89	210.82	185.85	5.98
Consumers' security deposit	38.61	39.71	44.68	50.65	51.84
Sub-total (B)	***482.78***	***571.23***	***923.90***	***899.07***	***679.09***
Capital base = A – B	***122.72***	***60.57***	***(203.03)***	***14.15***	***73.51***
Reasonable Return					
(i) 16% on Capital base		7.69	9.69	-	0.38
(ii) 0.50% on the amount borrowed from Organizations or Institutions approved by the State Government		0.50	1.40	2.12	0.05
Reasonable Return		**8.19**	**11.10**	**2.12**	**0.43**
5% of the amount of reasonable return to be at the disposal of the undertaking		0.41	0.55	0.11	0.02
Total		**8.60**	**11.65**	**2.23**	**0.45**

6.2.15 Surplus after Appropriation of Reasonable Return

The calculation of trued-up surplus after accounting for reasonable return determined above for the period 2001-02 to 2004-05 is presented below:

Table 6.11 : Net Surplus till 31.03.2005 (Amount in Rs. Crore)

Particulars	2001-02			2002-03			2003-04			2004-05			Total upto 31.03.2005		
	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable	Consultant's finding	Sought by UPCL	Allowable
Surplus/(Gap)	69.21	42.71	45.30	329.16	199.89	211.33	249.68	161.40	185.89	107.47	10.26	36.60	**755.52**	**414.26**	**479.12**
Less: Reasonable Return		8.00	8.60		15.04	11.65		40.98	2.23		3.48	0.45	**0.00**	**67.50**	**22.93**
Net Surplus	**69.21**	**34.71**	**36.70**	**329.16**	**184.85**	**199.68**	**249.68**	**120.42**	**183.66**	**107.48**	**6.78**	**36.15**	**755.53**	**346.76**	**456.19**

6.3 UPCL's Operations during 2005-06 and 2006-07

6.3.1 Power Purchase Expenses

The Petitioner has submitted details of power purchase costs for 2005-06 & 2006-07 on the same lines as was done for 2001-02 to 2004-05 discussed earlier. The Commission has evaluated the claims of the Petitioner by the supporting data and calculations furnished by it and found the same in order and in conformity with Commission's approach described above. As the audit of accounts for these years is still pending, the Commission has provisionally accepted Petitioner's claims in this regard. Accordingly, the power purchase cost claimed by UPCL, allowed by Commission and total upto 31.03.2007 (including total upto 31.03.2005 found earlier) is presented below:

Table 6.12 : Power Purchase Details till 31.03.2007 (Amount in Rs. Crore)

Particulars	Total upto 31.03.2005		2005-06		2006-07		Total upto 31.03.2007	
	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable
State Consumption	1420.84	1420.84	676.64	676.64	858.81	858.81	**2,956.29**	**2,956.29**
UI underdrawal	206.34	206.34	74.68	74.68	68.11	68.11	**349.13**	**349.13**
Total Power Purchase	**1627.18**	**1627.18**	**751.32**	**751.32**	**926.92**	**926.92**	**3,305.42**	**3,305.42**

6.3.2 O& M Expenses

The Petitioner has submitted the O&M expenses on the basis of actual expenses as shown in un-audited Provisional Accounts for the years 2005-06 & 2006-07. A comparison of expenses approved by the Commission, and those sought by Petitioner for these years is presented in the following Table. The Table shows that the Petitioner has incurred an expenditure of Rs. 152.47 Crore against the gross O&M expenses of Rs. 138.70 Crore approved by the Commission for 2005-06 and hence has exceeded the approved expenses by Rs. 13.77 Crore. Similarly, the excess expenditure in 2006-07 was Rs. 4.27 Crore.

Table 6.13 : Summary of O&M Expenses till 31.03.2007 (Amount in Rs. Crore)

Particulars	Total upto 31.03.2005		2005-06			2006-07			Total upto 31.03.2007	
	Sought by UPCL	Allowable	Approved	Sought by UPCL	Allowable	Approved	Sought by UPCL	Allowable	Sought by UPCL	Allowable
Employee costs										
Other than terminal benefits	297.98	297.98	85.38	88.75	88.75		95.04	95.04	**481.77**	**481.77**
Terminal Benefits	76.52	76.52	13.98	18.56	18.56		17.36	17.36	**112.44**	**112.44**
Gross	***374.50***	***374.50***	***99.36***	***107.31***	***107.31***		***112.40***	***112.40***	***594.21***	***594.21***
Less: capitalisations	57.17	57.17	18.33	17.06	17.06		10.74	10.74	**84.97**	**84.97**
Net cost	***317.33***	***317.33***	***81.03***	***90.25***	***90.25***		***101.66***	***101.66***	***509.24***	***509.24***
R & M costs	91.53	91.53	30.23	31.60	31.60		35.01	35.01	**158.14**	**158.14**
A & G costs	42.59	42.59	9.11	13.56	9.23		16.74	16.74	**72.89**	**68.56**
Less: capitalisations	7.47	7.47	0.69	1.03	0.69		0.98	0.98	**9.48**	**9.14**
Net cost	***35.12***	***35.12***	***8.42***	***12.53***	***8.54***		***15.76***	***15.76***	***63.41***	***59.42***
Gross O&M expenses	**508.62**	**508.62**	**138.70**	**152.47**	**148.14**	**159.88**	**164.15**	**164.15**	**825.24**	**820.91**
Less: capitalisations	64.64	64.64	19.02	18.09	17.75		11.72	11.72	**94.45**	**94.11**
Total O&M expense	**443.98**	**443.98**	**119.68**	**134.38**	**130.39**	**159.88**	**152.43**	**152.43**	**730.79**	**726.80**

A closer look at the components of O&M expenses for this year reveals that the Petitioner has incurred higher expenditure of Rs. 7.95 Crore, Rs. 1.37 Crore, and Rs. 4.45 Crore for employee, R&M & A&G expenses respectively. While the increase in employee expenses is acceptable as the approved expenditure on this head was based on available information for part of the preceding year. The correct impact of merger of Dearness Allowance into Salary was not known at that time. Further, as major component of this expenditure is regulated by Government wage structure and also includes excess payments to retiring employees, which the Commission has presently allowed, the Commission accepts the actual employee expenses. The increase in R&M expenses is also very minimal of about Rs. 1.37 Crore. R&M expenses by the very nature are not amenable to accurate projections and are necessary for ensuring reliable supply irrespective of the previous year's expenses. Thus, the Commission accepts the actual R&M expenses claimed by the Petitioner for 2005-06. Out of the excess A&G expenses of Rs. 4.45 Crore, Rs. 0.12 Crore were incurred towards license fees and Rs. 4.33 Crore towards other expenses over the approved base of Rs. 9.11 Crore which is on a higher side and ought to have been controlled. Thus, the Commission is not allowing the excess expenditure of Rs. 4.33 Crore towards other heads. Further, against the A&G expenses capitalised approved of Rs. 0.69 Crore actual A&G expenses capitalised were of Rs. 1.03 Crore. The Commission has taken Rs. 0.69 Crore as the expense capitalised on the gross A&G base of Rs. 9.23 Crore. **The Petitioner is hereby directed to control its A&G expenses for future as excessive claims on this head would not be allowed.**

The gross O&M Expenditure for 2006-07 has to be worked out based on percentage increase in actual number of consumers and actual inflation level. Against the projected levels of 11.73% and 4% for these two factors taken in the previous tariff Order, the actual levels are 10.32% (increase in consumers from 1039627 to 1146898) and 6.21% respectively. Applying these corrections, in the base O&M expenses of Rs. 138.70 Crore for 2005-06, the allowable Gross expenses work out to Rs. 162.52 Crore against the actual gross expenses of Rs. 164.15 Crore for 2006-07. Since the actual expenses include an excess payment of Rs. 1.56 Crore for 2005-06 & 2006-07, the increase in O&M expenses is marginal and hence, is allowed by the Commission.

6.3.3 Interest & Finance Charges

As discussed above, the Commission has accepted the interests claimed by Petitioner for 2005-06 and 2006-07 on the basis of Certificate from independent auditor. For specific loans the Commission has adopted the approach as has been discussed for the period 2001-02 to 2004-05. It may be pointed out that after separation of PTCUL from UPCL in 2004-05 the Commission had during the transition period upto 2005-06 allowed interest on transmission loans to UPCL as an interim measure. Since, the trued up interests for 2004-05 and 2005-06 for these works have now been allowed to PTCUL, no interest is being allowed to UPCL for these two years in this exercise.

Table 6.14 : Interest Expenses till 31.03.2007 (Amount in Rs. Crore)

Particulars	Total upto 31.03.2005		2005-06		2006-07		Total upto 31.03.2007	
	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable
REC-Old	40.31	40.16	20.84	20.84	22.95	22.95	**84.10**	**83.95**
IDBI	2.56	2.56	0.00	0.00	0.00	0.00	**2.56**	**2.56**
PFC	0.93	0.93	0.00	0.00	0.00	0.00	**0.93**	**0.93**
CBI	3.30	3.30	0.00	0.00	0.00	0.00	**3.30**	**3.30**
HDFC	0.07	0.07	0.00	0.00	0.00	0.00	**0.07**	**0.07**
REC (New)	7.88	3.40	5.51	0.00	0.00	0.00	**13.39**	**3.40**
AREP	0.47	0.00	2.25	0.00	2.41	0.00	**5.13**	**0.00**
RGGVY	0.00	0.00	0.09	0.09	0.50	0.50	**0.59**	**0.59**
APDP	5.00	5.00	2.21	2.21	2.15	2.15	**9.36**	**9.36**
APDRP	0.05	0.05	0.60	0.60	0.96	0.96	**1.61**	**1.61**
District Plan	3.41	3.41	1.21	1.21	1.27	1.27	**5.89**	**5.89**
MNP	17.87	17.87	7.84	7.84	7.63	7.63	**33.34**	**33.34**
PMGY	1.20	1.20	0.50	0.50	0.49	0.49	**2.19**	**2.19**
PTW	0.00	0.00	0.00	0.00	0.02	0.02	**0.02**	**0.02**
State Plan	5.60	5.60	1.55	1.55	1.48	1.48	**8.63**	**8.63**
NABARD	1.92	0.13	1.84	0.00	0.00	0.00	**3.76**	**0.13**
MISC. Intt.	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	**0.00**
Sub-Total	**90.56**	**83.67**	**44.44**	**34.84**	**39.86**	**37.45**	**174.86**	**155.96**
Rebate	41.06	41.06	2.37	2.37	3.91	3.91	**47.34**	**47.34**
Guarantee Fees	7.02	6.54	2.19	2.19	2.06	2.06	**11.27**	**10.79**
Bank Charges	0.13	0.13	0.17	0.17	0.17	0.17	**0.47**	**0.47**
Interest on S.D.	4.87	4.87	2.14	2.14	2.75	2.75	**9.76**	**9.76**
Sub-Total	**53.08**	**52.60**	**6.87**	**6.87**	**8.89**	**8.89**	**68.84**	**68.36**
Gross Total	**143.64**	**136.27**	**51.31**	**41.71**	**48.75**	**46.34**	**243.70**	**224.32**
Less: Tfd. To CWIP	32.34	32.34	12.35	12.35	1.79	1.79	**46.48**	**46.48**
Less: REC Interest capitalised	0.00	40.16	0.00	20.84	0.00	22.95	**0.00**	**83.95**
Net Interest	**111.30**	**63.77**	**38.96**	**8.52**	**46.96**	**21.60**	**197.22**	**93.89**

6.3.4 Depreciation

The Commission noted that while calculating depreciations for 2005-06 and 2006-07 Petitioner has applied the rates as per Regulations, it has not considered the reduction in cost of the assets, which were funded out of grants and consumer contributions, in accordance with the requirement of the Regulations. The Commission has considered the financing of assets furnished by the Petitioner during the ARR and Tariff Proceedings for 2007-08 and 2008-09 and has deducted the value of grants used to finance the assets. Thus, from the opening value of GFA for 2005-06 & 2006-07 respectively, the opening values of grants utilised by the Petitioner in financing the assets have been deducted to arrive at the value of depreciable assets. The year-wise depreciation and cumulative upto 31.03.07 including that upto 31.03.05 determined by the Commission thus works out as given hereunder:

Table 6.15 : GFA & Depreciation till 31.03.2007 (Amount in Rs. Crore)

Particulars	Total upto 31.03.2005		2005-06		2006-07		Total upto 31.03.2007	
	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable
GFA			717.59	717.59	855.40	855.40		
Less: Grants			-	211.06	-	303.13		
Depreciable GFA			717.59	506.53	855.40	552.27		
Rates			3.76%	3.76%	3.79%	3.79%		
Depreciation	148.49	155.10	27.01	19.06	32.39	20.91	**207.89**	**195.07**

6.3.5 Provision for Bad & Doubtful Debts

The Commission has considered provision for bad debts @ 1.5% of sales revenue for 2005-06 and 2006-07 as discussed in preceding paras. **The Commission, however, is concerned about the ever rising level of receivables and directs the Petitioner to vigorously work for recovery of the same and write-off individually identified bad debts by implementing this Policy and submit a report on the same by 31.12.2008.** The amount, thus, allowed in the total period upto 31.03.2007 works out to Rs. 61.65 Crore against a claim of Rs. 102.77 Crore towards provision for bad & doubtful debts as shown in the Table below:

Table 6.16 : Provision of Bad & Doubtful Debts till 31.03.2007 (Amount in Rs. Crore)

Particulars	Total upto 31.03.2005		2005-06		2006-07		Total upto 31.03.2007	
	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable
Provision for Bad debts	59.79	35.86	20.71	12.43	22.27	13.36	**102.77**	**61.65**

6.3.6 Return on Equity (RoE)

The Petitioner has submitted that it has infused equity of Rs. 5 Crore in asset created in 2006-07, which would entitled it for return on equity from the year 2007-08 as per Regulations. Accordingly, the Petitioner has not claimed any RoE for 2005-06 and 2006-07 and no return is, therefore, being allowed for these years.

6.3.7 Interest on Working Capital

The Petitioner has not claimed any interest on working capital for 2005-06 and 2006-07. However, the Regulations stipulate the normative working capital to be allowable to the distribution licensee. The working capital as per Regulation comprises of:

- One month O&M expenses inclusive of maintenance spares forming part of R&M expenses.
- Capital required to finance the shortfall in collection.
- Receivables for sale of electricity equivalent to billing cycle suitably adjusted for security given by consumers and credit given by suppliers.

Accordingly, the Commission has computed the working capital requirement by taking into consideration the allowable O&M expenses, collection efficiency of 90% and 92% proposed by the Petitioner during the ARR and tariff proceedings for 2005-06 and 2006-07 respectively. Further, the billing cycle of different categories of consumers has been taken as one and a half months and necessary adjustments as required under the Regulations for security given by consumers and credit given by suppliers have been made. Hence, the total working capital of the Petitioner calculated as above works out to Rs. 124.19 Crore for 2005-06 and Rs. 88.60 Crore for 2006-07 and hence interest has been calculated @ 10.25% for the two years. Details are provided in the Table below:

Table 6.17 : Interest on Working Capital (Amount in Rs. Crore)

Particulars	2005-06 (Allowable)	2006-07 (Allowable)
O&M Expenses	10.87	12.70
Collection inefficiency	82.85	71.25
Receivables	172.60	185.54
Sub-total	**266.31**	**269.50**
Less: Adjustments for		
Security	79.51	103.65
Credit given by suppliers	62.61	77.24
Net Working Capital	**124.19**	**88.60**
Interest Rate	10.25%	10.25%
Interest on Working Capital	**12.73**	**9.08**

6.3.8 Total Expenses upto 31.03.2007

Based on the above discussion, total expenses recognised by the Commission for the period upto 31.03.2007 works out to Rs. 4404.64 Crore against a claim of Rs. 4544.09 Crore. A summary of total expenses giving comparison of Petitioner's proposals and Commission's approval is presented below:

Table 6.18 : Expenses till 31.03.2007 (Amount in Rs. Crore)

Particulars	Total upto 31.03.2005		2005-06		2006-07		Total upto 31.03.2007	
	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable
Power Purchase	1,627.18	1,627.18	751.32	751.32	926.92	926.92	**3,305.42**	**3,305.42**
O&M expense	443.98	443.98	134.38	130.39	152.43	152.43	**730.79**	**726.80**
Interest	111.30	63.77	38.96	8.52	46.96	21.60	**197.22**	**93.89**
Depreciation	148.49	155.10	27.01	19.06	32.39	20.91	**207.89**	**195.07**
Provision for Bad debts	59.79	35.86	20.71	12.43	22.27	13.36	**102.77**	**61.65**
Interest on Working Capital	-	-	-	12.73	-	9.08	-	**21.81**
Total Expenses	**2,390.74**	**2,325.89**	**972.38**	**934.45**	**1,180.97**	**1,144.30**	**4,544.09**	**4404.64**

6.3.9 Tariff and Non-Tariff Revenue

The tariff revenue from sale of energy to State consumers and non-tariff income has been considered as per approach defined earlier for past years. As accounts for 2005-06 and 2006-07 are still provisional, the Commission has provisionally accepted the revenues claimed by Petitioner on the basis of its accounts. Summary is presented below:

Table 6.19 : Revenues till 31.03.2007 (Amount in Rs. Crore)

Particulars	Total upto 31.03.2005		2005-06		2006-07		Total upto 31.03.2007	
	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable
[A] Tariff Revenue	2,391.31	2,391.31	828.48	828.48	890.61	890.61	**4,110.40**	**4,110.40**
[B] Non-tariff revenue								
Share in Trading	14.58	14.58	0.63	0.63	0.00	0.00	**15.21**	**15.21**
UI Revenue	207.17	207.17	102.00	102.00	61.44	61.44	**370.61**	**370.61**
Meter Rent	36.25	36.25	1.29	1.29	0.02	0.02	**37.56**	**37.56**
DPS	31.94	31.95	1.61	1.61	1.91	1.91	**35.46**	**35.47**
Interest on F.D.	71.14	71.14	1.44	1.44	1.31	1.31	**73.89**	**73.89**
Others	52.61	52.61	17.13	17.13	26.05	26.05	**95.79**	**95.79**
Sub-total	**413.69**	**413.70**	**124.10**	**124.10**	**90.73**	**90.73**	**628.52**	**628.53**
Total Revenue	**2,805.00**	**2,805.01**	**952.58**	**952.58**	**981.34**	**981.34**	**4,738.92**	**4,738.93**

6.3.10 Surplus upto 31.03.2007

The calculation of trued-up surplus after accounting for reasonable return for the period 2001-02 to 2006-07 is presented below:

Table 6.20: Position of Surplus upto 31.03.2007 (Amount in Rs. Crore)

Particulars	Total upto 31.03.2005		2005-06		2006-07		Total upto 31.03.2007	
	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable	Sought by UPCL	Allowable
Surplus	414.26	479.12	(19.80)	18.13	(199.63)	(162.96)	**194.83**	**334.29**
Less: Reasonable Return	67.50	22.93	-	-	-	-	**67.50**	**22.93**
Net Surplus	**346.76**	**456.19**	**(19.80)**	**18.13**	**(199.63)**	**(162.96)**	**127.33**	**311.36**

6.3.11 Sharing of Over /under achievement of Distribution Losses

The Petitioner has submitted that:

(i) The Commission in its first tariff order dated 08-09-2003 recognized the T & D Losses for 2002-03 at 46.17%. The Commission fixed the loss reduction targets @ 4% per annum for the period from 2003-04 to 2007-08. It has submitted that UPCL is the Distribution Licensee and PGCIL Losses as well as State Transmission Losses are not in its control and accordingly, UPCL is committed to reduce distribution losses as per the targets (4% per annum) in compliance of the Commission's order. A detailed calculation sheet showing PGCIL Losses, State Transmission Losses and Distribution Losses for 2002-03 and thereafter distribution loss reduction targets for 2003-04 to 2007-08 has been enclosed, which is summarised below:

Table 6.21: Calculation of Opening Distribution Loss given by Petitioner

Particulars	MU
Energy received through PGCIL System	1768.10
(-) Sale to Other State	978.46
Energy received through PGCIL System for State Consumption	789.64
Energy received not coming throug PGCIL System	2966.12
Total State Consumption	**3755.76**
Re-casted sale within State	2021.60
T & D Losses	1734.16
% T & D Losses	46.17%
Segregation of PGCIL & (PTCUL + UPCL) Losses	
PGCIL Losses @ 4%	31.59
Remaining Losses (PTCUL + UPCL)	1702.59
PTCUL Losses @ 2.5%	93.10
UPCL Losses	1609.47
% of UPCL Losses	44.32%

The break up of losses for 2002-03 have accordingly been worked out as follows:

PGCIL Losses - 4.00%
State Transmission Losses - 2.50%
UPCL (Distribution Losses) - 44.32%

(ii) UPCL has calculated targeted sales year-wise for the period from 2003-04 to 2006-07 on the basis of loss reduction target of 4% p.a. set by Commission for the respective years.

(iii) The Petitioner has then calculated year wise revenue implication for over/under achievement of losses as per approved trajectory for the following two cases:

- Year-wise sales as per licensee's CS-3 statements vis-à-vis the targeted sales
- Year-wise recasted sales based on norms issued by Commission in respect of un-metered supply in Domestic, Private Tube-wells, Public Lighting and Government Irrigation categories vis-à-vis the respective targeted sales.

UPCL has shown that in first case it has achieved the loss reduction target set by the Commission and recorded higher sales than the targeted sales as reflected in the commercial & financial statements. On the other hand, considering the recasted sales as per the norms fixed by the Commission, it has not achieved the loss reduction targets during the above period and falls short in revenues by about Rs. 22 Crore. It has therefore submitted that in the absence of new norms and proper metering/billing system, it may not be appropriate and fair to estimate and recast the consumption / sales on norms for the purpose of ascertainment of efficiency of distribution licensee and truing up of its Annual Revenue Requirement. Accordingly, it has requested that no financial impact of losses may be considered by the Commission.

While the Commission accepts Petitioner's calculations for opening level of distribution loss, it is not in agreement with the above prayer of the Petitioner as accepting the same would amount to permitting the cost of inefficiencies and inaction of UPCL to be passed on to the consumers. The targets were laid well in advance and were fixed with opening loss level derived after considering the then existing system of metering and billing and also the same norms for unmetered supply. The Petitioner cannot be allowed to take advantage of these norms for fixing a higher opening loss level first and then seeking relaxation based on other norms. The Commission has therefore decided to take net financial impact of Rs. 22.46 Crore for last 4 years, as proposed by Petitioner, as revenue which would have accrued to it but for higher than approved losses could not be realised. Accordingly, the total surplus earned by the Petitioner upto 31.03.2007, including this revenue, is being considered as Rs. 333.82 Crore.

6.3.12 Treatment of Surplus upto 31.03.2007

The net surplus available with UPCL is Rs. 333.82 Crore. The Commission had directed

UPCL to utilise the surplus only for creation of fixed assets. This was done to avoid the burden of servicing costs for loans and equity on consumer tariffs, if the assets are financed through normal financing with 70:30 norm. This approach ensures that consumers are benefited by not only getting lower tariffs but also better and reliable supply by making funds available to utility for system improvement. Accordingly, as has been discussed earlier, the Commission is allowing an amount of Rs. 46.48 Crore as utilisation from this surplus towards funding of interest during construction (not funded by schemes) as this utilisation is for creation of assets under sanctioned schemes. This is also in line with Commission's previous direction, where it was envisaged to use the surplus for leveraging investments under various schemes. This leaves a net surplus of Rs. 287.34 Crore with the licensee. Further, as derived in Section 7, fixed assets worth Rs. 54.57 Crore have already been stated to be created by the Petitioner from its internal resources for which the Petitioner has sought Commission's approval for treating it as utilisation of surplus. However, the Petitioner has claimed return on equity of Rs. 5 Crore, which has been stated to be invested in fixed assets in 2006-07. Therefore, the requirement of utilisation from other internal resources was Rs. 49.57 Crore only. Since the purpose of the proposed utilisation was investments into distribution system, the Commission accepts the same as utilised leaving net surplus of Rs. 237.77 Crore. It shall also ensure that no long term funding for such assets is tied up relieving the consumers from associated servicing costs.

6.4 Implementation of Hon'ble ATE's Directions

6.4.1 Re-determination of Tariff for Steel Units

Hon'ble Appellate Tribunal of Electricity in para 20 of its Order dated 06.06.2007 in Appeal No. 214 of 2006 in the matter of Shri Dhan Varsha Steels (Pvt.) Ltd. and Poddar Alloys Pvt. Ltd. has directed as follows:

> *"In view of the above, we consider it prudent to remit the matter to UERC to recompute the tariff for the steel units keeping in view our observations as above. We direct accordingly. On re-determination of tariff of steel units, the excess amount recovered should be adjusted in the bills for the following six months. Needless to mention, that in the process of re-determination, the Commission should take the actual increase in demand for power by the steel industries rather than the hypothetical total power purchase cost and provide the consequent relief in the tariff in the truing up exercise in the ensuing tariff period".*

As the Commission has done provisional true-up of UPCL's ARR for 2006-07, the Commission is re-determining the tariff for steel units as per above direction of Hon'ble Tribunal. Accordingly, based on actual sales and power purchase data submitted by UPCL and considered by Commission after true-up, the average cost of supply for 2006-07 has been worked out in the table below:

Table 6.22:Calculation of Average Cost of Supply for 2006-07

Sl. No.	Particulars	Amount
A	Cost of power purchased (Rs. Crore)	858.81
B	Cost of overheads (Rs. Crore)	217.38
C	Total Cost (Rs. Crore)	1076.19
D	Sales at Target Loss (MU)	3987.46
E	Average Cost of Supply (Rs./kWh) [10xC/D]	2.70

Regarding cross subsidy to be charged from steel units, Hon'ble ATE in para 40 of their Order dated 23.05.2007 in Appeal No. 269 of 2006 and Appeal No. 12 of 2007 for re-determination of tariff for steel units, directed the Commission to redetermine the tariff for steel units utilizing cross-subsidies of Rs. 0.87 per unit and Rs. 0.70 per unit for the years 2004-05 and 2005-06 respectively. The Commission is carrying forward the reduction in cross-subsidy for steel units and approves a level of Rs. 0.45/unit as cross-subsidy for 2006-07. Accordingly, the tariff chargeable to steel units works out to Rs. 3.15/unit.

On the issue of Tariff structure, Hon'ble Tribunal have observed in paras 17 and 19 that:

> *"….All units with load factor above 50%, whether HT or PIUs should pay a higher tariff and those below 50% or below 33% should pay a comparatively lower tariff……"*
>
> *[Para 17]*
>
> *"19. No one complained of any difficulty in dealing with staggered rates. The same method could be followed to extract a higher tariff from those having higher load factor……..."*
>
> *[Para 19]*

Accordingly, the Commission has re-determined the tariff structure for Steel Units based on load factor. Components of re-determined tariff for the period 01.04.2006 to 29.02.2008 are given in Table below:

Table 6.23: Re-determined Tariff for Steel Units

Component of Tariff		01.04.06 to 29.02.08	
		Tariff Charged	**Re-determined Tariff**
Demand Charges (Rs./kVA/month)		350	200
Energy Charges (Rs./kVAh)	Load Factor*		
	0-33%	2.35	2.00
	>33% & upto 50%	2.35	2.30
	> 50%	2.35	2.60

*For tariff purposes Load Factor (%) would be deemed to be =

$$\frac{\text{Consumption during the billing period}}{\text{Maximum Demand or Contracted Demand whichever is less x No. of hours in the billing period}} \times 100$$

6.4.2 *Re-determination of Tariff for Railway Traction*

In Appeal No. 219 of 2006 filed by Indian Railways against Tariff Order for 2006-07, Hon'ble ATE in its order dated 28.11.2007 have directed in para 12 as follows:

"……..The Commission is directed to re-determine the tariff for the appellant for the financial year 2006-07 keeping in view the observations made above within a period of sixty days of this judgment and the respondent No.2 is directed to refund the amount found to have been received in excess of the tariff determined in pursuance of this judgment within sixty days of such determination."

Further, in paras 9 and 10, Hon'ble ATE have taken cognizance of "Minutes of Meeting held on 18.08.2005 between the officer of UPCL and Northern Railways at Urja Bhawan, Dehradun to discuss the matter of Railway Traction Tariff for proposed electrification of Railway Traction over railway roots in Uttarachal" and have observed in paras 10 and 11 that:

"10) It is clear from the above that the composite cost of surplus was not more than Rs.2.90 per unit. Despite such data available with the Commission why the Commission fixed the effective composite tariff of Rs.4.55 per unit for the appellant is not understandable.

11) Similarly why the tariff fixed for the appellant is so much higher than the HT tariff also remains unexplained. The Commissions also seems to have overlooked the fact that the appellant bears the cost of infrastructure network of HT lines and transformers etc. which substantially facilitates to reduce the cost to supply to the respondent No.2."

Keeping in view the above observations of Hon'ble Tribunal, the Commission is relying upon the agreement reached between UPCL & Railways, which is reflected in the above referred Minutes as follows:

"vi) Taking into consideration the proposal of Northern Railway for new traction load in Uttaranchal and other relevant aspects of cost recovery of huge capital investment, incentives/rebates allowed in some other States and the benefits accruing to UPCL as well as Uttaranchal State for new traction load, it is proposed to agree for

(a) a composite tariff of at least Rs. 2.90 per unit subject to the condition that energy charges will not be less than Rs. 2.35 per KVA of the contracted load per month; or

(b) a two-part tariff Rs. 2.50 per unit plus Rs. 1.50 per KVA demand charges per month subject to the condition that demand charges plus energy charges will not be less than Rs. 2.35 per KVA of the contracted load per month."

Since the Commission had determined two-part tariff for Railways without any minimum charges, the Commission has re-determined tariff for Railway Traction in accordance with option (b) above without applicability of minimum charges. The Commission, however, would like to point out that the abovesaid arrangement between UPCL & Railways was required to be approved, giving requisite details, from the Commission as per the directions given by Commission in previous orders. The re-determined tariff for Railways applicable for the period 01.04.2006 to 29.02.2008 is given below:

Table 6.24:Re-determined Tariff for Railway Traction

Component of Tariff	01.04.06 to 29.02.08	
	Tariff Charged	Re-determined Tariff
Demand Charges (Rs./kVA/month)	165	150
Energy Charges (Rs./kVAh)	3.25	2.50

The Petitioner is directed to implement the above re-determined tariffs as per directions of Hon'ble ATE.

7. Analysis of Annual Revenue Requirement

In this Section, the Commission has analysed Petitioner's projections of category-wise sales, losses, power purchase quantum and cost, O&M expenses, capital related expenses, non-tariff income and revenue likely to be earned at existing tariffs. Based on the analysis and scrutiny of Petitioner's projections in the Petition and considering the subsequent submissions including actual data till 2006-07 and for first six months of 2007-08, i.e. April to September 2007 the Commission has analysed and determined the UPCL's ARR for 2007-08 and 2008-09 as detailed in this Section.

7.1 Sales forecast for 2007-08

As discussed in the Commission's Approach in Section 4, the Commission has scrutinized Petitioner's projections for category-wise sales during 2007-08 and also projected the category-wise sales for 2008-09 in accordance with the approach adopted by the Commission in its previous Tariff Order.

7.1.1 Domestic (RTS-1)

The Petitioner has projected ambitious rural electrification target for 2007-08 under the Rajiv Gandhi Grahmin Vidyutikaran Yojna (RGGVY) Scheme stipulating 190362 new connections to be released during the year. Considering the impact of new connections under this scheme as 125 MU, UPCL has projected the sales to domestic category during 2007-08 as 1257 MU which translates to an overall growth of around 19% for 2007-08.

The four years' Compounded Average Growth Rate (CAGR) based on the sales during the period 2002-03 to 2006-07 works out to be 4.87%. The Commission has, therefore, applied growth rate of 4.87% to 2006-07 figures for projecting the sales for the domestic category for 2007-08. For projecting the sales for 2008-09, the Commission has considered 3 years CAGR of 3.97% to sales projected by the Commission for 2007-08.

For additional consumers under RGGVY scheme, the Commission in its previous year Tariff Order for 2006-07 considered 69740 new connections. However, actual new rural connections added in 2006-07 were only 35000, far lower than the approved level of 69740 connections. Further, actual new rural connections added till September 2007 are 17005. Considering the actual number of new connections in 2006-07 and the progress during first six months of 2007-08, the Petitioner's target of releasing 190362 new connections in 2007-08 appears far from realistic. **The Commission expresses its displeasure on slow progress in releasing new connections under RGVVY Scheme and directs UPCL to accelerate this process.** It may be noted that funds are available to the Petitioner under RGGVY Scheme launched by Central Government by way of 90% grant and only 10% loan. Slow pace of rural electrification not only delays the utilisation of available cheap funds but also deprives rural consumers of the State from early electrification and consequent economic benefits. The Commission, considering the actual progress till September 2007 has considered number of new connections equivalent to 69740 for 2007-08, as taken in 2006-07 Tariff Order. The balance out of total new connections projected by the Petitioner for 2006-07 (i.e. 120622 connections), have been considered by the Commission in 2008-09. However, in case the actual number of new connections released during 2007-08 and 2008-09 are in variation to those assumed in this Order for sales projections, the Commission will consider the impact of the same in truing up exercise. For assessing the impact of new connections under RGVVY scheme on sales, the Commission has accepted UPCL's assumptions of average connected load of 0.75 kW and 10% load factor.

Based on these assumptions, the total consumption of domestic consumers as estimated by the Commission for 2007-08 and 2008-09 works out to 1179.05 MU and 1305.06 MU respectively.

7.1.2 Non-Domestic (RTS-2)

The Petitioner has estimated sales to Non-Domestic Consumers on basis of a normal two year CAGR of 2.7% over sales of 2006-07. Additional sales of around 30 MU have been projected by the Petitioner during 2007-08 on account of high urbanisation and commercial activities expected in upcoming cities in Uttarakhand. The Petitioner has also projected sales of 30 MU in this category on account of efficiency improvement on reduction of losses. Thus, the Petitioner has projected a total sale of 618 MU for 2007-08 in this category.

Considering the past trends in sales and actual sales during first half of the year, the Commission has applied growth rate of 5% to 2006-07 figures for projecting the sales for 2007-08. For projecting sales for 2008-09, the Commission has considered a growth rate equivalent to three years CAGR to sales projected by the Commission for 2007-08.

The Commission has examined the proposal of additional sales of 30 MU on account of increase in commercial activities as projected by the Petitioner for 2007-08. As the Efficiency Improvement on account of loss reduction has been considered separately by the Commission as per loss reduction trajectory, the Commission has not considered any additional sales for any particular category on account of loss reduction.

Based on these assumptions, the total consumption of non-domestic consumers as estimated by the Commission for 2007-08 and 2008-09 works out to 599.43 MU and 606.95 MU respectively.

7.1.3 Public Lamps (RTS-3)

The Petitioner has estimated sales to consumers under this category on basis of 3 years' CAGR of 27% over 2006-07 and projected the sales for 2007-08 as 51 MU.

The Commission would like to highlight that as the consumption of this category was un-metered till 2005-06, projecting sales by applying CAGR of estimated consumptions for the past would not be the correct approach. The Commission has, therefore, analysed the growth rate projected by the Petitioner in connected load and past trends of connected load. The Petitioner has considered an increase of around 26% in connected load for 2007-08. The three years CAGR of connected load works out to 7.45%. The Commission has estimated connected load for 2007-08 and 2008-09 by considering a growth rate of 7.45% (3 years' CAGR) and has applied actual load factor of 2006-07, when this category was metered on projected connected load for estimating the sales. With these assumptions, the Commission has estimated sales of 43.55 MU and 46.79 MU for 2007-08 and 2008-09 respectively.

7.1.4 Private Tube-Wells (RTS-4)

The Petitioner has projected sales for 2007-08 based on two years' CAGR of 10.5% over 2006-07 which works out to 172 MU. Moreover, the Petitioner has estimated increase in consumption by 21 MU on account of additional connections of 1500 PTW envisaged by the State Government in 2007-08 under State Plan as well as due to billing improvement measures.

The Commission observed that for 2006-07, UPCL has considered un-metered sales by applying norm of 68 units/BHP/month in accordance with the Commission's previous Orders. The total actual sales for 2006-07 computed by UPCL by applying this norm is 154 MU (against sales of 276 MU reported in CS-3 statement). Based on actual sales to metered rural consumers during

2006-07, the average consumption works out to 117 units/BHP/month. The Commission is of the view that as some of the rural consumers are metered now and the data regarding average consumption of rural metered consumers is available, it will be correct approach to revise the earlier norm of of 68 units/BHP/month to 117 units/BHP/month. Further, for un-metered consumers it will not be correct approach to project sales by applying CAGR of past assumed consumptions.

The Commission, therefore, analysed the growth rate projected by the Petitioner in connected load and past trends of connected load. The Petitioner has considered an increase of around 21% in connected load for 2007-08. The three years CAGR of connected load works out to 3.52%. The Commission has estimated connected load for 2007-08 and 2008-09 by considering a growth rate of 3.52% (3 years' CAGR) and 1500 new connections to be released in 2007-08 and applied average consumption norm of 117 units/BHP/month for estimating the sales. With these assumptions, the Commission has estimated sales of 200.91 MU and 207.98 MU for 2007-08 and 2008-09 respectively.

7.1.5 Government Irrigation Systems (RTS-5)

The Petitioner has projected sales under this category to be 101 MU for 2007-08 based on expected new/additional load in this category with an estimated increase in consumption of 18 MU over sales for 2006-07.

Since LT connections in this category were unmetered earlier, past assumed consumptions cannot be used for projecting future consumptions. The Commission has, therefore, projected sales for this category by using the projected connected load. The Petitioner has considered an increase in connected load by 25%, which is much higher than past trends. The Commission has, however, projected connected load for 2007-08 and 2008-09 by applying a growth rate of 6.71% (equivalent to 3 years' CAGR) and has applied actual load factor of 2006-07 to project the sales. With these assumptions, the Commission has estimated sales of 88.87 MU and 94.83 MU for 2007-08 and 2008-09 respectively.

7.1.6 Public Water Works (RTS-6)

The Petitioner has projected sales for 2007-08 based on two years' CAGR of 13.7% over 2006-07, which works out to 223 MU. The Petitioner has also estimated increase in consumption of 16 MU on account of new/additional load to be released as per the State Government program and replacement of defective meters in this category.

The three years' Compounded Average Growth Rate (CAGR) based on the sales during the period 2003-04 to 2006-07 works out to be 12.95%. The Commission, accordingly, has applied growth rate of 12.95% to 2006-07 sales for projecting the sales for 2007-08 and applied the same growth rate to sales projected by the Commission for 2007-08 for projecting 2008-09 sales. For 2007-08, the Commission has also considered additional sales of 16 MU on account of new/additional load as submitted by the Petitioner. With these assumptions, the Commission has estimated sales of 237.47 MU and 268.23 MU for 2007-08 and 2008-09 respectively.

7.1.7 Industry (RTS-7)

The Petitioner has projected sales for industrial consumers to be 2053 MU in 2007-08 on basis of three year CAGR of 31% over 2006-07. While the Commission has as gone by the past trends for projecting sales for 2007-08 in this category, the Commission is of the view that as various concessions available to new industries only till 2009-10, the rate of addition of new industries now is expected to go down. Hence, the growth pattern in sales as observed in recent past may not continue in future. The Commission has, therefore, considered moderate growth rate for projecting sales for 2008-09 in this category. Details are discussed below:

7.1.7.1 LT Industries

The actual sales to LT consumers for 2006-07 as submitted by the Petitioner is 155 MU. The three years' Compounded Average Growth Rate (CAGR) based on the actual sales works out to be 19.89%. The Commission, for 2007-08, has considered the growth rate of 19.89% equivalent to 3 years CAGR. However, for 2008-09, the Commission has considered growth rate of 7% for projecting LT Industrial sales. On basis of these parameters, the sales estimated by the Commission for 2007-08 and 2008-09 works out to 186.10 MU and 199.12 MU respectively.

7.1.7.2 HT Industries

The actual sales to HT consumers for 2006-07 as submitted by the Petitioner is 1413 MU. The Commission noted that due to comparatively lower tariffs, the Industrial sales have been increasing at a very high rate of 20.05% to 38.80% during the last four years. Further, the Commission obtained the actual sales data for the period April to October 2007. The actual sales to HT Industrial category as reported by UPCL during the period April to October 2007 is 1257.94 MkVAh. Considering the past trends and actual sales during first seven months, the Commission has considered the sales of 2113.34 MU for 2007-08. The Commission, for 2008-09, has considered growth rate of 7% for projecting HT Industrial sales. On basis of these parameters, the sales estimated by the Commission for 2008-09 works out to 2261.27 MU.

7.1.8 Mixed Load

The Petitioner has projected sales of 75 MU under this category 2007-08 based on existing load, load factor and additional increase in sales of 10 MU on account of estimated fresh load to be sanctioned in this category.

The Commission has accepted the projections made by the Petitioner for increase in sales during the 2007-08 and approved the same to be 75 MU. For 2008-09, the Commission has applied 3 years' Domestic CAGR of 3.97% and estimated the sales as 77.97 MU.

7.1.9 Railway Traction

The Petitioner has projected sales under this category to be 9 MU in 2007-08 considering an estimated increase in sales of 3 MU on account of increase in load factor during the 2007-08. This level of sales was also acceptable to Railways as confirmed by them in Advisory Committee Meeting. The Commission has, therefore, accepted the projections made by the Petitioner for increase in sales during 2007-08 and approved the same as 9 MU. For 2008-09, the Commission has assumed an increase in sales by 2.5 MU and has estimated the sales to be 11.50 MU for 2008-09.

The Summary of the category-wise sales projected by the Petitioner and as accepted by the Commission for 2007-08 and category-wise sales estimated by the Commission for 2008-09 is given in the Table below:

Table 7.1: Category wise sales for 2007-08 and 2008-09 (MU)

S.No	Category	2007-08		2008-09
		Proposed by Petitioner	Accepted by Commission	Estimated by Commission
1	Domestic (RTS - 1)	1241.00	1163.60	1287.96
2	Concessional Snowbound Area (RTS - 1A)	16.00	15.45	17.10
	Sub-Total (Domestic)	***1257.00***	***1179.05***	***1305.06***
3	Non-domestic, incl Commercial (RTS - 2)	618.00	599.43	606.95
4	Public Lamps (RTS - 3)	51.00	43.55	46.79
5	Private Tubewell / Pump Sets (RTS - 4)	193.00	200.91	207.98
6	Government Irrigation System (RTS - 5)	101.00	88.87	94.83
7	Public Water Works (RTS - 6)	239.00	237.47	268.23
8	Industrial Consumers (RTS - 7)	2053.00	2299.44	2460.40
	LT Industrial		186.10	199.12
	HT Industrial		2113.34	2261.27
9	Mixed Load (RTS - 8)	75.00	75.00	77.97
10	Railway Traction (RTS - 9)	9.00	9.00	11.50
Total		**4596.00**	**4732.71**	**5079.70**

7.2 Transmission & Distribution Losses

The Petitioner in its tariff petition for 2006-07 had requested the Commission to consider a loss level of 34.64% within its distribution network. The Commission in the Retail Tariff Order for UPCL for 2006-07 approved a loss level of 30.17% and pointed a shortfall of 8.4% from the target levels, after adding the losses in the intra-state and inter-state transmission network. The Petitioner has submitted that it has recorded a distribution loss level of 33.20% during 2006-07, which has been computed as per the norms specified by the Commission for un-metered consumption. The target T&D loss for 2007-08, as per the trajectory adopted by the Commission works out to 26.17%, which implies a reduction of 7.03% from the base value in March 2007. The Petitioner has emphasized that in view of the quantum of increasing rural supply on account of implementation of RGGVY scheme, the condition of the present distribution network and available resources, reduction of 7.03% losses within a year would be a stiff target, which is foreseen as almost impossible to achieve. The Petitioner has proposed to reduce its distribution losses to the level of 29.20% for the year 2007-08 (excluding external transmission loss), adhering to the annual loss reduction target of 4% set by the Commission.

During various submissions, UPCL highlighted that the opening loss level of 46.17% for 2002-03 fixed by the Commission includes the central sector transmission losses and PTCUL transmission losses on which UPCL has no control. The Commission has examined this matter in Section 6 earlier and has accepted loss level of UPCL's distribution business for 2002-03 as 44.32%

after segregating the central sector transmission losses and state transmission losses.

Further, the Commission in its previous Tariff Orders has directed the Petitioner to reduce the losses by 4% every year. As the distribution loss level is 44.32% for 2002-03, considering the loss reduction target as 4% p.a., the target distribution loss for 2007-08 works out to 24.32%. The Table below shows the year-wise distribution loss level trajectory for the distribution licensee from 2002-03 till 2007-08.

Table 7.2: Distribution Losses Trajectory

Particulars	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Reduction		4%	4%	4%	4%	4%
Target Distribution Loss for the Year	44.32%	40.32%	36.32%	32.32%	28.32%	24.32%

In accordance with the methodology adopted in previous Tariff Orders, the Commission for 2007-08 has considered 1% reduction in technical losses and 3% reduction in commercial losses over the distribution loss target for 2006-07. For 2008-09, as discussed in Section 4, the Commission has considered a nominal commercial loss reduction target of 2%.

Accordingly, the estimated energy requirement at distribution periphery and approved loss level for 2007-08 and 2008-09 is given in Table below:

Table 7.3: Approved Energy Input Requirement at Distribution Level (MU)

Particulars		2007-08	2008-09
Loss level in previous year		28.32%	24.32%
Technical Loss reduction		1%	0%
Loss Level for Energy Input		27.32%	24.32%
Sales		4733	5080
Energy Input Requirement at T-D Interface		6512	6712
Commercial Loss Reduction	%	3%	2%
	MU	195	134
Total Sales with Effecting Improvement		4928	5214
Overall Distribution Loss (%)		24.32%	22.32%

Considering the transmission loss of 2.5% for PTCUL system, the total energy requirement of UPCL at State boundary works out to 6679 MU and 6884 MU for 2007-08 and 2008-09 respectively.

7.3 Power Purchase Requirement and Cost for 2007-08

7.3.1 Sources of Power

UPCL has four primary sources of firm power, viz.

- Generating Stations of UJVNL

- Central Generating Stations (CGS)
- Share of 12% free power of the State Government of Uttarakhand
- IPPs and Other generating stations in the State of Uttarakhand

In addition to the above sources, UPCL has entered into the Banking arrangements with the Punjab State Electricity Board (PSEB), Haryana Power Generation Corporation Ltd. (HPGCL), BSES Rajdhani Power Limited (BRPL) and Reliance Energy Trading Limited (RETL).

7.3.2 Overall Approach for Projecting Availability of Power

The Commission, in its previous Tariff Orders, had considered the generation targets for the ensuing financial year as specified by the Central Electricity Authority (CEA). However, for 2007-08, as the ARR and tariff determination process was delayed due to late filing of the Petition, the data with respect to actual generation and actual power purchased during ten months of 2007-08 (April 2007 to January 2008) is available and the Commission has considered the same. The approach adopted for projecting the energy availability for remaining two months i.e. February 2008 and March 2008 is discussed in following paragraphs.

7.3.3 Energy Availability from UJVNL

The Commission had directed UVJNL to submit the monthly projection for UJVNL generating stations for 2007-08. UJVNL has submitted the revised monthly projections for 2007-08. Further, UJVNL also submitted the expected generation from Maneri Bhali-II during 2007-08 to be 80 MU as infirm power. The Commission has considered station-wise actual generations from April 2007 to January 2008 and the projected monthly generation for February to March 2008 as submitted by UJVNL for projecting energy availability from UJVNL generating stations. The Commission has considered the normative auxiliary consumption for each generating station for estimating the net energy available to the UPCL. With these assumptions, the energy availability for 2007-08 from UJVNL stations after excluding Himachal Pradesh's (HP) share works out to 3032.37 MU.

The summary of the energy availability for 2007-08 from UJVNL generating stations as approved by the Commission is shown in the Table below:

Table 7.4: Energy Available from UJVNL Stations during 2007-08 (MU)

Particulars	Net Energy Available during 2007-08
UJVNL Main Stations	2,788.88
Pathri	85.15
Mohammadpur	35.22
Maneri Bhali-II	80.00
UJVNL-SHEPs	43.12
Total	3,032.37

7.3.4 Energy Availability from Central Generating Stations

UPCL has a firm allocation of share of power from generating stations of National Thermal Power Corporation (NTPC), National Hydro Power Corporation (NHPC) and Nuclear Power Corporation (NPC) 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 shortage in different States.

UPCL, in its Petition, while projecting the energy available from CGS has considered only the firm share in Central Generating Stations and has not considered its share in unallocated quota. UPCL has considered the share allocation as per the Ministry of Power (MoP) in this regard.

Further, UPCL has also considered the power availability from the new Central Generating Station of Kahalgaon (Stage-II) while projecting the power purchase quantum and costs for 2007-08 and considered the share allocation as notified by the MoP.

The Commission has analysed the actual generation from CGS stations and the CEA target for the period April 2007 to January 2008 and observed that the actual generation from the CGS for thermal and hydro stations has been higher than the CEA targets specified till January and in only gas based stations actual generation has been lower than the targets specified by CEA. Considering the above facts, the Commission has considered the actual generation from April to January 2008 and projected generation for the remaining period, i.e., February to March 2008 based on following assumptions:

- For Thermal and Gas based stations monthly average generation of past three years
- For hydro stations, monthly design energy

For estimating the energy sent out from these stations for February to March 2008, the Commission has considered the energy available after excluding the normative auxiliary consumption as specified in the respective Tariff Orders and bills of the generating stations. For projecting the energy availability during 2007-08, the Commission has considered the allocation of power (firm share of UPCL as well as unallocated power) based on the latest allocation as specified in Northern Region Power Committee notice no. NRPC/SE(O)/Allocations/2007-08 dated December 22, 2007 for the remaining period, i.e., from February to March 2008. The Commission has not considered any generation from new generating station for 2007-08 from Kahalgaon (Stage-II).

UPCL submitted that the external transmission loss on purchase from Central Generating Stations in the Northern Region is 4%. The Commission has considered the pooled transmission losses for the Northern Region during 2007-08 in the Northern Region as provided by the Northern Region Load Dispatch Centre (NRLDC) from time to time. Thus, the Commission has approved the transmission losses external to the State, i.e., purchase from Central Generating Stations and Other sources as 4% for 2007-08.

The summary of the energy availability from CGS as approved by the Commission for the 2007-08 is shown in the Table below:

Table 7.5: Energy Available from CGS during 2007-08 (MU)

Particulars	Energy Available to UPCL Till January	Energy Availability for UPCL from Feb to March	Total
NHPC			
Salal	34.08	2.11	36.19
T/Pur	13.59	1.47	15.06
Tanakpur free power	44.42	4.04	48.46
Chamera-I	63.14	4.11	67.25
Chamera-II	3.96	1.28	5.24
Uri	69.08	13.20	82.29
Dhauliganga	43.81	3.01	46.82
Dhauliganga free power	128.37	6.96	135.33
Dulhasti	83.04	5.78	88.82
Sub-Total	***483.50***	***41.96***	***525.46***
THDC			
Tehri-I	64.30	18.27	82.57
Free Power - Tehri I	242.21	60.82	303.03
Sub-Total	***306.51***	***79.09***	***385.60***
NTPC			
Anta	81.20	19.08	100.27
Auraiya	118.80	28.70	147.50
Dadri Gas	128.01	31.40	159.41
Unchahar-I	219.10	44.13	263.22
Unchahar-II	105.39	21.26	126.65
Unchahar-III	90.87	17.10	107.98

Table 7.5: Energy Available from CGS during 2007-08 (MU)

Particulars	Energy Available to UPCL Till January	Energy Availability for UPCL from Feb to March	Total
Rihand-1	265.04	51.02	316.07
Rihand-2	231.96	45.10	277.07
Singrauli	619.03	132.21	751.24
Kahalgaon	0.00	0.00	0.00
Sub-Total	***1859.41***	***390.00***	***2249.41***
NPC			
NAPP	17.35	7.81	25.15
Sub-Total	***17.35***	***7.81***	***25.15***
SJVNL	**8.49**	**1.97**	**10.46**
Total	**2236.18**	**520.84**	**3196.09**

7.3.5 Energy Availability from Vishnu Prayag Hydro Electric Project

The Petitioner has projected the energy availability based on capacity allocation of 12% free power from the Vishnu Prayag power station. The Commission has considered the actual energy available from April 2007 to January 2008 and projected generation for the remaining months based on the annual CEA Target for 2007-08. The auxiliary consumption has been considered on normative basis for estimating the energy sent out from the station for February to March 2008. The total estimated energy available from this station during 2007-08 is estimated at 195.94 MU.

7.3.6 Energy Availability from SHPs in the Independent Power Producers (IPPs) category and UREDA Stations

The Commission has considered the availability from small and micro hydro generating stations in the IPP category and those belonging to the UREDA based on the actual generation from April 2007 to January 2008 and projected generation for February to March 2008 based on the past trends. The Commission has also considered the energy availability from the Debal small hydro power project based on the actual generation from April 2007 to January 2008 and projected generation for the remaining period based on the average PLF of 45%. The total availability from these sources for 2007-08 works out to be 90.95 MU as detailed in the Table below:

Table 7.6: Energy Available from IPPs andUREDA (MU) during 2007-08

Source	Availability
Him Urja	27.30
Hanuman Ganga	17.55
RBNS Sugar Mill	33.27
UREDA	0.49
Debal	12.34
Total	**90.95**

7.3.7 Banking

Banking for 2007-08 has been considered as per the agreement between UPCL and PSEB dated April 12, 2007 and between UPCL and Haryana Power Generation Corporation Limited (HPGCL) dated April 27, 2007. As per the agreement, UPCL is required to Bank power from May 1, 2007 to October 15, 2007 for which it is required to purchase over and above the State's requirement during these months. From November 15, 2007 to March 2008, PSEB and HPGCL would return the banked power with 5% premium subject to terms and condition of the agreement. Further, UPCL has entered in to banking agreement with BRPL and RETL for energy to be banked to UPCL during December 2007 to March 2008 and UPCL has to return the energy banked to BRPL and RETL during the months of April to September in 2008-09. The Commission, for 2007-08, has considered the actual energy banked and energy returned during the period April 2007 to January 2008 and projected energy to be returned/banked during February and March 2008 as per the details submitted by UPCL.

7.3.8 Power Purchase Cost from Generating Stations of UJVNL

The Commission has approved the primary energy rate for 2007-08 for nine major generating stations in its Tariff Order dated March 18, 2008 and estimated the power purchase cost from these generating stations considering the energy available to UPCL for 2007-08. Power purchase cost from Pathri and Mohammadpur stations of the UJVNL has been considered based on the actual power purchase cost from April 2007 to January 2008 and considering the power purchase cost for the remaining period based on ad-hoc price of 37 Paise per Unit. Power purchase cost from the Small HEPs of the UJVNL has been considered based on the actual power purchase cost from April 2007 to January 2008 and for the remaining period based on the principle of weighted average cost of power allocated to the State from Central Generating Stations. Though the existing power development cess payable to the State Government towards the investments in the hydro power projects in the State is 40 paise/unit, the Commission for the reasons specified in its Order dated March 18, 2008 on UJVNL's Tariff for 2007-08 and 2008-09 has considered the cess as 30 Paise per Unit and 10 Paise per unit towards the royalty to the State Government for the purchase cost from the UJVNL's 9 main stations and Pathri and Mohammadpur.

Further, the Commission has considered the generation from Maneri Bhali-II as infirm generation and considered the purchase rate as 85.15 Paise per Unit based on the least variable cost of the central sector thermal generating stations in the Northern Region.

7.3.9 Power Purchase Cost from Central Generating Stations (CGS)

For CGS, the Commission has considered actual power purchase cost for the period April 2007 to January 2008 and projected the cost for the remaining period. The Commission has considered the cost for the remaining period based on the annual fixed charges approved by CERC for 2007-08 and apportioned these charges to UPCL based on the State's share allocation in these generating stations for the remaining period. The actual variable charges from April to January 2008 as appeared in the power purchase bills of the Petitioner have been considered for projection during the remaining period. Free power has been taken in accordance with existing practice at weighted average cost of power available to the State from Central Generating Stations.

7.3.10 Merit Order

For purchase of power at reasonable rates, it is necessary to adopt the merit order of purchase. The merit order of purchase is stipulated based on the total cost of power purchase per unit, from respective individual sources. The next stage involved in the determination of power purchase costs is the operation of a monthly merit order on available stations, capturing both the seasonal nature of sales and the seasonal disparity in availability especially for hydel stations that would result in a cost optimization process that would be based on the relevant cost. This process allows a far more accurate determination of the optimal costs involved in power purchase than the usage of a yearly merit order process. The Commission has considered the actual energy available for the period April to January 2008 and considered the projected total energy available from all the stations for remaining two months of 2007-08. Based on the above monthly merit order, the Commission has apportioned the total availability between requirement for the State and estimated the surplus / deficit available.

However, the energy to be purchased from small hydro generating plants, cogeneration plants and other non-conventional generating stations has been excluded from the merit order. The power purchase from Nuclear Power Corporation (NPC) has also been excluded from the merit order, as the NPC stations cannot be backed down and the energy has to be absorbed when it is generated.

The Commission also recognizes that the actual off take from a generating station and the associated costs for a Petitioner might be different from that determined in the merit order above. The Commission would review on these differences as filed by the Petitioner based on a scrutiny of whether sound economic principles or other tenable requirements have been followed in the actual dispatch adopted by the Petitioner.

7.3.11 Power Purchase of Deficit Energy

Based on the monthly merit order dispatch, it is noted that the surplus energy is available during some of the months. However, during some of the months particularly during winter months, the total energy available was less than the requirement and, hence, the Petitioner would be required to purchase 351.47 MU of additional power to meet the entire State's requirement from external sources. Out of this total deficit of 351.47 MU, UPCL has already met its requirement of 227.64 MU through UI and the Commission approves the balance 123.82 MU requirement also to be met through UI. The Petitioner has proposed over-drawls from the grid through UI mechanism by payment of UI charges and the cost of purchase of this energy has been proposed at Rs. 3.76/unit. For the period April to January 2008, the Commission has considered the actual cost on account of UI overdrawal and for the remaining period i.e. February and March 2008, the Commission is providing for purchase of additional power to meet the shortfall at the rate of Rs. 3.76/unit as proposed by the Petitioner.

7.3.12 Transmission Charges Payable to PGCIL and PTCUL

UPCL in its Petition has estimated the transmission charges payable to PGCIL at Rs. 43 Crore for 2007-08. However, subsequently, the Petitioner submitted the revised estimate of the transmission charges payable to PGCIL at Rs. 45 Crore for 2007-08. The Commission considering the applicable transmission charges for Northern Region, transmission capacity allocated to UPCL for existing capacities has estimated the external transmission charges of Rs. 45 Crore for 2007-08.

The annual fixed charges for State Transmission Utility (PTCUL) has been determined as Rs. 91.19 Crore by the Commission for 2007-08 vide its Order dated March 18, 2008 and the same has been allocated to the Petitioner and included in its ARR.

7.3.13 Total Power Purchase Cost for the 2007-08

Based on the above, the total power purchase cost for the Petitioner for 2007-08 has been estimated, which works out to Rs. 1042.14 Crore. The summary of the energy available, energy approved for purchase and corresponding purchase cost for 2007-08 has been shown in the Table below:

Table 7.7: Summary of Power Purchase at State Periphery and its Cost for 2007-08

Particulars	Availability (MU)	Power Purchase (MU)	Total Cost (Rs. Crore)
UJVNL-Main Stations	2,788.88	2,788.88	234.82
Maneri Bhali-II	80.00	80.00	6.81
UJVNL Income Tax	-	-	-
UJVNL-SHPs	43.12	43.12	8.00
Pathri	85.15	85.15	6.56
Mohammadpur	35.22	35.22	6.56
Sub-Total	***3,032.37***	***3,032.37***	***262.74***
NHPC			
Salal	36.19	36.19	2.89
T/Pur	15.06	15.06	2.01
Tanakpur free power	48.46	48.46	8.10
Chamera-I	67.25	67.25	11.24
Chamera-II	5.24	1.28	0.46
Uri	82.29	82.29	14.36
Dhauliganga	46.82	46.82	9.08
Dhauliganga free power	135.33	135.33	22.28
Dulhasti	88.82	67.09	21.50
Sub-Total	***525.46***	***499.78***	***91.92***
THDC			
Tehri-I	82.57	60.09	23.60
Free Power - Tehri I	303.03	303.03	53.62
Sub-Total	***385.60***	***363.12***	***77.22***
NTPC			
Anta	100.27	100.27	21.58
Auraiya	147.50	131.44	29.80
Dadri Gas	159.41	138.83	35.68
Unchahar-I	263.22	263.22	54.41
Unchahar-II	126.65	126.65	25.01
Unchahar-III	107.98	97.85	21.66
Rihand-1	316.07	316.07	55.20
Rihand-2	277.07	277.07	55.97
Singrauli	751.24	751.24	93.61
Kahalgaon	-	-	-
Sub-Total	***2,249.41***	***2,202.64***	***392.92***
NPC			
NAPP	25.15	25.15	4.95
Sub-Total	***25.15***	***25.15***	***4.95***
Vishnu prayag (free power)	195.94	195.94	33.36
SJVNL	10.46	3.17	1.66
Others	-	-	-
Him Urja(IPP)	27.30	27.30	6.97
Hanuman ganga(IPP)	17.55	17.55	3.15

Table 7.7: Summary of Power Purchase at State Periphery and its Cost for 2007-08

Particulars	Availability (MU)	Power Purchase (MU)	Total Cost (Rs. Crore)
RBNS Sugar Mill	33.27	33.27	7.62
UREDA	0.49	0.49	0.08
Debal	12.34	12.34	3.03
Sub-Total	***90.95***	***90.95***	***20.85***
Actual UI Overdrawal	227.64	227.64	109.95
Additional purchase for meeting deficit	123.83	123.83	46.56
Total Power Purchase without Banking	6,866.82	6,764.58	1,042.14
Punjab / Haryan / BRPL / RETL under Banking	127.28	127.28	
Total Power Purchase Cost	**6,994.10**	**6,891.86**	**1,042.14**

Considering the actual power purchase during the period April 2007 to January 2008 and based on projected energy availability for February and March 2008, the total energy purchase during 2007-08 works out to 6891.86 as against the energy input requirement of 6679 MU estimated by the Commission which is mainly due to variation in actual distribution losses and distribution losses considered by the Commission based on trajectory. If the actual losses of the Petitioner would have been at the level considered by the Commission, either power purchase could have been lower or the sales for 2007-08 would have been higher. The Commission, in accordance with the approach as detailed out in Section 4 and approach adopted in previous Tariff Orders has not disallowed the power purchase cost corresponding to higher loss levels, has considered the additional energy sales of 161.21 MU out of this additional power purchase after adjusting the losses at the approved level.

The Petitioner's claim of Rs. 61.21 Crore towards income tax payable to UJVNL for previous years has not been considered by the Commission for the reasons specified in the Commission's Order dated March 18, 2008 on Tariff Determination of UJVNL's generating stations for 2007-08 and 2008-09. As regards to income tax payable to UJVNL by UPCL, the Commission has considered the same while projecting the power purchase costs for 2007-08.

7.4 Power Purchase Requirement for 2008-09

7.4.1 Energy Availability from UJVNL

The Commission has considered the availability of UJVNL generating stations for 2008-09 as follows:

- For 9 main generating stations and Pathri and Mohammadpur stations of UJVNL, monthly indicated availability of individual stations as projected by UJVNL.

- For existing SHPs, the availability has been considered based on past trend of the monthly generation pattern.
- For Maneri Bhali-II as indicated by UJVNL for 2008-09

The Commission has estimated the energy sent out from these generating stations after considering the normative auxiliary consumption. Accordingly, the availability for 2008-09 after excluding Himachal Pradesh's (HP) share works out to 4,440.48 MU.

The summary of the energy availability for 2008-09 from UJVNL stations as approved by the Commission is shown in the Table below:

Table 7.8: Energy from UJVNL Stations during 2008-09 (MU)

Particulars	Commission
UJVNL Main Stations	2,723.81
Pathri	43.12
Mohammadpur	89.55
Maneri Bhali-II	1,550.34
UJVNL-SHPs	33.66
Total	**4,440.48**

7.4.2 Energy Availability from Central Generating Stations

The Commission has considered the annual generation for CGS based on the annual generation target as specified by the CEA for 2008-09 and has considered the past years monthly generation pattern from these stations for projecting the monthly generation for 2008-09. The energy sent out from these stations has been estimated considering the normative auxiliary consumption as specified by CERC in the respective Tariff Orders.

UPCL has a firm allocation of share of power from generating stations of National Thermal Power Corporation (NTPC), National Hydro Power Corporation (NHPC) and Nuclear Power Corporation (NPC) 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 shortage in different States. For projecting the energy availability from Northern Region Central Generating Stations during 2008-09, the Commission has considered the weighted average allocation of power (firm share of UPCL as well as unallocated power) based on allocation as specified by NRPC from time to time during the year 2007-08.

The Commission has also considered the generation from new generating station for 2008-09 from Unit-I of the Kahalgaon (Stage-II) generating station based on the average PLF of 80% and normative auxiliary consumption as approved by the CERC in its Tariff Order. The Commission has considererd the transmission losses external to the State for purchase from Central Generating Stations and Other sources.

The summary of the energy availability from CGS as estimated by the Commission for the 2008-09 is shown in the Table below:

Table 7.9: Energy Available from CGS during 2008-09 (MU)

Particulars	Gross Generation	ESO	State Share	Availability after Inter-State Transmission loss
NHPC				
Salal	3082	3051	1.21%	35.44
T/Pur	399	395	3.89%	14.75
Tanakpur free power			12.00%	45.51
Chamera-I	2100	2075	3.53%	70.31
Chamera-II	1424	1407	0.48%	6.45
Uri	2486	2456	3.48%	82.06
Dhauliganga	1135	1121	4.47%	48.09
Dhauliganga free power			12.00%	129.15
Dulhasti	1891	1868	4.51%	91.11
Sub-Total	***12517***	***12374***		***522.87***
THDC				
Tehri-I	2850	2818	2.96%	80.19
Free Power-Tehri I			12.00%	324.62
Sub-Total	***2850***	***2818***		***404.81***
NTPC				
Anta	2755	2672	6.58%	107.44
Auraiya	4213	4087	4.19%	161.46
Dadri Gas	5415	5253	4.12%	181.31
Unchahar-I	3225	2942	8.70%	245.61
Unchahar-II	3225	2935	4.00%	112.63
Unchahar-III	1612	1467	6.58%	92.71
Rihand-1	7720	7102.4	4.33%	295.06
Rihand-2	7720	7102.4	3.80%	258.96
Singrauli	15270	14087	5.22%	705.63
Kahalgaon	3504	3241	2.12%	65.93
Sub-Total	***54659***	***50888***		***2,226.74***
NPC				
NAPP	1074	915	4.09%	35.91
Sub-Total	***1074***	***915***		***35.91***
SJVNL	6400	6323	0.27%	16.11
Total	**77500**	**73318**		**3,206.43**

7.4.3 Energy Availability from Vishnu Prayag Hydro Electric Project

The Commission has considered the annual generation based on the annual generation target as specified by CEA for 2008-09 and has considered the past years monthly generation from these stations for projecting the monthly generation for 2008-09. The auxiliary consumption has been considered on the normative basis. For projecting the energy available to UPCL, 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 2008-09 is estimated at 203.46 MU.

7.4.4 Energy Availability from SHPs in the Independent Power Producers (IPPs) category and UREDA Stations

The Commission has considered the availability from small and micro hydro generating stations, i.e., Himurja, Hanuman Ganga, RBNS sugar mill and Debal in the IPP category and those belonging to the UREDA based on the past trends. The total availability from these sources, thus, works out to 164.83 MU as detailed in the Table below:

Table 7.10: Energy Available from IPPs and UREDA (MU) during 2008-09

Source	Availability
Him Urja	19.41
Hanuman Ganga	25.78
RBNS Sugar Mill	93.39
UREDA	0.24
Debal	26.00
Sub-Total	**164.83**

7.4.5 Banking

Banking for 2008-09 has been considered as per the agreement between UPCL and PSEB dated April 12, 2007 and between UPCL and Haryana dated April 27, 2007. As per the agreement, UPCL is required to Bank power from May 1, 2007 to October 15, 2007 for which it is required to purchase over and above the State’s requirement during these months. From November 15, 2007 to March 2008, PSEB and HPGCL would return the banked power with 5% premium subject to terms and condition of the agreement. Further, UPCL has entered in to banking agreement with BRPL and RETL for energy to be banked to UPCL during December 2007 to March 2008 and UPCL has to return the energy banked to BRPL and RETL during 2008-09. The Commission has considered the banking for 2008-09 based on the banking arrangement with PSEB and HPGCL and energy required to be returned to BRPL and RETL for the energy received during 2007-08 with extra 5% as premium.

7.4.6 Merit Order

As discussed in earlier, the Commission has applied the monthly merit order in approving the power purchase cost in line with the principle adopted by the Commission in previous Tariff Orders. The merit order of purchase is stipulated based on the total cost of power purchase per unit, from individual sources. The total energy input requirement as estimated by the Commission for 2008-09 has been apportioned on monthly basis based on the average monthly energy availability in the past three years. Based on the monthly merit order, the Commission has apportioned the total availability between requirement for the State and surplus / deficit available.

However, the energy to be purchased from small hydro plants, cogeneration generating plants, other non-conventional generating stations and NPC has been excluded from the merit order.

7.4.7 Power Purchase Cost from Generating Stations of UJVNL

The Commission has approved the primary energy rate for 2008-09 for nine major generating stations in its Tariff Order dated March 18, 2008 and estimated the power purchase cost from these generating stations based on the energy available to the UPCL for 2008-09. Power purchase cost from Pathri and Mohammadpur stations of UJVNL has been considered based on the ad-hoc price of 37 Paise per Unit. Power purchase from the Small HEPs of the UJVNL has been considered based on the principle of weighted average cost of power allocated to the State from Central Generating Stations. Though the existing power development cess payable to the State Government towards the investments in the hydro power projects in the State is 40 paise / unit. The Commission for the reasons specified in its Order dated March 18, 2008 on UJVNL's Tariff for 2007-08 and 2008-09 has considered the cess as 30 Paise per Unit and 10 Paise per unit towards the royalty to the State Government for the purchase cost from UJVNL's 9 main stations and Pathri and Mohammadpur.

Further, the Commission has also considered the generation from Maneri Bhali-II during 2008-09. UJVNL has recently filed its Petition for approval of provisional tariff of Rs. 2.69 / unit. The Petition filed by UJVNL for approval of the provisional tariff is under process. For estimating the power purchase cost, the Commission has considered the provisional tariff of Rs. 2.69 per Unit on ad-hoc basis as proposed by UJVNL. However, UJVNL shall bill the power supplied from Maneri

Bhali-II based on provisional tariff approved by the Commission.

The Petitioner's claim of Rs. 61.21 Crore towards income tax payable to UJVNL for previous years has not been considered by the Commission for the reasons specified in the Commission's Order dated March 18, 2008 on Tariff Determination of UJVNL's generating stations for 2007-08 and 2008-09. As regards to income tax payable to UJVNL by UPCL, the Commission has considered the same while projecting the power purchase costs for 2008-09.

7.4.8 Power Purchase Cost from Central Generating Stations

The Commission has considered the annual fixed charges approved by CERC for 2008-09 and apportioned these charges to UPCL based on the State's share allocation in these generating stations for 2008-09. The actual variable charges including Fuel Price Adjustment (FPA) Charges from April to January 2008 have been escalated by 4% for projecting the total variable cost for 2008-09. Other Charges including Incentive for thermal power stations approved by CERC @ 25 paise/unit for the portion of generation over and above 80% plant load factor and for hydro stations on achieving capacity index more than the normative capacity index has been considered for the projections for 2008-09. The Commission has considered the primary energy rate of 85.15 Paise per Unit for central sectory hydel stations on the basis of least variable charges of thermal stations in the Northern Region. The Commission has considered the primary energy rate of 65.82 paise per unit for 2008-09 for Salal generating station as the revenue from primary energy rate exceeds the Annual Fixed charges. Free power has been taken in accordance with existing practice at weighted average cost of power allocated to the State from Central Generating Stations.

7.4.9 Power Purchase through UI

Based on the monthly merit order dispatch, the surplus energy is available during some of the months. However, during some of the months particularly during winter months, the total energy available is less than the requirement and, hence, the Petitioner would be required to purchase 49.91 MU of additional power to meet the entire State's requirement from external sources. For want of any better option, the Commission is providing for purchase of additional power to meet the shortfall at the rate of Rs 3.76/unit as proposed by the Petitioner for 2007-08.

7.4.10 Transmission Charges Payable to PGCIL and PTCUL

The Commission considering the applicable transmission charges for Northern Region transmission capacity allocated to UPCL for existing capacities and additional capacity has estimated the external transmission charges at Rs. 47.25 Crore for 2008-09.

The annual fixed charges for State Transmission Utility (PTCUL) has been determined as Rs. 86.71 Crore by the Commission for 2008-09 vide its Order dated March 2008 and the same has been allocated to the Petitioner and included in its ARR.

7.4.11 Total Power Purchase Cost for 2008-09

Based on the above, the total power purchase cost for the Petitioner for 2008-09 has been estimated, which works out to Rs. 1102.92 Crore. The summary of the energy available and energy approved for purchase and corresponding purchase cost for 2007-08 has been shown in the Table below:

Table 7.11: Summary of Power Purchase at State Periphery and its Cost for 2008-09

Particulars	Availability (MU)	Power Purchase (MU)	Total Cost (Rs. Crore)
UJVNL-Main Stations	2,723.81	2,723.81	237.30
Maner Bhali-II	1,550.34	621.92	173.52
UJVNL-SHPs	43.12	43.12	8.11
Pathri	89.55	89.55	6.90
Mohammadpur	33.66	33.66	2.59
Sub-Total	***4,440.48***	***3,512.06***	***428.41***
NHPC			
Salal	35.44	35.44	2.75
T/Pur	14.75	14.75	2.17
Tanakpur free power	45.51	45.51	8.56
Chamera-I	70.31	70.31	12.19
Chamera-II	6.45	4.02	1.13
Uri	82.06	82.06	12.45
Dhauliganga	48.09	45.46	7.63
Dhauliganga free power	129.15	129.15	24.29
Dulhasti	91.11	65.87	17.69
Sub-Total	***522.87***	***492.57***	***88.86***
THDC			
Tehri-I	80.19	14.48	5.16
Free Power - Tehri I	324.62	324.62	61.05
Sub-Total	***404.81***	***339.10***	***66.21***
NTPC			
Anta	107.44	107.44	23.15
Auraiya	161.46	161.46	37.43
Dadri Gas	181.31	181.31	43.97

Table 7.11: Summary of Power Purchase at State Periphery and its Cost for 2008-09

Particulars	Availability (MU)	Power Purchase (MU)	Total Cost (Rs. Crore)
Unchahar-I	245.61	245.61	52.87
Unchahar-II	112.63	112.63	23.37
Unchahar-III	92.71	92.71	21.83
Rihand-1	295.06	295.06	53.77
Rihand-2	258.96	258.96	53.98
Singrauli	705.63	705.63	90.64
Kahalgaon	65.93	65.93	14.99
Sub-Total	***2,226.74***	***2,226.74***	***416.00***
NPC			
NAPP	35.91	35.91	7.36
Sub-Total	***35.91***	***35.91***	***7.36***
Vishnu prayag (free power)	203.46	203.46	38.27
SJVNL	16.11	3.41	1.45
Others			
Him Urja(IPP)	19.41	19.41	4.85
Hanuman Ganga(IPP)	25.78	25.78	4.63
RBNS Sugar Mill	93.39	93.39	21.29
UREDA	0.24	0.24	0.04
Debal	26.00	26.00	6.76
Sub-Total	***164.83***	***164.83***	***37.59***
Additional purchase for meeting deficit	-	49.91	18.77
Total Power Purchase without Banking	**8,015.20**	**7,027.98**	**1,102.92**
Net Return of Energy banked during 2007-08	(143.98)	(143.98)	-
Total Power Purchase Cost	**7,871.22**	**6,884.00**	**1,102.92**

The Commission has also considered the energy for banking requirement (energy to be returned during 2008-09 for the energy banked during 2007-08) from the energy available for 2008-09. The Commission has approved the total power purchase requirement for the State as 6884 MU and approved the banking requirement as 143.98 MU. Thus, the Commission has approved the total power purchase cost for 7027.98 MU.

7.5 Cost of Assets

7.5.1 Capital Cost of Original Assets

The Petitioner has submitted that it has considered the opening value of the Gross Fixed Assets as Rs. 1058.18 Crore transferred to it by UPPCL, as on November 8, 2001 based on the principles / methodology specified by Government of India (GoI) vide its Order No. 42/7/2000 R&R dated 5th November 2001 under Section 63(4) of the Uttar Pradesh Reorganisation Act, 2000.

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 directed the Petitioner to submit the details in line with principle adopted in earlier Orders. UPCL, in one of its replies regarding the opening GFA, submitted the revised additional capitalisation considering the opening GFA as considered by the Commission in its previous Tariff Orders.

The Commission, therefore, has considered the original value of the Petitioner's GFA, on November 09, 2001 as Rs. 508 Crore.

7.5.2 Additional Capitalisation

The Petitioner submitted that on the opening value of GFA it has subsequently considered additions based on capitalisation of works under various schemes and projects carried out by it. For 2006-07 and 2007-08, it has drawn up the investment plans considering the expected investments under various schemes like District Plan, State Plan, RGGVY, APDRP, PMGY, MNP and system improvement works.

In the last Tariff Order dated July 12, 2006, the Commission had approved additional capitalization for 2001-02, 2002-03, 2003-04 and 2004-05. The Commission had approved additional capitalization of Rs. 186.31 Crore for 2004-05 in its Order dated July 12, 2006 based on provisional accounts the submissions of the UPCL. However, UPCL in its additional submission has submitted that it has recomputed the additional capitalisation based on the Audited Accounts for 2004-05 as Rs. 152.08 Crore. The Petitioner has also given the details of these assets created during 2004-05.

The Commission in its previous Tariff Order dated July 12, 2006 had disallowed the additional capitalization for 2005-06 as the details were not submitted by UPCL and not considered the projected additional capitalization for 2006-07 as the Commission took a view to allow capitalisation on actual basis. The Commission directed UPCL to submit the physical progress and financial progress of the various schemes capitalised and in progress. The Petitioner has submitted the physical progress and financial progress for the major works under Accelerated Power Development Reform Program (APDRP).

The Commission during the technical sessions directed UPCL to submit scheme-wise details of assets capitalized and completed during each of the year from 2005-06 to 2006-07 and details of assets completed and capitalized during first nine months of 2007-08 i.e. April to December 2007 and the projected asset capitalisation during January to March 2008. The Petitioner vide its additional submission dated December 31, 2007 submitted the assets capitalised under different projects like District Plan, State Plan, RGGVY scheme, etc., during the 2005-06, 2006-07 and 2007-08 and projected to be capitalized till 31.03.2008.

Due to reasons given in Section 4, the Commission has accepted Petitioner's submissions and considered the asset capitalisation from 2004-05 to 2006-07 on provisional basis. The opening block of fixed assets for 2007-08 has been considered after adjusting for transfer of PTCUL's assets from UPCL pursuant to the Transfer Scheme notified by the State Government dated May 31, 2004. However, as the Commission is also determining the tariff for 2008-09, it has also considered the actual additional capitalization during the period April to December 2007 and projected to be capitalized during the remaining period of 2007-08.

The Table below shows the opening Gross Fixed Assets for 2004-05 as approved by the Commission in its previous Tariff Order and year-wise additional capitalisation as considered by the Commission:

Table 7.12: GFA and Additional Capitalisation approved by the Commission (Rs. Crore)

Particulars	2004-05	2005-06	2006-07	2007-08
Opening value of GFA	581.78	706.20	844.01	1,132.50
Additions in				
APDRP	14.15	69.22	122.68	50.00
District Plan	3.67	5.11	8.35	9.50
PMGY	6.52	15.73	21.46	2.00
State Plan	6.15	5.00	7.75	20.00
Nalkoop	2.55	2.78	3.16	8.00
MNP	35.55	9.68	6.70	-
Kuteer Jyoti	2.64	2.32	3.87	0.10
AREP	43.41	23.17	10.15	0.15
RGGVY	-	-	69.68	230.00
Others	15.61	15.72	23.24	25.00
Deposit Works	21.83	21.77	52.17	25.00
Total Additions during the year	152.08	170.50	329.21	369.75
Deletions during the year	27.66	32.69	40.72	40.00
Transferred to PTCUL	-	-	-	-
Closing value of GFA	706.20	844.01	1,132.50	1,462.25

7.6 Financing of Capital Assets

Regulation 13 (4) of UERC on financing of projects, stipulates that:

> *"(5) (a) In case of all projects, debt-equity ratio as on the date of commercial operation shall be 70:30 for determination of tariff. Where equity employed is more than 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as the normative loan.*
>
> *Provided that in case of the projects where actual equity employed is less than 30%, the actual debt and equity shall be considered for determination of tariff.*
>
> *(b) The debt and equity amounts arrived at in accordance with clause (a) shall be used for calculating interest on loan, return on equity, Advance Against Depreciation and Foreign Exchange Rate Variation."*

The value of capital cost, which is to be considered for calculating depreciation, is defined in Regulation 15(1) (a) as follows:

> *"The value base for the purpose of depreciation shall be the historical cost, excluding capital Subsidy/grant, of the asset capitalized."*

For the purpose of calculating interest on loans and the return on equity, the debt-equity ratio for the capitalised assets is required. Accordingly, detailed funding of these assets through loans, equity or grants etc. is needed. The Petitioner in its additional submissions dated 31.12.2007 submitted the means of financé details for assets capitalised under various schemes from 2004-05 to 2007-08 based on the Audited Accounts for 2004-05 and Provisional Accounts for 2005-06 and 2006-07 and the same has been considered by the Commission.

The summary of means of financing of the assets from 2004-05 to 2007-08 is given in the Table below:

Table 7.13: Means of Financing of Assets for 2004-05 and 2005-06 (Rs. Crore

Particulars	2004-05				2005-06			
	Grant etc.	Loan	Internal Resources	Total	Grant etc.	Loan	Internal Resources	Total
Opening value	171.93	409.85	-	581.78	211.06	480.12	15.02	706.20
Additions in								
APDRP	12.74	1.42		14.15	62.30	6.92		69.22
District Plan	-	3.67		3.67	-	5.11		5.11
PMGY	5.87	0.65		6.52	14.16	1.57		15.73
State Plan	-	6.15		6.15	-	5.00		5.00
Nalkoop	2.55	-		2.55	2.78	-		2.78
MNP	1.78	33.77		35.55	0.48	9.20		9.68
Kuteer Jyoti	2.64	-		2.64	2.32	-		2.32
AREP	-	43.41		43.41	-	23.17		23.17
RGGVY	-	-		-	-	-		-
Others	-		15.61	15.61	-	-	15.72	15.72
Deposit Works	21.83	-		21.83	21.77	-		21.77
Total additions during the year	47.40	89.07	15.61	152.08	103.81	50.97	15.72	170.50
Deletions during the year	8.27	18.80	0.59	27.66	11.74	19.80	1.15	32.69
Closing value of GFA	211.06	480.12	15.02	706.20	303.13	511.29	29.59	844.01

Table 7.14 : Means of Financing of Assets for 2006-07 and 2007-08 (Rs. Crore

Particulars	2006-07				2007-08			
	Grant etc.	Loan	Internal Resources	Total	Grant etc.	Loan	Internal Resources	Total
Opening value	303.14	511.29	29.59	844.01	535.84	545.67	51.00	1,132.50
Additions in								
APDRP	110.41	12.27		122.68	45.00	5.00		50.00
District Plan	-	8.35		8.35	-	9.50		9.50
PMGY	19.31	2.15		21.46	1.80	0.20		2.00
State Plan	-	7.75		7.75	-	20.00		20.00
Nalkoop	3.16	-		3.16	8.00	-		8.00
MNP	0.34	6.37		6.70	-	-		-
Kuteer Jyoti	3.87	-		3.87	0.10	-		0.10
AREP	-	10.15		10.15	-	0.15		0.15
RGGVY	62.71	6.97		69.68	207.00	23.00		230.00
Others	-		23.24	23.24	-		25.00	25.00
Deposit Works	52.17	-		52.17	25.00	-		25.00
Total additions during the year	251.97	54.00	23.24	329.21	286.90	57.85	25.00	369.75
Deletions during the year	19.27	19.62	1.83	40.72	21.91	16.07	2.02	40.00
Transferred to PTCUL	-	-		-	-	-		-
Closing value of GFA	535.84	545.67	51.00	1,132.50	800.83	587.45	73.98	1,462.25

7.7 Interest and Financing Charges

The Commission has worked out the Interest and Finance Charges considering the loan amount corresponding to assets capitalised in each year based on approved means of finance.

The interest rate and charges for loans under various schemes has been discussed in the following paragraphs.

7.7.1 Transfer Scheme Loans

7.7.1.1 REC Old Loan

The Petitioner in its Petition has claimed that it accepts Commission's approach for disallowance of overdue interest towards the REC old loan and requested the Commission to consider and accept the interest payments corresponding to REC old loan during the tariff determination for 2007-08. During the tariff determination process as a part of additional information, UPCL submitted that interest liability payable towards REC old loan for 2007-08 to be Rs. 9.77 Crore being interest on the original value of the Transferred REC loan of Rs. 154.19 Crore.

The Commission had disallowed any interest towards the REC old loan in the Tariff Order dated July 12, 2006. The relevant extract of the said Order has been reproduced below:

"The Petitioner claimed interest of Rs. 12.72 Crore on these loans. However, according to the re-schedulement agreement, the overdue interest to which this amount pertains, is to be repaid in installments spread over five years and does not attract any interest. Further, interest would accrue on the principal amount but its payment will start after 5 years along with repayment of the principal amount for which EMIs have been fixed. It is, therefore, clear that no fresh interest liability is being discharged during this period and the amount of Rs. 12.72 Crore which is being paid is a part of the accumulated overdue interest and not current interest on outstanding loans. Since this interest liability would have been reflected in the accounts in the relevant year and is not a current item of expenditure, the same is not admissible for tariff purposes. For want of these details, a sum of Rs. 12.72 Crore was allowed by way of interest during 2005-06 and the same needs to be written back. Accordingly, the Commission is disallowing payment of Rs. 12.72 Crore towards accumulated interest by way of expenditure for tariff purposes and is in addition writing back similar amount wrongly allowed in the last tariff exercise."

Upon direction from the Commission, the Petitioner submitted the copy of Memorandum of Agreement towards the new package for the outstanding loan of REC old loan based on the reschedulement of dues recoverable from UPCL. The features of the said agreement are as follows:

- Payment of overdue interest of Rs. 63.76 Crore as on March 31, 2002 to be frozen and payable in 60 monthly installments without any further interest from January 2003

- Waiver of penal interest of Rs. 7.24 Crore as on March 31, 2002 and non-inclusion of the interest accrued on the entire outstanding for the period between April 1, 2002 to December 31, 2002 for calculating Equated Monthly Installments (EMIs) on outstanding loans
- Payment of overdue principle of Rs. 45.23 Crore as on March 31, 2002 in 180 EMIs along with interest @ 10.11% annualized. The first EMI to commence from January 2008 and interest for the period January 1, 2003 to December 31, 2007 to accrue on the overdue principle on the same rate
- Payment of balance outstanding principle of Rs. 108.96 Crore as on March 31, 2002 to be swapped effective from January 1, 2003 by new loan bearing interest rate applicable as on December 31, 2002, i.e., rate of 9.75% to be annualized at 10.11%. REC forgoes 50% of the opportunity cost (Present Value of the future receivables) and capitalised the balance 50% and added to the outstanding loan. The first EMI to commence from January 2008 and interest for the period January 1, 2003 to December 31, 2007 to accrue on the overdue principle on the same rate. The outstanding loan estimated at Rs. 120.59 Crore as on 31.03.2002
- The total EMI towards over-due principle and loan outstanding from January 2008 estimated as Rs. 2.83 Crore

The Commission analysed in detail the agreement submitted by the Petitioner and has computed the interest and loan repayment for 2007-08 and 2008-09 based on the terms and conditions of the said Agreement. As discussed in Section 6, in line with the Agreement, the Commission has considered the interest arising for the period on the total outstanding loan and over-due loan for the period April 1, 2007 to December 31, 2007 as capitalized interest to be recovered in balance loan tenure of 15 years from January 2008. As per REC letter dated 28.02.2008 submitted by the Petitioner, the amount of this capitalised interest as on 31.12.2007 is Rs. 102.65 Crore. Accordingly, the Commission has provided for its recovery in 2007-08 and 2008-09 as Rs. 1.71 Crore and Rs. 6.84 Crore respectively. The Commission further computed the interest and total outstanding loan for the period from January to March 2008 to estimate the interest payable for 2007-08, which works out to Rs. 6.47 Crore for 2007-08 and Rs. 25.38 Crore for 2008-09. Further, the Commission computed the interest part of the EMI payable during April to March 2009 in line with the terms and conditions of the Agreement.

The Commission has, thus, approved total interest / repayment charges of Rs. 8.18 Crore and

Rs. 32.22 Crore for REC Old loan for 2007-08 and 2008-09 respectively.

7.7.1.2 Government of Uttar Pradesh (UP) Loan

The Petitioner has claimed an interest of Rs. 11.85 Crore towards the Government of UP loan of Rs. 67.73 Crore. During subsequent submissions, UPCL submitted the revised workings for interest for 2007-08 without claiming any interest on GoUP loan as provided for in the books of Accounts in line with the principle adopted by the Commission in the previous Tariff Order dated July 12, 2006. However, the Petitioner has requested that any impact of the interest on GoUP loan may kindly be considered from the transfer date, if the GoUP loan forms a part of the transferred loans in the final Transfer Scheme Notifications.

The Commission in line with the principle adopted in previous Tariff Order dated July 12, 2006 is not allowing and interest for 2007-08 and 2008-09. The Commission may, subject to prudence check consider the impact of the interest on GoUP loan after the final Transfer Scheme notification.

7.7.1.3 Government of Uttarakhand Loans

UPCL has projected a total outstanding loan as on March 31, 2007 of Rs. 286.42 Crore and after taking into account receipts and repayments during the year, the closing balance of Rs. 327.85 Crore for 2007-08. The Petitioner had claimed interest and finance charges of Rs. 20.57 Crore on these outstanding loans, out of which Rs. 1.20 Crore has been capitalised and balance Rs. 19.37 Crore has been claimed in tariff.

Regulation 14(1) stipulates that

"Interest on loan capital shall be computed loan-wise including on loans arrived at in the manner indicated in regulation 13(4)".

Further, the Regulations recognize only those loans, which have been used for financing of capitalized assets and not the total amount of loan received by the licensee. Accordingly, the Commission has worked out the Interest and Finance Charges considering the loan amount corresponding to assets capitalised in each year based on approved means of finance. As regards to the interest rates, the Commission has considered the average interest rates based on interest rate applicable on various loan trenches as estimated by the Petitioner. The Commission noted that interest rates for various trenches of loans under different schemes have been different in different years of release. However, the Petitioner has not been able to give linkages of capitalized loans with applicable interest rates. The Commission has, therefore, considered one interest rate for each scheme which shall be trued up when actual liabilities of interests are available after the close of the year. The interest rates considered by the Commission are as follows:

- APDRP : 12%
- District Plan : 11%
- PMGY : 12%
- State Plan : 12.50%
- MNP : 12%
- RGGVY : 5%

The Interest Charges for 2007-08 and 2008-09 worked out accordingly and as approved by the Commission are shown in the Table below:

Table 7.15: Interest on Government of Uttarakhand Loans (Rs. Crore)

Particulars	2007-08	2008-09
APDRP	2.55	2.73
District Plan	4.41	4.63
PMGY	0.53	0.53
State Plan	7.32	7.80
MNP	9.98	9.77
RGGVY	0.92	1.50
Total	**25.72**	**26.96**

7.7.2 Interest on Security Deposit

The Petitioner has projected the interest on consumers' security deposit for 2007-08 on the basis of expected load growth in 2007-08 over 2006-07 and considering the interest charges @ 6% per annum.

The Commission has accepted the Petitioner's projections of interest on security deposit for 2007-08 and considered the same principle for estimating interest on security deposit for 2008-09. As regard to the interest rate towards security deposit, the Commission has issued Order in the matter of rate of interest of security deposit of consumers dated July 27, 2007. Para 1 of the said Order stipulate as follows:

"With effect from 1st April 2007, the distribution licensee shall pay interest on Security Deposit of consumer, both consumption and material security, at the Bank Rate as on 1st April of the financial

year for which interest is due. Bank Rate shall mean the Rate as notified by Reserve Bank of India u/s 49 of the RBI Act, 1934."

The Commission has, accordingly, considered interest rate @ 6% per annum in line with the said Order and approved interest charges of Rs. 6.58 Crore and Rs. 8.06 Crore for 2007-08 and 2008-09 respectively.

7.7.3 Government Guarantee Fee

The Petitioner in its Petition claimed an amount of Rs 4.12 Crore towards the guarantee fee payable to GoU for 2007-08. The Commission had disallowed the Petitioner's claim in the Tariff Order for 2006-07 dated July 12, 2006. The relevant extract of the same has been reproduced below:

"Further, the Petitioner has provided a sum of Rs. 4.12 Crore as guarantee fee to GoU. The Petitioner has not provided any details of the loans for which such fee is payable or has actually been paid. For want of substantiation this claim is not being allowed. However, if requisite details are provided along with the next years ARR the Commission would suitably review this position."

As a part of the tariff determination process, the Commission directed the Petitioner to submit the details of the loans for which such fee is payable. The Petitioner submitted the details as a part of the additional information including Government's letter specifying terms for payment and submitted that Government Guarantee Fee payable to GoU is against the Letter of Credit of Rs. 35 Crore toward the power purchase from CPSU, REC Old Loan and REC loan for transmission works. However, on account of transfer of the assets to PTCUL, servicing of the guarantee fee payable on REC loan for transmission works has been transferred to PTCUL. The Petitioner also submitted calculations for Guarantee Fee payable.

The Commission, therefore, has considered the Government guarantee fee payable to GoU for 2007-08 and 2008-09 for the Letter of Credit towards the power purchase from CPSU and REC Old loan considering the repayments during 2007-08 and 2008-09. Accordingly, the Commission has approved an amount of Rs. 2.06 Crore and Rs. 1.98 Crore for 2007-08 and 2008-09 respectively towards the guarantee fee payable to GoU.

Thus, the Commission has allowed the total interest and financial charges of Rs. 42.54 Crore for 2007-08 and Rs. 69.22 Crore for 2008-09 against the projected claim of Rs. 38.73 Crore for 2007-08.

7.8 Depreciation

The Petitioner has stated that it has computed depreciation on the rates provided for in the Regulations and for 2007-08, depreciation rates have been applied on the closing balance of fixed assets in 2006-07.

The Commission in its Tariff Order for 2006-07, in the absence of information regarding categorization of capital assets as per the categories specified in the Regulations and age profile of the assets allowed depreciation of Rs. 24.27 Crore based on opening depreciable GFA of Rs. 465.90 Crore. The Commission in its Tariff Order for 2006-07 had also directed the Petitioner to prepare and maintain fixed assets registers. The direction given by the Commission in this regard is reproduced below:

> *"The Petitioner is hereby directed to prepare and maintain fixed assets registers so as to be able to clearly define assets in the classes specified in the Regulations alongwith their respective ages and to present correct picture of assets in the next filing, failing which the Commission will have no choice but to totally disallow Petitioner's claims in this regard."*

During the technical validations sessions, the Petitioner informed that the work on preparing the Fixed Asset Register to be awarded to the external agency shortly and the Petitioner would submit the Fixed Asset Register as and when the work gets completed. The Petitioner also submitted asset class-wise details for asset additions till 31.03.2007.

In accordance with the provisions of the Regulations, the Depreciation has been computed at weighted average rate of 3.79% on the Depreciable GFA at the beginning of the year as per asset classification provided by the Petitioner for 2006-07.

The opening value of Petitioner's Depreciable GFA for the year 2007-08 works out to Rs. 596.67 Crore and for 2008-09 it works out to Rs. 661.43 Crore as per financing details given by the Petitioner. The Commission has, accordingly, approved the depreciation of Rs. 22.61 Crore and Rs. 25.07 Crore for 2007-08 and 2008-09 respectively.

7.9 Return on Equity

The Petitioner submitted that as part of the transfer of assets and liabilities from UPPCL, it had been transferred a liability of Rs. 572 Crore for CPSU dues as per the Ahluwalia Committee

Report. GoU has subsequently signed a Tripartite Agreement with Reserve Bank of India (RBI) and Government of India (GoI) and has since then issued bonds. Further, the transfer scheme of PTCUL and the capital structures of UPCL and PTCUL are under finalisation. The Petitioner would approach the Commission on finalisation of its capital structure and place for its consideration any associated changes as part of the ARR. Pending finalisation of the above, the Petitioner has claimed return on equity on the share capital of Rs. 5 Crore as per its Audited Accounts for 2004-05.

The Commission in its Order dated July 12, 2006 has disallowed any return on equity as details for the investment of equity in capital assets were not submitted by UPCL.

The Petitioner as a part of the Tariff determination process, upon enquiring by the Commission, submitted that the equity of Rs. 5 Crore has been utilized for creation of assets for system improvement works in the year 2006-07.

As per UERC (Terms & Conditions for determination of Distribution Tariff) Regulations, 2004 –

> *"Return on equity shall be computed on the equity determined from the projects capitalised under different schemes on basis of financing ratio defined for different schemes for Debt and Equity portion".*

Return on Equity has been computed by the Commission for the assets capitalised under system improvement schemes funded out of equity as per Means of Finance. The Commission has considered the Petitioner's submission in this regard and approves a return on equity of Rs. 0.70 Crore at the rate of 14% on the equity of Rs. 5 Crore for 2007-08 and 2008-09.

7.10 Operation & Maintenance (O&M) Expenses

O&M expenses comprising of expenditure on staff, administration and repairs and maintenance are to be determined in accordance with Regulation 11 of UERC (Terms and Conditions for determination of Distribution Tariff) Regulations, 2004. The Commission in its previous Tariff Order approved a consolidated value of O&M expenses of Rs. 159.88 Crore factoring 4% effect of inflation and proportionate increase in the number of consumers. The Commission projected the O&M Expenses on Gross Basis for 2006-07 and highlighted that actual capitalisation will be considered while truing up exercise is done for these expenses.

Based on the provisional accounts submitted by the Petitioner for 2006-07, the Commission observed that the actual net O&M Expenses for 2006-07 were lower than the O&M expenses approved in the Order. The Petitioner has submitted that it has projected the O&M expenses considering the Regulations laid by the Commission in context to the same. The O&M expenses projected by the Petitioner for the 2007-08 show a 24.99% increase over the actual O&M expenses for 2006-07 due to projected increase in consumers from 11.46 Lakh to 13.83 Lakh.

As discussed in the Section 4 of this Order dealing with the Commission's Approach, the Commission has estimated the O&M Expenditure for 2007-08 and 2008-09 factoring in both the inflation as well as increase in total number of consumers considered by the Commission. Recognising that during 2008-09, employee expenses may go up substantially due to expected salary revision etc., the Commission, in addition to O&M expenses computed in accordance with the Regulations has made a lumpsum provision of Rs. 18 Crore to bear the impact of expected pay revisions on provisional basis. The Commission would carry out the truing up of actual O&M expenses subject to prudence check in the next year tariff exercise. The Operation and Maintenance expenses approved by the Commission for 2007-08 and 2008-09 are shown in the Table below:

Table 7.16: Operations and Maintenance Expenses for 2007-08 (Rs. Crore)

Particulars	Base	With Escalation
Approved O&M Expenses for 2006-07	159.43	165.81
O&M Expenses for Additional Consumers	11.92	12.40
Regulatory Fees	0.45	0.45
Total	**171.80**	**178.65**

Table 7.17: Operations and Maintenance Expenses for 2008-09 (Rs. Crore)

Particulars	Base	With Escalation
Approved O&M Expenses for 2007-08	178.20	185.33
O&M Expenses for Additional Consumers	19.70	20.49
Regulatory Fees	0.45	0.45
Provision for Pay Revision		18.00
Total	**198.36**	**224.27**

Therefore, the O&M expenses approved by the Commission for 2007-08 and 2008-09 are Rs. 178.65 Crore and Rs. 224.27 Crore respectively.

7.11 Interest on Working Capital

As Per Regulation 14(2) of UERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2004, Interest on working capital should be computed as laid down below:

"Interest on working

(a) Working capital shall be worked out to cover

(i) Operation and Maintenance expenses, which includes Employee costs, R&M expenses and A&G expenses, for one month; (estimated spares cost for a period approved as minimum inventory period but normally not exceeding one quarter shall be allowed in R&M expenses)

(ii) Capital required to finance such shortfall in collection of current dues as may be allowed by the Commission.

(iii) Receivables for sale of electricity for a period equivalent to billing cycle plus one month suitably adjusted for security given by consumers and credit given by suppliers.

(b) Rate of interest on working capital shall be the short-term Prime Lending Rate of State Bank of India as on 1st April of the tariff period.

(c) The revenue collection against current dues and past dues shall be shown separately and expressed as a percentage of the current dues and past dues respectively. These percentages shall be brought to an efficient level within a time period as may be directed by the Commission"

The Commission has estimated Interest on Working capital in accordance with the provisions of the Regulations considering collection efficiency of 95%. The Interest on working capital approved by the Commission for 2007-08 and 2008-09 works out to Rs. 11.35 Crore and Rs. 13.92 Crore respectively which is shown in the table below:

Table 7.18:Interest on Working Capital for 2007-08 and 2008-09 (Rs. Crore)

Particulars	2007-08	2008-09
O&M	14.89	18.69
Collection Inefficiency	60.98	65.87
Receivable	203.25	219.58
Less: Security Deposit	168.34	168.34
Total	**110.78**	**135.80**
Interest	**11.35**	**13.92**

7.12 Non-Tariff Income

As Per Regulation 18(2) of UERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2004, Non-Tariff Income shall comprise of:

"The non-tariff income shall comprise of:

(a) Delayed Payment Surcharge,

(b) Meter Rent,

(c) Income from investments,

(d) Miscellaneous receipts from consumers, and

(e) Trading income

(f) Any other income"

The Petitioner has submitted that non-tariff income primarily comprises, discount/rebate on timely payment of power purchase bills, income from fixed deposits and delayed payment charges from consumers. The Petitioner has not considered the sale of apparatus and scrap as non-tariff income as the same cannot be estimated at this stage. The Petitioner has estimated the values for non-tariff income for 2007-08 at Rs. 3.18 Crore. The actual non-tariff income during 2006-07 as per provisional accounts is Rs. 22.40 Crore.

The Commission has considered the Non-Tariff income of Rs. 22.40 Crore each for 2007-08 and 2008-09 equivalent to actual non-tariff income for 2006-07 as per provisional accounts.

7.13 Provision for Bad & Doubtful Debts

UPCL has claimed expenditure of Rs. 28.92 Crore towards provision for Bad & Doubtful debts for 2007-08.

The Petitioner has submitted that it has finalised a suitable policy for provisioning for and writing off bad debts for implementation, and upon approval of policy by the Board of Directors, bad debts shall be written off from the books of account. The Petitioner has considered a provision of Rs.28.92 Crore at a conservative level of 2.5% of the revenue to be billed during the ensuing year.

For reasons discussed in Section 6, the Commission has accepted Petitioner's requests for making provisions for bad debts for the past years in truing up but has restricted it to 1.5%. taking the same concept forward, the Commission on provisional basis has considered bad debts at 1.5% of revenue at existing tariffs for 2007-08 and 2008-09. The provision for bad debts considered by the Commission works out to Rs. 19.67 Crore and Rs. 20.28 Crore for 2007-08 and 2008-09 respectively. This provisioning of bad debts during 2007-08 and 2008-09 will be trued up with actual bad debts written off during the years.

7.14 Impact of Reduction in tariff for Steel Units and Railway Traction

On the basis of Appeals filed by some Steel Units, the Hon'ble Appellate Tribunal for Electricity (ATE) by its order dated 23 May, 2007 directed the Commission to re-determine the tariff of Steel Units for the period from 1st September 2004 to 31st March 2005 and for the period from 1st April 2005 to 31st March 2006. Accordingly, the Commission re-determined the tariff for Steel Units, which resulted in reduction of 42 paisa/kVAh for the period from 1st September 2004 to 31st March

2005 and 32 paisa/kVAh for the period from 1st April 2005 to 31st March 2006.

Further, Hon'ble ATE vide its order dated 6 June 2007 in Appeal No. 214 of 2006 filed by some Steel Units directed the Commission to recalculate the tariff of Steel Units fixed by it in the tariff order dated 12th July 2006 for 2006-07.

The Petitioner has estimated an amount of Rs. 35 Crore towards impact on account of adjustments for reduction of tariff in respect of Steel Units. The Commission has considered the estimated impact of Rs. 25 Crore towards reduction in tariff of steel units from 1st September 2004 to 31st March 2005 and for the period from 1st April 2005 to 31st March 2006 in the ARR of 2007-08 as the same would have been refunded to these units in this year.

The Hon'ble ATE vide its order dated 28.11.2007 in Appeal No. 219 of 2006 directed the Commission to re-determine the tariff for Railway Traction for 2006-07. As regards re-determination of tariff of steel units and Railway Traction from April 1, 2006 in accordance with the directions of Hon'ble ATE orders, the Commission has re-determined the tariff applicable from April 1, 2007 in Section 6 on Truing-up for the Period 2001-02 to 2006-07 and has considered this re-determined tariff for 2008-09 while estimating the revenue at existing tariffs. Since, the exact impact of the refund as a result of re-determination of tariff for steel units and Railway Traction for the period 01.04.2006 to 29.02.2008 is not known at this stage, the same has not been included in the ARR for 2008-09.

7.15 Annual Revenue Requirement (ARR)

The Petitioner has projected Annual Revenue Requirement of Rs. 1698.86 Crore for 2007-08.

However, the Annual Revenue Requirement estimated by the Commission works out to Rs. 1456.06 Crore and Rs. 1567.94 Crore respectively as summarised in the Table below:

Table 7.19: Proposed and Approved ARR

Sl. No.	Item	2007-08		2008-09
		UPCL Petition	Approved	Approved
A	Expenditure			
1	Power Purchase Expenses	1102.91	1042.14	1102.92
2	UJVNL-Tax	61.14		
3	Transmission Charges-PGCIL	45.00	45.00	47.25
4	Transmission Charges-PTCUL	45.62	91.19	86.71
5	O&M expenses	215.77	178.65	224.27
6	Interest charges	39.93	42.54	69.22
7	Depreciation	117.06	22.61	25.07
8	Interest on Working Capital	11.19	11.35	13.92
	Gross Expenditure	**1638.62**	**1433.48**	**1569.36**
	Less: Expense Capitalization			
B	**Interest capitalized**	**1.20**	**-**	**-**
	Total Expense Capitalization	1.20	-	-
	Other Expenses / Appropriations			
1	Provision for Bad & Doubtful Debts	28.92	19.67	20.28
2	Return on Equity	0.70	0.70	0.70
3	Adjustment for reduction of steel units tariffs	35.00	25.00	
C	**Net Expenditure**	**1702.03**	**1478.85**	**1590.34**
	Less: Non Tariff Income	3.18	22.40	22.40
	Net Annual Revenue Requirement	**1698.86**	**1456.45**	**1567.94**

7.16 Revenue at Existing Tariffs and Revenue Gap

By applying the existing tariff rates applicable for different categories of consumers including the impact of ToD tariffs and additional 20% charge for the industries who have opted for continuous supply, the Commission has estimated the total revenue at existing tariffs. Further, the Commission has considered additional revenue on account of following aspects:

- Revenue from efficiency gains (commercial loss reduction at average tariff)
- Revenue from additional sales on account of higher power purchase allowed during 2007-08 than the energy input requirement as discussed above in Para 7.3.13 at average tariff

The summary of total revenue estimated by the Commission for 2007-08 and 2008-09 is given in following Table:

Table 7.20: Revenue at existing tariffs

Sl. No.	Category	2007-08		2008-09	
		Sales	Revenue	Sales	Revenue
		MU	Rs. Crore	MU	Rs. Crore
1	Domestic	1179.05	232.12	1305.06	255.40
2	Non Domestic	599.43	207.46	606.95	214.31
3	Public Lamps	43.55	10.89	46.79	11.70
4	Private Tubewells	200.91	11.83	207.98	15.38
5	GIS	88.87	22.10	94.83	23.58
6	PWW	237.47	53.43	268.23	60.35
7	Industrial	2299.44	660.71	2460.40	714.12
8	Railway Traction	9.00	3.36	11.50	4.29
9	Mixed Load	75.00	17.63	77.97	18.32
	Sub-Total	***4732.71***	***1219.52***	***5079.70***	***1317.46***
	Efficiency Improvement	195.36	50.33	134.24	34.82
	Additional Sales	161.21	41.53		
	Total		**1,311.39**		**1,352.27**

The revenue at existing tariffs leaves a revenue gap of Rs. 145.06 Crore and Rs. 215.67 Crore during 2007-08 and 2008-09 to match the net approved ARR for 2007-08 and 2008-09.

8. Tariff Rationalisation and Design

8.1 Tariff Rationalisation

Before proceeding with the exercise of determining the category-wise tariffs to meet the approved Annual Revenue Requirement of the Petitioner for 2007-08 and 2008-09 as elaborated in Section 7 of this Order, the Commission considers it imperative 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.

8.2 Petitioner's Proposals

8.2.1 Minimum Charges and Fixed Charges

UPCL submitted that the Commission had abolished Minimum Charges in its tariff order for 2006-07 for all the consumer categories which resulted in financial loss to them. This has also resulted in increase in theft as consumers are not required to pay any energy charge if their metered consumption is nil. The removal of minimum charges has also led to increase in number of cases of meter-tampering and defective meters, leading to pilferage and theft of electricity.

UPCL has, therefore, proposed introduction of monthly fixed charges in a range of Rs. 15/kW to Rs. 500/kW for all consumers (except H.T. industrial consumers for which fixed charges in the form of demand charges are already applicable). The rationale for proposing fixed charges is to recover part of fixed cost incurred by the licensee to serve the consumers. UPCL submitted that the proposal for introduction of Fixed Charges is in line with the provisions of Section 45 (3) of Electricity Act, 2003 and the same practice has also been followed in most of the other States where the practice of minimum consumption guarantee charges or minimum charges have been done away with.

8.2.2 Customer Service Charges

In addition to Demand Charges, for Industrial and Railway Traction Categories, UPCL has proposed introduction of Customer Service Charges in the range of Rs. 50 to Rs. 500 per consumer per month. UPCL has submitted that the main rationale for proposing these charges is to recover part of fixed cost incurred by the licensee to serve the consumers.

8.2.3 Slab-wise Tariff for Domestic & Non-domestic Consumers

UPCL has also proposed slab-wise tariff for Domestic and Non-domestic consumers. The reason stated is to reduce the cross-subsidy for such of the consumers who consume electricity above average consumption in these categories. UPCL has proposed different tariff increases for different slabs in these categories. For Domestic category, the slabs proposed and slab-wise average tariff increase proposed by UPCL is as follows:

- For consumption upto 100 units per month – 10%
- For consumption from 101 units to 200 units per month – 20%
- For consumption above 500 units per month – 50%

For Non-Domestic category, the slabs proposed and slab-wise average tariff increase proposed is as follows:

- For consumption upto 100 units per month – 10%
- For consumption from 101 units to 200 units per month – 16%
- For consumption above 500 units per month – 33%

8.2.4 Prohibitive Tariff for unmetered consumers

UPCL while suggesting measures for tariff rationalisation has proposed introduction of prohibitive tariff for un-metered consumers to encourage metering of connections. UPCL submitted that introduction of higher charges for un-metered consumers would be a factor to persuade them to switch over to metered supply which would not only ensure correct measurement of energy supplied but would also assure matching revenue to the Petitioner viz. UPCL.

8.2.5 ToD Tariffs

UPCL submitted that the peak hour surcharge @25% has not helped in reducing the consumption during peak hours and flattening the demand curve in the State. UPCL has proposed an increase in peak hour surcharge from existing level of 25% to 100% for the Industrial consumers inline with the prevailing peak tariff in the State of Himachal Pradesh. The higher peak hour surcharge would discourage consumption during peak hours and, thus, help in flattening the load curve. UPCL further submitted that the cost of power in peak hours is substantially high and hence it has proposed the higher peak hour surcharge in line with the cost of energy to be purchased in peak hours.

8.2.6 Charges for Supply during Restricted Hours

UPCL has proposed that the charges for industrial consumers opting for supply during restricted hours (continuous supply) may be increased from additional 20% of energy charge to 50% of energy charge to be levied throughout the year and the consumer should be allowed to change option once in a year.

For industrial consumers who do not opt for continuous supply throughout the year but are connected on mixed feeders and are found using electricity during load shedding period, load shedding penalty for the number of days of such violation is proposed to be as follows:

- LT Industry Consumer – Rs. 100 per BHP per day of the contracted load
- HT Industry Consumer – Rs. 250 per kVA per day of the contracted load
- HT Steel units Consumer – Rs. 400 per kVA per day of the contracted load

It has further proposed that for the month of load violation during load shedding period, these consumers should be billed at the rates applicable for consumers opting for continuous supply.

8.3 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 rationalization is a dynamic process and it is essential that the same is viewed/reviewed in keeping with changing environment and experience gained over a period of time. The Commission has, therefore, carefully examined the measures proposed by the Petitioner and also considered the suggestions given by the respondents. While determining the tariff, the Commission has endevoured to balance the interests of the licensees and the consumers.

8.3.1 Fixed Charges and Minimum charges

The analysis of ARR for 2008-09 approved in this Order reveals that about 45% of the

UPCL's costs are fixed in nature including the capacity/fixed charges of power purchase. 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 recognizes 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 Monthly Minimum Charges (MMC) is a way of ensuring minimum revenue to the Utility from the consumers, however if the consumption exceeds specified amount, then no MMC are levied on the consumers and, hence, 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.

The Commission is of the view that as about 45% of the Petitioner's costs is fixed in nature, recovery of some minimum portion portion of fixed costs should be allowed through fixed charges. In order to move towards cost of supply, it is desirable to have two-part tariff. Further Section 45(3) of the Electricity Act, 2003 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 ;

(b) a rent or other charges in respect of any electric meter or electrical plant provided by the distribution licensee."

Further, the licensee is incurring fixed cost directly attributable to individual consumers such as meter reading, bill preparation, distribution and collection, which should ideally be allocated to and recovered from each consumer. The Commission has, therefore, decided to move towards this concept of two-part tariff and in this Order introducing fixed charges for most of the consumer categories.

Considering that levy of fixed charges may not impinge adversely, the Commission, to start with, has introduced only a nominal fixed charge as a movement towards designing the tariff structure linked to cost structure.

Ideally, the fixed charges should be levied on the basis of sanctioned load, for all the categories. However, for Domestic category, considering the quality of metering and billing data which has been analysed in detail in Section 5 on Analysis of Billing Data and reflects under/overstated loads, the Commission, for the present, has introduced the fixed charges on per connection basis.

For Non-Domestic, Public Lamps, Public Water Works and GIS Categories, Fixed Charges have been introduced on the basis of sanctioned/contracted load in Rs. per kW terms. However, in order to avoid mis-declaration of load the Commission has also included penalty for exceeding contracted load, which will be applicable only for all such consumers, where MDI meters have been installed.

The Commission in its Tariff Order for 2006-07 had abolished minimum charges for all the categories. The analysis of billing data of the Petitioner as discussed in Section 5 has revealed shocking facts such as very low load factor (less than even 1%) for some of the industrial consumers. This indicates that the Petitioner is not able to bill the industrial consumers corresponding to their consumption, which in turn is resulting in loss of revenue which is being passed on to other honest consumers. Considering the results of billing data analysis, the Commission is constrained to re-introduce the concept of Minimum Charges but in slightly modified form of Minimum Consumption Guarantee (MCG) charges for the Industrial category. MCG charges now approved are to be adjusted only towards energy charges against the earlier Minimum Charges towards fixed and Energy Charges. The Commission has determined these charges for the Industrial categories based on the load factor as mentioned below:

- LT Industrial Category – Load Factor of 10% (as most industries are single or double shift)
- HT Industrial Category – Load Factor of 15% (all industries under this category are 3 shift)

The Commission would like to emphasise that the Minimum Consumption Guarantee (MCG) charges for Industrial Category has been re-introduced considering the deficiencies observed in the billing data of the Petitioner. However, considering that there could be genuine reasons for low load factor in domestic and non-domestic categories, such as premises being locked for long period, seasonal nature of commercial activities like tourism, the Commision has exempted these categories from MCG charges. **The licensee is directed to check the reasons, including by testing of meters, for extremely low load factors for high value consumers in these categories.** The Commission will analyse the billing data of the Petitioner on regular basis and may review the continuation of the MCG charges in subsequent Tariff Orders.

8.3.2 Customer Service Charge

UPCL has proposed monthly Customer Service charge for Industrial and Railway traction category to recover part of fixed cost which is incurred by the Licensee to serve the consumers.

The Commission would like to highlight that the tariff of Industrial and Railway Traction categories is already a two part tariff i.e., Demand Charges and Energy Charges, and, hence, the Petitioner is already recovering certain portion of its fixed cost from these categories by way of demand charges. Further, the revenue impact of customer service charge is miniscule and introducing this additional charge would only complicate the tariff structure. Hence, the Commission does not see any merit in levy of customer service separately on Industrial and Railway Traction consumers.

8.3.3 Slab system for Domestic & Non-domestic Consumers

UPCL has proposed slab-wise tariff for Domestic and Non-domestic consumers in order to reduce the cross-subsidy to consumers consuming electricity beyond average consumption in this category.

The current tariff structure for Domestic and Non-Domestic category does not have any slab system. In most of the other States, number of slabs in domestic and non-domestic categories have been reduced to rationalize the tariff and to simplify the tariff structure. Most of the respondents have also objected to the proposal to introduce slabs system in these two categories. The Commission is of the view that introduction of slab system for domestic and non-domestic consumers will be retrograde to tariff rationalization, particularly when the tariffs for all the categories have to be moved towards cost reflective tariff in gradual manner. Although, the Petitioner has attempted to justify his proposal but the same is without any objective analysis in as much as it has not even provided impact of slab system on revenue.

Based on the analysis of billing data, it is observed that around 25% of consumers are billed on provisional basis without meter reading. Further, the meter readings taken on any day during the month are treated as meter readings on some pre-fixed date for that area. This practice would lead to incorrect application of slabs for monthly consumption. With these kinds of deficiencies in the billing system, it will not be appropriate to change the tariff structure, as it will add more billing problems.

While the Commission fully recognizes that high end consumers consume more power, but at the same time introduction of slab-wise tariff may increase malpractices by the consumers including taking multiple connections and reporting of lower consumption of electricity so as to take advantage of lower slab tariff.

In view of the above, the Commission has not accepted the proposal of the Petitioner to introduce the slab based tariff for Domestic and Non-Domestic categories and has decided to continue with the present structure.

8.3.4 Time of Day (ToD) Tariffs

Though the ToD tariffs are being charged from some categories of consumers, but the Petitioner has failed to submit the requisite data related to ToD consumption of the consumers and the impact of the same on revenue for HT Industrial consumers. As regards Non Domestic and LT Industry, the Petitioner could not submit ToD consumption data even for one Division. It has also not submitted any data showing impact of introduction of ToD tariffs in shifting consumptions of consumers from peak to other hours. When the Petitioner is unable to provide the ToD consumption data and is not in a position to assess the revenue impact of ToD tariff, it would not be justifiable to increase the peak hour surcharge as suggested by the Petitioner.

Some of the non-domestic consumers (particularly hotel consumers) represented that, it is not possible for them to shift the load and, hence, ToD Tariffs should not be made applicable for this category. The Commission agrees with the views of these consumers and has, therefore, decided to abolish the ToD tariffs for non-domestic consumers.

Several respondents submitted that morning peak hours should be abolished and there should be only evening peak hours during which the peak hour surcharge should be levied as applicable in most of the other States.

The Commission is unable to accept this demand of consumers on the basis of peak hours followed in other States. Uttarakhand, due to its different geographical conditions, has distinct morning peak along-with the normal evening peak during winter season. The Commission has, therefore, decided to maintain status quo in so far as peak hours are concerned.

As regards to ToD rates i.e. peak hour surcharge and off peak hour rebate, the Commission would like to continue with the existing peak hour surcharge of 25% and off peak hour rebate of 5% till proper analysis of ToD data is done by the Petitioner and its impact on load curve and revenue is assessed for at least one full year based on the meter readings.

8.3.5 Prohibitive Tariff for unmetered consumers

UPCL while suggesting measures for tariff rationalisation has proposed introduction of prohibitive tariff for un-metered consumers to encourage metering of connections.

While the Commission agrees with the view of the Petitioner, but at the same time feels that increase in tariff should not be such that the traffic cannot bear it and causes restlessness. The Commission would also like to highlight that the introduction of prohibitive tariff for unmetered consumers is not the only solution to encourage metering. Moreover, metering of consumers is the responsibility of the licensee and as elaborated in Section 5, with present state of affairs even where meteres have been installed the Petitioner is unable to take the readings for more than 25% of such consumers for years together. The Commission has, therefore, decided to restrict the increase in tariff of un-metered domestic consumers from existing tariff of Rs. 120/connection/month to Rs. 150/connection/month. This increase in tariff, however, shall not apply to consumers in hilly areas of the State which for this purpose extend to 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.

8.3.6 Supply during Restricted Hours

The Petitioner has proposed to increase the charges for industrial consumers opting for supply during restricted hours (continuous supply) to 50% of energy charge as against existing 20% of energy charge to be levied throughout the year.

Some of the respondents have suggested that this charge may be increased to 25% of energy charges but should be levied only during the period of load shedding instead of levying it through out the year.

On the issue of levy of these charges throughout the year, the Commission is of the view that for making available the continuous supply to the industrial consumers, who have opted for it, the Petitioner may have to contract the capacity with generating stations and for which the Petitioner will have to pay the Fixed Charges for the entire year. If the capacity is not contracted to meet continuous supply, the additional energy required during the load shedding period will have to be procured through short term trading or through UI route at very high rates. If the power is procured on short term basis and the impact of same is to be passed on to the consumers who have opted for continuous supply only during the period of load shedding, the additional charges to be levied will be more than 100% of normal energy charges considering the prevalent short term trading rates in the market. In order to avoid higher impact on consumers during load shedding period and to motivate the licensee to make long term arrangements for continuous supply of power, there is merit for charging reasonable premium in energy charges through out the year.

As regard the extent of premium to be charged, the Commission has decided to retain the current applicable provisions as approved in the Tariff Order for 2006-07 without any increase. The Commission agrees with the view of the Petitioner that the consumers shall be allowed to change the option only once in a year subject to the condition that 20% higher charges shall be applicable for entire financial year irrespective of actual period of continuous supply. Considering stakeholders' response that peak hour penalty for non-continuous supply consumers is harsh, the Commission would take up this matter separately later.

8.4 Other Tariff Rationalisation Measures

8.4.1 kVAh Based Tariff for Non Domestic and LT Industry Categories

The kVAh based tariff provides sufficient incentive for the consumers to provide adequate shunt capacitors and maintain the required PF. It has built in incentive for consumers who have high power factor and also disincentives for consumer whose power factor is poor. Further, it minimises the discretion of field staff of licensee. Meters compatible to record kVAh reading has been installed by the Petitioner for all the consumers having sanctioned load above 25 kW in Non Domestic and LT Industry category. Therefore, the Commission has specified the kVAh based energy charges for the consumers having sanctioned load above 25 kW in Non Domestic and LT Industry Categories except educational instutions, hospitals and charitable institutions. The

Commission intends to extend the coverage of kVAh billing to other 3 phase Government Categories, LT Industries and non-domestic consumers in next tariff. **The Petitioner is hereby directed to ensure installation of appropriate meters for all such consumers within 6 months. The Commission hereby also directs the Petitioner to maintain the data of such consumers both in kWh and kVAh after installation of such meters.**

8.4.2 Basis of Fixed Charges for LT Industries and Non-Domestic Consumers

LT Industrial consumers still have their contracted load in BHP. Maximum demand indicated by MDI is in kW. Since Commission has decided to levy penalty for exceeding contracted load, present system of contracted load in BHP may result in avoidable disputes relating to imposition of penalty. In the light of above the Commission has decided that all such contracted loads shall be reckoned in kW only by using the conversion factor as 1 BHP= 0.746 kW and **directs Petitioner to convert contracted load of all LT Industrial consumers in kW using above mentioned conversion factor.** Further, consumer's contracted demand in kVA would depend on his average power factor which is not known for LT industry, PWW, GIS, Public Lamps and Non-domestic consumers. The Commission, therefore, has approved fixed charges on per kW basis instead of introducing Demand charges on per kVA basis. **The Commission hereby directs the Petitioner to maintain the data of MDI of such consumers both in kW and kVA to take a decision on kVA based fixed charges in the next tariff exercise.**

8.4.3 Categorisation of HT Industries

The Commission in its Tariff Order for 2006-07 specified separate tariff for general HT Industry and Steel Units. Hon'ble Appellate Tribunal of Electricity (ATE) in its Order in Appeal No. 214 of 2006 opined that same tariff could be made applicable for all HT Industries and Power Intensive Units (PIUs) including Steel Units. The Hon'ble ATE further mentioned that all units with load factor above 50%, whether HT or PIUs should pay a higher tariff and those below 50% or below 33% should pay a comparatively low tariff. Some respondents have also emphatically demanded such merger and load factor based tariff.

Considering the above observations of Hon'ble ATE and respondents' submissions, the Commission has re-categorised the HT Industry category and has specified uniform load factor based Energy Charge for all the consumers under HT Industry category. The Commission has specified the energy charges linked to load factor as follows:

- Upto 33% load factor
- Above 33% load factor and upto 50% load factor
- Above 50% load factor

As regards to demand charges, the Commission has specified lower demand charges for industries having contract load upto 1000 kVA than for industries having contract load above 1000 kVA.

8.4.4 Railway Traction Tariff

Hon'ble Appellate Tribunal of Electricity (ATE) in its Order in Appeal No. 219 of 2006 directed the Commission to re-determine the tariff for Railway Traction category for 2006-07.

The Hon'ble ATE, in its Order, raised the issue that why the tariff for the Railway Traction should be much higher than the HT Tariff when the Railways bears the cost of infrastructure network of HT lines and transformers etc., which substantially facilitates to reduce the cost of supply to UPCL.

Northern Railways in its submission mentioned that the tariff for Railway Traction should be determined at reasonable level commensurate with the cost of supply taking into account the Central Generating Stations cost. It was also submitted that Railways, being continuous supply consumer is unable to shift its load and, hence, ToD tariff should not be applied for railway traction. Railways representative has confirmed during Advisory Committee meeting that cheaper power received from UPCL shall be used within the state and shall not be transmitted out of state, except over traction circuits at 25 kV which is a technical requirement.

The Commission is of the view that it will not be appropriate to allocate the cost of power purchase from some sources to a particular category as with this approach every category will demand for allocation of cheaper power to that particular category. The Commission agrees with the view of Railways that ToD Tariff should not be applicable for Railway Traction. The Commission, in accordance the directions of Hon'ble ATE and considering the suggestions made by Railways, and also considering that Railways require continuous supply, has determined the Energy Charges Railway Traction by adding 20% surcharge as applicable to HT industries who have opted continuous power during restriction period towards continuous supply of power and

4% impact of ToD tariff on HT Industry Tariff applicable for load factor below 33%. However, considering that Railways have very low load factor, the Commission has fixed the Demand Charges as Rs. 150/kVA for it, though its contracted load is more than 1000 kVA.

8.4.5 Billing Demand

The Petitioner has proposed billable demand as actual recorded maximum demand or 80% of contracted load, whichever is higher. Some of the respondents have demanded to keep the billable demand as per prevalent mechanism of actual recorded maximum demand or 75% of contracted load, while some other respondents have requested the Commission to keep the billable demand as actual recorded maximum demand or 70% of contracted load, whichever is higher. The Commission is of the view that the billable demand should be close to the contracted load as this will help in proper planning of the system demand and accordingly the Petitioner will be able to contract the capacity from generators. Further, increase in billable demand will also improve the recovery of fixed cost from fixed charges. Therefore, the Commission agrees with the view of the Petitioner and modifies the definition of billable demand as actual recorded maximum demand or 80% of contracted load, whichever is higher.

8.4.6 Restriction in Usage of Supply for Industries

In last Tariff Order dated 12th July 2006 Commission had made following provisions in regard to imposition of restriction towards the usage of electricity by the industry during certain hours in the day:

(i) For consumers opting for supply during restricted hours (Continuous) - 20% increase in the Energy charge as given in Rate of charge. Demand charge and other charges remain same as per rate of charge given above.

(ii) For consumers not opting for supply during restricted hours (Non continuous) - Energy charge, Demand charge and other charges as per rate of charge given above.

(iii) Peak Hour Violation Penalty shall get attracted. Consumers who do not opt for supply during Peak hours/Restricted hours (Non Continuous supply) shall not be allowed to use power in excess of 15% of their contracted demand. Any violation detected shall attract a penalty of Rs. 50 per KVA per day of the contracted demand, for the number of days of such violation. For the month of default, the consumer shall be billed at the rates specified at (i) above (for consumers opting for supply during restricted hours (Continuous)).

Commission has received representations from industry regarding imposition of penalty clause (iii) above during restrictions on usage of electricity during months of Jan-Feb 2008. The Commission is taking view in the matter and till final view is taken the above provisions would continue and new rate of charge w.e.f. 01.03.2008 would be:

Table 8.1: ToD Tariff for Continuous Supply Industries

Industries with load factor*	Energy Charges during normal hours	Energy Charges during Peak hours	Energy Charges during Off Peak Hours
Up to 33%	Rs. 2.64/kVAh	Rs. 3.30/kVAh	Rs. 2.50/kVAh
Above 33% and upto 50%	Rs. 2.88/kVAh	Rs. 3.60/kVAh	Rs. 2.74/kVAh
Above 50%	Rs. 3.18/kVAh	Rs. 3.98/kVAh	Rs. 3.02/kVAh

Industries who have already opted for continuous power will continue to pay 20% higher tariff as mentioned above. Industries who opt for continuous power after implementation of this order shall be levied above mentioned 20% higher tariff from 1st April 2008 or from the date of connection whichever is later.

8.4.7 Surcharge for PTW consumers

PTW consumers had been given option of paying bills by the due date or twice in a year i.e. by the end of December (bills for the period June to November) and by the end of June (bills for the period from December to May) and no specific surcharge was applicable on the bills for making half yearly payments as above. However, in case the consumer failed to make payment as above, a surcharge on unpaid amount @1.25%/month for the period (months or part thereof) for payments was delayed beyond due date of the bill was payable. This provision has caused some avoidable disputes regarding surcharge. In order to eliminate disputes, **Licensee is directed to raise bills 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) with 15 days notice period**. In case consumer fails to make payment within due date, a surcharge @ 1.25%/month for the period (months or part thereof) shall be payable.

8.5 Treatment of Revenue Gap

As concluded in Section 7 of the Order, the revenue at existing tariffs leaves a revenue gap of Rs. 145.07 Crore and Rs. 215.67 Crore during 2007-08 and 2008-09 to match the net approved ARR for 2007-08 and 2008-09 respectively.

The Petitioner has proposed to increase the tariff with effect from April 1, 2007 to recover the part of revenue gap estimated by the Petitioner for 2007-08. As discussed in Section 3, the Commission has made the category-wise tariffs approved in this Order effective from March 1, 2008. This will facilitate the additional recovery of around Rs. 18 Crore through revised tariffs during 2007-08. This leaves the uncovered gap of Rs. 127.07 Crore during 2007-08.

Further as concluded in Section 6 of the Order, the Commission based on truing up of ARR and Revenue for the previous years from 2001-02 to 2006-07 has estimated a net surplus of Rs. 237.77 Crore at the end of 2006-07. The Petitioner in its supplementary Petition for truing up of previous years requested the Commission that the surplus, if any, calculated as on March 31, 2007 may not be adjusted against the ARR of the future years pending finalization of the Transfer Scheme and resolution of the issues related to it.

The Commission is of the view that if the Petitioner's request is accepted and no part of surplus of Rs 237.77 Crore at the end of 2006-07 is not used for bridging the estimated revenue gap of 2007-08 and 2008-09, the tariff increase required to meet the gap of two years i.e. 2007-08 and 2008-09 in 13 months period i.e. March 2008 to March 2009 will lead to a severe tariff shock to the consumers. At the same time, as the impact of finalisation of transfer scheme and related issues on ARR for previous years is not known at this stage, it would be preferable to leave certain portion of net surplus at the end of 2006-07 to take care of the impact of finalisation of transfer scheme on ARR for previous years.

In view of the above, the Commission has decided to utilize the surplus to the extent of Rs. 127.07 Crore to meet the uncovered gap of 2007-08. The net surplus after utilization of surplus to meet the uncovered gap of 2007-08 works out to Rs. 110.70 Crore. The Commission will consider the utilization of balance surplus of Rs. 110.70 Crore in future years ARR including the impact of finalisation of transfer scheme on ARR for previous years.

The Commission, accordingly, has allowed the recovery of entire approved ARR for 2008-09 through tariffs.

8.6 Category-wise Tariff Design

Several respondents from consumer categories have opposed the increase in tariff proposed by the Petitioner and submitted that the existing electricity tariffs in the State of Uttarakhand are reasonable. In this regard, the Commission would like to highlight that the average cost of supply has increased from approved average cost of supply of Rs. 2.30/kWh in 2003-04 to Rs. 3.02/kWh in 2008-09. Inspite of reduction in losses as per trajectory, one of the factors attributable to increase in cost of supply is substantial increase in power purchase requirement to meet the energy requirement of large number of new industrial consumers in the State. During 2003-04, industrial consumption was around 26% of total consumption which has increased to around 49% of total consumption in 2007-08. In MW terms Industrial load has increased from 266 MW in 2003-04 to 763 MW as on 31st Oct, 2007 and expected to go up to around 900 MW by the end of FY 2008-09. This necessitates purchase of costly power by the licensee even beyond the allocated quota for the State. Further, to meet the additional energy requirement, the Petitioner had to purchase power through UI overdrawals at more than Rs. 5/unit during peak hours. In case of certain HT industries (having high load factor), which were supposed to be cross-subsidizing earlier, the actual cost of supply eclipsed their effective tariff and such industries un-intentionally got cross-subsedized. Therefore, the Commission while designing the category-wise tariffs has considered this aspect in accordance with the provisio to Regulation 20 and attempted to strike a balance between the interests of various consumer categories and the Licensee.

The Commission has designed the category-wise tariffs for full recovery of approved Annual Revenue Requirement for 2008-09. 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 March 1, 2008 and shall continue to be applicable till further orders.

8.6.1 RTS-1: Domestic Tariff

As the Petitioner has sought time for metering unmetered rural domestic consumers, the Commission is permitting to retain this sub-category. However, as discussed above, while addressing the issues of tariff rationalization, the fixed charges for un-metered supply have been increased to Rs. 150/connection/month, however, without any change for such consumers in hilly areas. The tariff for lifeline consumers have been retained at existing level. For other domestic metered consumers, nominal fixed charge of Rs. 15/connection/month has been introduced and no change has been made in the energy charges. For single point bulk supply connections, the fixed charges have been approved as Rs. 15/kW/month and rebate on energy charges has been increased slightly.

A comparison of the tariff, i.e. existing, proposed by the licensee and that approved by the Commission, is given in the Table below.

Table 8.2: Tariff for Domestic Consumers

Sl. No.	Category	Existing		Proposed		Approved	
		Fixed Charges	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
		Rs./month	Rs./kWh	Rs./kW/ month	Rs./kWh	Rs./ month	Rs./kWh
1	Domestic Unmetered (Rural)	120	Nil	500	Nil	150*	Nil
2	Domestic Metered						
2.1	Life line consumers- Below poverty line and Kutir Jyoti having load upto 1 kW and conumtion upto 30 units/month	Nil	1.50	Nil	1.50	Nil	1.50
2.2	Other Domestic Consumers – Metered						
	0-100 units				2.20		
	Above 100 -200 units		2.00	15	2.50	15	2.00
	Above 200 units				3.00		
3	Single point bulk supply		1.95	15	2.50	15/kW	1.90

** 120 for consumers in hilly areas*

8.6.2 RTS 1-A: Concessional Snowbound Area Tariff

As the domestic and non-domestic consumers in snow bound areas of the State having limited paying capacity and are few in numbers and account for only a modest quantity of power consumption, no increase in tariff is contemplated. Further, considering the requests made by the consumers in snowbound area, the Commission has approved the concessional tariff for all Non Domestic consumers in snow bound areas. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in Table below:

Table 8.3: Concessional Tariff for Snowbound Areas

Sl. No	Category	Existing		Proposed		Approved	
		Fixed Charges	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
		Rs./month	Rs./kWh	Rs./kW/ month	Rs./kWh	Rs./month	Rs./kWh
1.1	Domestic	Nil	1.50	10.00	1.50	Nil	150.00
1.2	Non Domestic						
	Upto 1 kW	Nil	1.50	10.00	2.00	Nil	1.50
	1-4 kW	Nil	3.50	50.00	4.30	Nil	2.00
	Above 4 kW	Nil	3.00, 3.50	50.00	4.30	Nil	3.00

8.6.3 RTS-2: Non-Domestic Tariff

As discussed above, the Commission, considering the request made by some of the consumers, has done away with the ToD tariff for Non Domestic category. Nominal fixed charges of Rs. 15/kW have been introduced for all the non-domestic consumers. For Educational Institutions, Hospitals and Charitable Institutions, the Commission has given relief by merging tariff of Rs. 3/kWh with ToD and tariff of Rs. 3.50/kWh without ToD and approved a single tariff of Rs. 3/kWh. For other Non Domestic consumers, the tariff has been retained at existing level of Rs 3.50/kWh without any ToD tariff. Further, for consumers having load above 25 kW, kVAh based energy charges have been specified. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in Table below:

Table 8.4: Tariff for Non-Domestic

Sl. No.	Category	Existing			Proposed			Approved	
		Fixed Charges	Energy Charges		Fixed Charges	Energy Charges		Fixed/ Demand Charges	Energy Charges
			With ToD	Without ToD		With ToD	Without ToD		
		Rs./month	Rs. /kWh	Rs./kWh	Rs./kW/month	Rs./kWh	Rs./kWh	Rs./kW/month	Rs/kWh
1	Registered Charitable Organisations functioning only for charitable purposes	Included in 2 below			50	2.40	2.90	Included in 2 below	
2	Educational Institutions, Hospitals and Charitable Institutions								
2.1	Upto 4kW	Nil	3.00	3.00	50	0-100 units - 3.30 >100-200 units- 3.50 >200 units- 4.00	0-100 units - 4.30 >100-200 units- 4.50 >200 units- 5.00	15	3.00
2.2	Above 4 kW and upto 25 kW	Nil	3.00	3.50				15	3.00
2.3	Above 25 kW	Nil	3.00	-				15	3.00
3	Other Non Domestic Commercial users								
3.1	Upto 1 kW	Nil	3.00	3.50	50	0-100 units - 3.30 >100-200 units- 3.50 >200 units- 4.00	0-100 units - 4.30 >100-200 units- 4.50 >200 units- 5.00	15	3.50
3.2	Above 1 and upto 25 kW	NIl	3.00	3.50				15	3.50
3.2	Above 25 kW	Nil	3.00	-				15	Rs. 3.50 / kVAh
4	Unmetered	185	-	-		-	-	-	-

8.6.4 RTS-3: Public Lamps

The tariff has been approved linked to average cost of supply without any element of cross-subsidy. Nominal fixed charges have been introduced as in the case of other categories. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in Tables below:

Table 8.5: Tariff for Public Lamps

Sl. No	Category	Existing			Proposed			Approved		
		Fixed Charges	Maint. Charges	Energy Charges	Fixed Charges	Maint. Charges	Energy Charges	Fixed Charges	Maint. Charges	Energy Charges
		Rs. / month	Rs. / point / month	Rs. / kWh	Rs. / kW / month	Rs. / point / month	Rs. / kWh	Rs. / kW / month	Rs. / point / month	Rs. / kWh
1	Public Lamps	Nil	10	2.50	15	10	3.00	15	10	2.95

8.6.5 RTS-4: Private Tube Wells/Pump sets

The tariff has been retained at existing level without any increase. Further, to avoid undue hardship faced by agricultural consumers, the Commission as a rationalization measure, has merged tariff of urban and rural un-metered consumers. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in Table below:

Table 8.6: Tariff for Private tube Wells/ Pump Sets

Sl. No.	Category	Existing		Proposed		Approved	
		Fixed Charges	Energy Charges	Fixed charges	Energy Charges	Fixed Charges	Energy Charges
		Rs/BHP/ month	Rs./kWh	Rs/BHP/month	Rs./kWh	Rs/BHP/ month	Rs./kWh
1	Unmetered						
1.1	Rural	105	Nil	190*	Nil	105	Nil
1.2	Urban	126	Nil	215*	Nil	105	Nil
2	Metered	Nil	0.70	15	1.20	Nil	0.70

** After 4 months365 and 415 respectively.*

8.6.6 RTS-5: Government Irrigation System

The tariff has been approved linked to average cost of supply without any element of cross-subsidy. Nominal fixed charges have also been introduced. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in Tables below:

Table 8.7 : Tariff for Government Irrigation System

Sl. No.	Category	Existing		Proposed		Approved	
		Fixed Charges	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
		Rs./BHP/ month	Rs./kWh	Rs./BHP/ month	Rs./kWh	Rs./month	Rs./kWh
1	GIS upto 100 BHP	Nil	2.50	25	3.00	15/kW	2.95
2	GIS above 100 BHP	Nil	2.15/kVAh	25	2.75/kVAh	15/kW	2.50/kVAh

8.6.7 RTS-6: Public Water Works

The tariff has been approved linked to average cost of supply without any element of cross-subsidy. Similar to other Government suppliers, nominal fixed charges have been introduced in this category. The existing tariff, tariff proposed by the licensee and that approved by the Commission is given in Tables below:

Table 8.8: Tariff for Public Water Works

Sl. No.	Category	Existing		Proposed		Approved	
		Fixed Charges	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
		Rs./kW/ month	Rs./kWh	Rs./kW/ month	Rs./kWh	Rs./kW/ month	Rs./kWh
1	Public Water Works	Nil	2.25	15	2.75	15	2.95

8.6.8 RTS-7: Industry

For LT Industry, the fixed charges have been nominally increased to Rs. 70/kW as against existing level of Rs. 45 BHP/month (which is equal to Rs. 60/kW/month). The energy charges for LT Industry have been increased to Rs 2.75/kWh. Further, for consumers having load above 25 kW, kVAh based energy charges have been specified.

For HT Industry, the Commission has rationalized the present structure by specifying the load factor based energy charge for all the HT Industry consumers. Similarly, the Commission has segregated the Demand Charges linked to Contract Demand and specified Demand Charges for consumers with contract demand upto 1000 kVA and consumers having contract demand above 1000 kVA.

As discussed in earlier, the Commission has introduced Monthly Consumption Guarantee Charges (MCG) for all the industrial consumers as per the rates given in Table below. The Commission would like to clarify that Monthly Consumption Charges shall be applicable in case total energy charges during a month are lower than the MCG charges. Hence, the MCG charges shall be applicable in addition to the Fixed/Demand Charges. The existing tariff, tariff proposed by the licensee and that approved by the Commission for LT Industry is given in Table below:

Table 8.9: Tariff for LT Industry

<table>
<tr><th rowspan="3">Sl. No.</th><th rowspan="3">Category</th><th colspan="2">Existing</th><th colspan="3">Proposed</th><th colspan="3">Approved</th></tr>
<tr><th>Fixed charges</th><th>Energy Charges</th><th>Fixed charges</th><th>Energy Charges</th><th>Customer service charges</th><th>Fixed Charges</th><th>Energy Charges</th><th>MCG Charges</th></tr>
<tr><th>Rs/BHP month</th><th>Rs./kWh</th><th>Rs/BHP/ month</th><th>Rs./kWh</th><th>Rs/consumer/ month</th><th>Rs./kW/ month</th><th>Rs./kWh</th><th>Rs./kW/ month</th></tr>
<tr><td>1</td><td>Upto 25 kW</td><td rowspan="2">45</td><td rowspan="2">2.45</td><td rowspan="2">100</td><td rowspan="2">2.9</td><td rowspan="2">50</td><td>70</td><td>2.75/kWh</td><td>200</td></tr>
<tr><td>2</td><td>Above 25 K W</td><td>70</td><td>2.50/kVAh</td><td>200</td></tr>
</table>

The existing tariff and tariff proposed by the licensee for HT Industry is given in Table below:

Table 8.10: Existing and Proposed Tariff for HT Industry

Category	Existing Tariff		Proposed Tariff		
	Demand Charges	Energy Charges	Demand Charges	Energy Charges	Customer Service Charges
	Rs./kVA/month	Rs./kVAh	Rs./kVA/month	Rs./kVAh	Rs./consumer/month
General HT	125	1.9	250	2.35	250
Steel Units	350	2.35	400	2.75	500

The approved tariff for HT Industry is given in Table below:

Table 8.11: Approved Tariff for HT Industry

Description	Energy Charge*		Fixed /Demand Charge per month	Minimum Consumption Guarantee (MCG) Charge
1. HT Industry having contracted load above 88kVA/75 kW (100 BHP)	Utilisation Factor	Rs /kVAh		
1.1 Contracted Load up to 1000 kVA (Base voltage 11 kV)	Up to 33%	2.20	Rs. 150 / kVA of the billable demand	Rs 250/kVA
	>33%-50%	2.40		
	>50%	2.65		
1.2 Contracted Load More than 1000 kVA (Base voltage 11 kV) 3000 kVA (Base voltage 33 kV)	Up to 33%	2.20	Rs. 200/ kVA of the billable demand	Rs 250/kVA
	>33%-50%	2.40		
	>50%	2.65		

** Peak hour surcharge and off peak rebate shall be applicable as specified in Rate Schedule*

The revenue from MCG could not be estimated and at this stage and has, therefore, not been considered while determining the revenue of UPCL for 2008-09 and shall be considered during next truing up exercise. **The Petitioner is directed to keep monthly account of differential amount between Minimum Consumption Guarantee revenue and revenue from Energy Charges (MCG-EC) and submit the same to the Commission alongwith next tariff filing.**

8.6.9 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. 15/kW and has specified the uniform energy charge of Rs. 2.50/kWh considering the operational problems faced by the Licensee. However, this mixed load will only be applicable for connections with more than 60% domestic consumption.

Table 8.12: Tariff for Mixed Load

Sl. No.	Category	Existing		Proposed		Approved	
		Fixed Charges	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
		Rs./kW/ month	Rs./kWh	Rs./kW/ month	Rs./kWh	Rs./kW/ month	Rs./kWh
1	Above 60% and upto 70%	Nil	2.50	25	3.00	15	2.50
2	Above 70% and upto 80%		2.35				
3	Above 80% and upto 90%		2.20				
4	Above 90% and below 100%		2.05				
5	100%		1.95				

8.6.10 RTS-9: Railway Traction

As discussed in earlier, energy charges for Railway Traction has been arrived at by adding 20% surcharge towards continuous supply of power and 4% impact of ToD tariff on HT Industry Tariff applicable for load factor below 33%. Considering that Railways has very low load factor, the Demand Charges has been kept at same level as applicable to HT Industry consumers upto 1000 kVA though their contracted demand exceeds 1000 kVA.

Table 8.13: Tariff for Railway Traction

Sl. No.	Category	Existing		Proposed			Approved	
		Demand Charges	Energy Charges	Demand Charges	Energy Charges	Customer Service Charges	Demand Charges	Energy Charges
		Rs./kVA/ month	Rs./kVAh	Rs./kVA/ month	Rs./kVAh	Rs./ consumer/ month	Rs./kVA/ month	Rs./kVAh
1	Railway Traction	165	3.25	165	3.75	500	150	2.75

8.7 Revenue at Approved Tariffs

Based on the tariffs as approved above, the Commission has computed the projected revenue from each category for 2008-09. The summary of category-wise revenue at approved tariffs is given in following Table:

Table 8.14: Category-wise Revenue at Approved Tariffs for 2008-09

Category	Sales	Revenue
	MU	Rs Crore
Domestic	1305.06	278.59
Non Domestic	606.95	230.90
Public Lamps	46.79	14.00
Public Water Works	268.23	80.11
GIS	94.83	28.36
PTW	207.98	15.38
Industrial	2460.40	879.46
Railway Traction	11.50	5.61
Mixed Load	77.97	20.01
Sub-total	***5079.70***	***1552.42***
Efficiency Improvement	134.24	41.06
Total	**5213.94**	**1593.48**

The estimated revenue at approved tariffs for 2008-09 works out to Rs. 1593.48 Crore against the ARR of Rs. 1567.94 Crore leaving a surplus of Rs. 25.54 Crore. This surplus revenue has been allowed during 2008-09 to take care of the refund to be made by the Licensee to Steel Units and Railway Traction for the period April 2007 to February 2008 based on the re-determined tariffs approved by the Commission in this order. The actual impact of this refund would be trued up during the next year ARR.

9. Commission's Directives

The Commission in its previous orders had issued a number of specific directions to UPCL with an objective of attaining operational efficiency and streamlining the flow of information, which would be beneficial for the Sector and the Petitioner both in short and long term. These directions aim at creating a conducive environment for the Petitioner to provide good quality of electricity supply and service to the consumers of Uttarakhand at optimum costs.

This Section deals with the compliance status and Commission's views thereon as well as the summary of new directions (dealt in preceding Sections of this Order) for compliance and implementation by UPCL.

9.1 Compliance of Directives issued in Tariff Order for 2006-07

9.1.1 Fixed Assets Register

9.1.2 Direction

The Commission directed the Petitioner to prepare and maintain fixed assets register to clearly define assets in the classes specified in the Regulations alongwith their respective ages and to present correct picture of assets in the next filing.

9.1.3 Petitioner's Submissions

The Petitioner submitted that steps have been taken for preparation of detailed fixed asset registers, including identification, physical verification, valuation of all fixed assets; category-wise and location-wise as per the guidelines prescribed in the Companies Act, 1956.

UPCL has invited bids through competitive bidding for appointing the agency for preparation of Fixed Assets Register after making a detailed study of the activities and scope of this work being undertaken by distribution utilities in other States. The work of preparing the Fixed Asset Register will be awarded to the external agency shortly and the Petitioner would submit the Fixed Asset Register as and when the works gets completed.

The Commission has noted the progress made by the Petitioner and directs the Petitioner to submit the Fixed Assets Register within 6 months upon the date of this Order.

9.1.4 Roadmap to curb the wastage of electricity in Public Lamps Category (RTS-3)

9.1.5 Direction

The Commission directed the Petitioner to prepare a road map to curb the widespread wastage and pilferage of electricity in this category and submit a compliance report on the same to the Commission by September 30, 2006 with approval of its Board of Directors.

9.1.6 Petitioner's Submissions

The Petitioner submitted that it has targetted reduction of theft and pilferage of power through among others, vigilance and raid activities. Vigilance and raid teams have been created and put in place by the Petitioner and targets have been set for them to convert commercial losses into sales.**The Commission, however, notes that the Petitioner has not yet submitted any roadmap to curtain the widespread wastage and pilferage of electricity in this category and directs that Commission be apprised of the position in the first report to it within three months of this order.**

9.1.7 Time of Day Metering and Billing

9.1.8 Direction

The Commission directed the Petitioner that reading of all ToD meters shall be made by Meter Reading Instrument (MRI) and bills shall be raised accordingly.

9.1.9 Petitioner's Submissions

The Petitioner submitted that ToD metering for HT Industrial consumers have been completed. The Petitioner while proposing the revised ToD tariff for 2007-08 submitted that ToD meters will be read through Meter Reading Instrument (MRI) and bills will be raised based on meter reading only.

9.2 Compliance of Directives Issued in Tariff Order for 2003-04

9.2.1 Metering

9.2.2 Direction

The Commission directed the Petitioner to meter all the consumers and submit a detailed metering plan to the Commission by December 31, 2003 for metering of its consumers by March 31, 2005. The Commission also directed the Petitioner to energise new connections only with meters and to complete metering of all unmetered connections of Domestic, Commercial and Public Lighting categories in urban areas and those of Departmental Employees, State Tubewells, Public Institutions and Government bodies in all areas by December 31, 2003.

9.2.3 Petitioner's Submissions

The Petitioner has submitted that since its formation, it is putting best of its efforts to complete metering of all the consumers and the physical progress of metering achieved is being submitted regularly for kind information of the Commission. The Petitioner in its metering plan submitted to the Commission requested for extension of time for metering all consumers and in reply the Commission allowed time upto March 31, 2006 for metering of Domestic Rural and PTW connections. The Petitioner submitted that metering of Domestic (Rural) and PTW connections is under progress and efforts are being made for completing metering of the consumers. Metering of all other categories of consumers has been completed.

The Petitioner further submitted that it has been facing stiff resistance from the consumers, particularly from domestic (rural) and private tube-well consumer categories and unless the prohibitive tariff for unmetered rural domestic connections is introduced on the basis of load or normative high load factor consumption, thereby forcing such unmetered connections to co-operate for metering of their connections, 100% metering of the consumers in the rural domestic category may not be possible inspite of best of efforts on its part. The Petitioner, in its Petition, accordingly, proposed prohibitive tariffs for unmetered consumers

9.2.4 Meter Reading, Billing and Collection

9.2.5 Direction

In the Tariff Order for 2003-04, the Commission directed the Petitioner to review and suitably revise its Spot Billing System. The Commission also directed to carry out a study of the meter reading, billing and collection system and explore the ways of streamlining the same.

9.2.6 Petitioner's Submissions

The Petitioner has submitted that new practices in meter reading, bill distribution and collection facilities are under implementation. Process of online billing and Customer Relationship Management (CRM) system is under implementation in Kumaon Zone. Centralised Commercial Database Management Information System (MIS) is implemented at corporate office and integration to divisional MIS system is in progress. The process of consumer indexing and Geographical Information System (GIS) mapping in Roorkee and Dehradun urban circles has been completed and is under progress in Rudrapur and Haldwani Circles.

The Petitioner further submitted that development of Consumer Database on Consumer Indexing and Numbering (CIN) system to facilitate Energy Audit is in progress in Dehradun (Urban), Roorkee, Haldwani and Rudrapur Circles. There has been improvement in collection system through Post office, banks and camps.

9.2.7 Receivables Management

9.2.8 Direction

The Commission directed the Petitioner to carry out a detailed analysis of receivables and formulate a clear policy for treatment of recoverable arrears and also take steps to write them off.

9.2.9 Petitioner's Submissions

The Petitioner submitted that the analysis of receivables pending against Government consumers has already been completed and action has already been taken for waiver of late payment surcharge or writing off the surcharge amount. The analysis of Non-Government consumers is covered under the scope of system study work to evolve a broad policy guideline for receivable management.

The Petitioner, in order to facilitate speedy settlement of disputed electricity arrears in respect of industrial consumers, has constituted a Corporate Level Dispute Settlement Committee at its head office. This initiative is aimed at reducing the number of disputed and legal cases without affecting the rights of consumers to seek justice from appropriate courts/forums in the event of non-settlement. The Petitioner has highlighted that the consumers have already started taking benefit of this settlement mechanism.

9.2.10 Account Keeping

9.2.11 Direction

The Commission has directed the Petitioner to maintain its accounts and audit the same on regular basis.

9.2.12 Petitioner's Submissions

The Petitioner submitted that the accounts have been audited for 2001-02, 2002-03 and 2003-04. The accounts for the 2004-05 have already been audited but the report is awaited. For auditing of account for 2005-06, the appointment of auditors is pending from Comptroller and Auditor General (C&AG) of India.

9.2.13 Quality of Supply

9.2.14 Direction

The Commission directed the Petitioner to improve existing quality of supply considering different parameters like hours of supply, distribution transformer failure rate, interruption/frequency variation, consumer service quality, metering and billing procedures and complaint handling mechanism.

9.2.15 Petitioner's Submissions

The Petitioner submitted that the details with respect to above parameters for quality of supply have already been submitted to the Commission. The Petitioner has submitted the draft distribution code, complaint handling procedure, code of payment of bills, consumer right statement and other terms and conditions of supply have been submitted to the Commission for its approval. The supply code has already been notified by the Commission.

For the convenience of the consumers, the Petitioner has developed basic minimum facilities such as shed, sitting arrangement, drinking water, fans, toilets etc. These facilities have been provided in urban collection centres in Dehradun and other major towns.

9.2.16 Rural Electrification

9.2.17 Direction

The Commission directed the Petitioner to carry out rural electrification of villages without any additional financial burden.

9.2.18 Petitioner's Submissions

The Petitioner has submitted that it is in a process of carrying out rural electrification of villages under different financial assisted schemes of the Central / State Government. The Petitioner has submitted that fund of Rs. 643.83 Crore is likely to be available to it under Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY), in the form of 90% capital subsidy for electrification of total of 787 un-electrified villages, 682 de-electrified villages and 20,381 hamlets

During 2005-06, 304 un-electrified / de-electrified villages and 1099 hamlets were electrified by the Petitioner and during 2006-07, 581 un-electrified / de-electrified villages and 1989 hamlets were electrified. The Petitioner has set a target for 2007-08 for electrification of balance 534 un-electrified / de-electrified villages and 4,355 hamlets by March 31, 2008.

9.2.19 Database Management

9.2.20 Direction

The Commission directed the Petitioner to compile and submit the detailed format for collecting commercial information, category-wise for approval of the Commission.

9.2.21 Petitioner's Submissions

The Petitioner submitted that the details developed for collection of category-wise information have already been submitted to the Commission for consideration and approval.

9.2.22 Commercial and Technical losses

9.2.23 Direction

The Commission had directed the Petitioner to come up with a concrete plan for reduction of technical and commercial losses over the next five years indicating milestones for critical activities, in the form of targets and their date of completion, within 3 months of issuance of the Order.

9.2.24 Petitioner's Submissions

The Petitioner submitted that it has been assessing losses at all 33 kV and some 11 kV feeders. Energy audit of all independent feeders is also done. The analysis of energy losses at 11 kV and LT voltage at distribution transformer (DT) level through energy audit is under progress through consumer indexing and binder creation of the consumer database in Dehradun (Urban), Roorkee, Rudrapur and Haldwani Circles. The Petitioner has proposed to dedicate a team of officers at the corporate office to continuously analyse the outputs of the energy audit exercise. In order to reduce its non-technical losses, the Petitioner is taking a number of steps like regularisation of unauthorised connections/load, bringing un-ledgerised consumers to the billing fold, replacement of defective meters, ensuring accurate and complete meter reading and billing.

The Petitioner vide its letter no. 27/UPCL/UERC/B-5/C-4 dated March 14, 2008 has submitted that it has taken the following steps to reduce its system losses:

9.2.24.1 Energy Accounting/Audit

The Petitioner has submitted that all the 33 kV/11 kV feeders have been metered and metering of Distribution Transformers is in progress. Consumer Indexing and Geographical Information System (GIS) Mapping have been completed in Roorkee and Dehradun Circles and is in progress in Rudrapur Circle. Meter-reading of the 33 kV Feeder meters are being taken manually and losses at 33 kV feeders/voltage shall be assessed regularly for analysis.

9.2.24.2 Segregation of Agricultural Feeders

The Petitioner has submitted that 95 Agricultural Feeders have been identified and are envisaged to be segregated from Rural Feeders, largely in Roorkee & Rudrapur Circles and work is under progress as per budget provision.

9.2.24.3 Automatic Meter-reading (AMR)

The Petitioner has submitted that a project for automatic meter-reading and data-logging of Distribution Transformers and Feeders is being taken up for high value consumers in line with the directions of the Commission. Tendering process has been initiated for implementing AMR solutions in high value consumer meters as Pilot Project.

9.2.24.4 Prepaid / Smart Meters

The Petitioner has submitted that a Pilot Project for installation of pre-paid/smart meters (1000 Nos.) in Dehradun is envisaged for implementation. The use of pre-paid meters will improve billing and collection efficiency and will ensure consumer satisfaction by avoiding security deposit, bill payment, etc. and reduction of AT&C Losses.

9.2.24.5 Control of Energy Theft:

The Petitioner has submitted that in order to curb theft of energy it has taken the following measures:

- LT Conductors are being replaced by AB (Aerial Bunched) Conductor in theft prone areas
- Vigilance Raids are being conducted and cases are being registered u/s 126 and 135 of Electricity Act, 2003
- All new LT extensions for PTW consumers are envisaged through HV Distribution System / AB Conductors

9.2.24.6 Other Efficiency Improvement Measures:

The Petitioner has submitted that it has undertaken implementation of a Centralised high value consumer Billing & MIS at Corporate Level and integrated MIS at Divisional level. Implementation of Best Practices in Meter-reading, Bill Generation/distribution and Collection has also been undertaken. A Pilot Project for overall Revenue Improvement Action Plan is under implementation in Dehradun (Urban) Circle.

9.3 Compliance to Commission's Directives in Tariff Order for 2005-06

9.3.1 Power Availability

9.3.2 Direction

The Commission directed the Petitioner to explore the possibilities of increased central allocation, enhanced converge under banking arrangement and tapping of new sources to meet the uncovered demand.

9.3.3 Petitioner's Submissions

The Petitioner submitted that it had made banking arrangements with Punjab for 100 MW and Haryana for 75 MW. Moreover, power from new sources i.e. Dhauliganga (NHPC) and Hanumanganga (IPP) is available from 2005-06. The Petitioner is also exploring power availability from other hydro/thermal stations.

9.3.4 Employee Cost

9.3.5 Direction

The Commission directed the Petitioner to get a proper manpower requirement study done. This direction was reiterated by the Commission in the Order dated April 25, 2005 as a repetition to directions in Tariff Order for the 2003-04.

9.3.6 Petitioner's Submissions

The Petitioner submitted that it is presently undertaking a comprehensive manpower study through National Productivity Council (NPC) on organisation structure, human resources and the business process of its field units/offices as well as its Corporate Office in terms of their efficiency in

- Providing quality power supply to its consumers;
- Ensuring commercial efficiency and achieving corporate goal.

The Petitioner has submitted that the scope of the HR study also includes:

- Review of functions and activities of UPCL with respect to customers
- Responsibility description for the management team and modifications of the broad functional disciplines
- Benchmarking with two similar States.

The Commission directs the Petitioner to submit the Report on manpower study being undertaken by NPC within six months from the date of this Order.

9.3.7 Contribution towards Pension and Gratuity

9.3.8 Direction

The Commission has directed the Petitioner to get the actuarial calculation updated since considerable time has elapsed after division of staff between UPPCL and UPCL.

9.3.9 Petitioner's Submissions

The Petitioner had submitted that it is in process of getting the revised actuarial valuation done through a certified actuary.

9.3.10 Issues pending for settlement with Uttar Pradesh

9.3.11 Direction

The Commission had directed the Petitioner to settle all its claims with UPPCL, UP trust and UP government before releasing any further payments to any of them.

9.3.12 Petitioner's Submissions

The Petitioner submitted no payment has been released to UPPCL, UP Government or UP Trust. The Petitioner and Government of Uttarakhand is in process of restructuring the liabilities and equity structure of the Petitioner to resolve the pending issues of liabilities and loans arising from Transfer Scheme.

9.3.13 Introduction of loss based surcharge

9.3.14 Direction

The Commission had directed the Petitioner to build up proper and reliable division-wise data on energy sales.

9.3.15 Petitioner's Submissions

The Petitioner has submitted that it has been maintaining monthly energy data i.e. input, billing and distribution loss for each of its Revenue division.

9.3.16 Other Directives

9.3.17 Direction

The Commission had permitted the Petitioner to set aside Rs. 5.00 crore in a separate bank account for meeting the directives on improvement of consumer services. The Commission has directed the Petitioner to come up with proposed methodology for improvement in billing and collection and other consumer services. Moreover, the Commission has also directed the Petitioner to deposit Rs. 127.10 crore to employees GPF Trust as transitional arrangement pending transfer of share of GPF money from UPPSET.

9.3.18 Petitioner's Submissions

The Petitioner has submitted that it has set aside Rs. 5 crore in a separate bank account for utilizing the same for improving consumer services, billing and collection. Moreover, the Petitioner has also transferred an amount of Rs. 39.75 crore provisionally to facilitate GPF settlement of retired and transferred employees.

9.4 Commission's view

While the Commission is not taking any view on compliance of each directive, the Commission feels that the status reported by the Petitioner shows marginal movement towards the desired objectives of these directives. Still a lot needs to be done with due concerted efforts. The Commission is conscious of the fact that improvement in each are a of licensee's functions, e.g. metering, billing, collection, loss reduction etc., would be gradual. However, the Petitioner shall not be complacent and vigorous drive for improvement shall continue without fail. The Petitioner shall prioritise these works and set realistic targets and monitor the same on continuous basis

9.5 New Directives

The Commission has set certain new directions in the Tariff order for 2007-08 and 2008-09, as detailed in the respective sections. They are summarized here below:

9.5.1 Misuse of Electricity by Staff

The Commission directs the Petitioner to take appropriate steps on the issues raised by the respondents to avoid the misuse of electricity by UPCL staff. (Ref Section 3.2.8.3)

9.5.2 Disconnection Notice and unexpected Demand Raised

The Commission directs the Petitioner to take appropriate action for implementing the suggestions of the respondents on these aspects. (Ref Section 3.2.8.17)

9.5.3 Consumer Servicing

The suggestions of respondents are well accepted and the Commission directs the Petitioner to take appropriate action for implementing the suggestions of the respondents to improve the services to its consumers. (Ref 3.2.8.18)

9.5.4 Sales forecast, Energy Losses and Power Purchase Requirement

The Commission directs the Petitioner to correct the billing discrepancies and work out the actual distribution losses in the system and submit the same to the Commission within 3 months time.

The Commission also directs the Petitioner to reduce the distribution losses by a modest target of 2% in 2008-09 and, hence, specifies the distribution loss target of 22.32% for 2008-09. (Ref Section 4.4.1)

9.5.5 Capitalisation of new assets

The Petitioner is directed to submit certificates, in prescribed formats forwarded to Petitioner earlier, that such clearances had been obtained along with next filing. (Ref Section 4.4)

9.5.6 LT Consumers

The Commission hereby directs the Petitioner to raise only computerized bills for all categories of consumers w.e.f. 01.07.2008, whereafter no bill shall be raised manually. (Ref Section 5.3.2)

9.5.7 Low Load Factor

Petitioner is directed to undertake testing of meters of all such consumers in non-domestic and LT Industrial categories whose monthly load factor is less than 1% within six months from issue of this order and report compliance along with results of such testing by the following month end. (Ref. Section 5.4)

9.5.8 Domestic Category (RTS-1)

The Commission expresses its displeasure over slow progress of releasing new connections under RGVVY scheme and directs the Petitioner to accelerate the process. (Ref Section 5.4.1)

9.5.9 Mounting Arrears

The Commission, hereby, directs the Petitioner to recover its legitimate arrears (exceeding Rs. 1 Lakh) from such consumers within six months from issue of this order and report compliance.

The Commission directs the Petitioner to also put in place an adequate monitoring mechanism for implementation of proposed action plan at higher echelon of UPCL management and same shall be over-seen at the level of Secretary (Energy) who is also Chairman of the Petitioner. Further, periodical reports–quarterly basis, on its implementation both quantitatively and qualitatively, shall be submitted by the Petitioner to the Commission. (Ref Section 5.5)

9.5.10 Provision for Bad & Doubtful Debts

The Commission is concerned about the ever rising level of receivables and directs the Petitioner to vigorously work for recovery of the same and write-off individually identified bad debts by implementing this Policy and submit a report on the same by 31.12.2008. (Ref Section 6.3.5)

9.5.11 Treatment of Interest during Construction (IDC)

The Petitioner is directed to ensure that any scheme, which is envisaged now onwards, should include the component of IDC in its financing mix. The Petitioner is also advised to allocate this IDC to its CWIP so that it gets transferred to Fixed Assets and the Petitioner is able to claim depreciation on this amount. (Ref Section 6.2.8)

9.5.12 O&M Expenses

The Petitioner is hereby directed to control its A&G expenses for future as excessive claims on this head would not be allowed. (Ref Section 6.3.2)

9.5.13 Fixed Charges and Minimum charges

The licensee is directed to check the reasons, including by testing of meters, for extremely low load factors for high value consumers in these categories. (Ref Section 8.3.1)

9.5.14 kVAh Based Tariff for Non Domestic and LT Industry Categories

The Petitioner is hereby directed to ensure installation of appropriate meters for all such consumers within 6 months. The Commission hereby also directs the Petitioner to maintain the data of such consumers both in kWh and kVAh after installation of such meters. (Ref Section 8.4.1)

9.5.15 Basis of Fixed Charges for LT Industries and Non-Domestic Consumers

In the light of above the Commission has decided that all such contracted loads shall be reckoned in kW only by using the conversion factor as 1 BHP= 0.746 kW and directs Petitioner to convert contracted load of all LT Industrial consumers in kW using above mentioned conversion factor.

The Commission hereby directs the Petitioner to maintain the data of MDI of such consumers both in kW and kVA to take a decision on kVA based fixed charges in the next tariff exercise. (Ref Section 8.4.2)

9.5.16 Re-determination of Tariff for Railway Traction

The Petitioner is directed to implement the above re-determined tariffs as per directions of Hon'ble ATE. (Ref Section 8.6.2)

9.5.17 Accounting of Revenue from Minimum Consumption Guarantee

The Petitioner is directed to keep monthly account of differential amount between Minimum Consumption Guarantee revenue and revenue from Energy Charges (MCG-EC) and submit the same to the Commission alongwith next tariff filing. (Ref Section 8.7.1)

9.5.18 Fixed Assets Register

The Commission has noted the progress made by the Petitioner and directs the Petitioner to submit the Fixed Assets Register within 6 months upon the date of this Order. (Ref Section 9.1.1)

9.5.19 Employee Cost

The Commission directs the Petitioner to submit the Report on manpower study being undertaken by NPC within six months from the date of this Order. (Ref Section 9.3.2)

9.5.20 Roadmap to curb theft of electricity

The Commission, however, notes that the Petitioner has not yet submitted any roadmap to restrain the widespread wastage and pilferage of electricity in this category and directs that Commission be apprised of the position in the first report to it within three months of this order. (Ref Section 9.2.6)

9.6 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 annexed hereto as **Annexure 1**. These Tariffs will be effective from 01.03.2008.

(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 further Order of 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.

Sd/-	Sd/-
(V.K. Khanna)	**(V.J. Talwar)**
Member	**Chairman**

10. Annexures

10.1 Annexure 1: Rate Schedule Effective from 01.03.2008

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) Consumers having motive loads of more than 5 BHP shall install Shunt Capacitor of appropriate rating and conforming to BIS specification.

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 without correct meter. 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.

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 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)	50 kWh/kW/month
Non-domestic (Urban)	150 kWh/kW/month
Non-domestic (Rural)	75 kWh/kW/month
Private Tube Wells	70 kWh/BHP/month
Industry	
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.

6. 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	1st April 2008	
	Amount Payable	
On or Before 16th April 2008	**After** 16th April 2008	**After** 1st May 2008
Rs. 100/-	**Rs. 101.25**	**Rs. 102.50**

7. Solar Water Heater rebate

If consumer installs and uses solar water heating system, rebate of Rs. 75/- 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.

8. Rebate/surcharge for availing supply at voltage higher/lower than base voltage

(i) For consumers having contracted load upto 100 BHP/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. Similarly, supply above 11 kV shall be eligible for rebate of 7.5%

on the Rate of Charge.

(ii) For consumers having contracted load above 100 BHP/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 100 BHP/75 kW/88 kVA and receiving supply above 66 kV and upto 132 kV, shall receive a rebate of 2.5% on the Rate of charge.

(iv) For consumers having contracted load above 100 BHP/75 kW/88 kVA and receiving supply above 132 kV, shall receive a rebate of 5% on the Rate of charge.

9. Low Power Factor Surcharge (not applicable to Domestic, PTW and 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 & a surcharge of 10% of current energy charges will be levied for having power factor below 0.80

10. 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.

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. 15/kW
Fixed Charges for contracted load = 30 x 15=Rs. 450
Fixed Charges for excess load = 13x (2 x 15) =Rs. 390
Total Fixed Charges = 450+390= Rs. 840

(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. 200 / kVA
Demand Charges for contracted demand =2500 x 200=Rs. 500000
Demand Charges for excess demand = 300x (2 x 200) =Rs. 120000
Total Demand Charges = 500000+120000= Rs. 620000

11. 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 / Sactioned 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.

12. 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:

Residential premises for light, fan, power and other domestic purposes including single point bulk supply above 50 kW for residential colonies/townships, residential multi-storied buildings where energy is exclusively used for such purpose.

(This rate schedule shall also be applicable to consumers having contracted load upto 2 kW and consumption less than 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. 120/connection/month
2) Other Areas	Rs. 150/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*

(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	Nil	Rs. 1.50/kWh
1.2) Other domestic consumers	Rs. 15/connection/month	Rs. 2.00/ kWh
2) Single Point Bulk Supply	Rs. 15/kW/month	Rs. 1.90/kWh

RTS-1A: Snowbound

1. 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.

2. Rate of Charge Supply

<table>
<tr><th>Description</th><th>Fixed Charges</th><th>Energy charges</th></tr>
<tr><td>1) Domestic</td><td>Nil</td><td rowspan="2">Rs. 1.50/kWh</td></tr>
<tr><td>2) Non-domestic upto 1 kW</td><td>Nil</td></tr>
<tr><td>3) Non-domestic more than 1 & upto 4 kW</td><td>Nil</td><td>Rs. 2.00/kWh</td></tr>
<tr><td>4) Non-Doemstic more than 4 kW</td><td>Nil</td><td>Rs. 3.00/kWh</td></tr>
</table>

3. All other conditions of this Schedule shall be same as those in RTS-1.

RTS-2: Non-Domestic

1. Applicability

(i) Educational Institutions, Hospitals and Charitable Institutions.

(ii) Other Non Domestic / Commercial Users

2. Rate of Charge

2.1 Metered Category

Description	Fixed Charges	Energy charges
1. Educational Institutions, Hospitals and Charitable Institutions	Rs. 15/kW/Month	Rs. 3.00/kWh
2. Other Non Domestic /Commercial Users		
(i) Upto 25 kW	Rs. 15/kW/Month	Rs. 3.50 /kWh
(ii) Above 25 kW	Rs. 15/kW/Month	Rs. 3.50 /kVAh

(i) ToD Meters installed for consumers having sanctioned load of 25 kW and above shall be read by Meter Reading Instrument (MRI) only and full load survey report shall be downloaded for the purpose of complete analysis.

(ii) All consumers above 25 kW shall necessarily have ToD Meters.

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. 15 / kW	Rs. 2.95 / kWh.
Unmetered Rural	*Rs. 100 / 100 W lamp or part thereof	Nil

** For every 50 W or part thereof increase over and above 100W lamp additional Rs. 50/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.

2. Rate of charge

Category	Fixed Charges Rs./BHP/Month	Energy Charges Rs./kWh
Unmetered	*105	Nil
Metered	Nil	0.70

**Plus Rs. 20/connection/month for lighting load of not more than two lamps.*

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) with 15 days notice period. In case consumer fails to make payment within due date, a surcharge @1.25% per month for the period (months or part thereof) shall be payable.

RTS-5: Government Irrigation System

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. Up to 75 kW	Rs. 15/kW	Rs. 2.95/kWh
2. More than 75 kW	Rs. 15/kVA	Rs. 2.50/kVAh

RTS-6: Public Water Works

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.

2. Rate of charge

Fixed Charges	Energy Charges
Rs. 15 / kW	Rs. 2.95 / kWh

RTS-7: LT and HT Industry

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 600 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.

Description	Energy Charge		Fixed /Demand Charge per month	Minimum Consumption Guarantee (MCG) Charge**
1. LT Industry having contracted load upto 75kW (100 BHP)				
1.1 Contracted load up to 25 kW	Rs. 2.75/kWh		Rs. 70/ kW of contracted load	Rs. 200/kW
1.2 Contracted load more than 25 kW	Rs. 2.50/kVAh			
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%	2.20	Rs. 150/kVA of the billable demand*	Rs. 250/kVA
	Above 33% and upto 50%	2.40		
	Above 50%	2.65		
2.2 Contracted Load More than 1000 kVA	Upto 33%	2.20	Rs. 200/kVA of the billable demand*	Rs.250/kVA
	Above 33% and upto 50%	2.40		
	Above 50%	2.65		

** Billable demand shall be the actual maximum demand or 80 % of the contracted load whichever is higher.*

*** This Charge shall be in addition to fixed/demand charge and shall levied if Energy Charge is less than MCG*

#For tariff purposes Load Factor (%) would be deemed to be =

$$\frac{\text{Consumption during the billing period}}{\text{Maximum Demand or Contracted Demand whichever is less x No. of hours in the billing period}} \times 100$$

3. Time of Day Tariff

(i) 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.

(ii) ToD meters shall be read by Meter Reading Instrument (MRI) only with full load survey and bills shall be raised as per ToD rate of charge.

(iii) 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

(iv) The rates of ToD rebate/surcharge for energy charges 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
(Rebate)/Surcharge	25%	0%	25%	-5%

Accordingly, ToD Rate of Energy Charges shall be as under:

For LT Industry

Rate of Charge during		
Normal Hours	**Peak Hours**	**Off-peak Hours**
Rs 2.50/kVAh	Rs 3.13/kVAh	Rs 2.38/kVAh

For HT Industry

Load Factor*	Rate Charge during		
	Normal Hours	**Peak Hours**	**Off-peak Hours**
Less than 33 %	Rs 2.20/kVAh	Rs 2.75/kVAh	Rs 2.10/kVAh
Above 33% and upto 50 %	Rs 2.40/kVAh	Rs 3.00/kVAh	Rs 2.28/kVAh
Above 50%	RS 2.65/kVAh	Rs 3.30/kVAh	Rs 2.50/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.

4.1 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, and rice mill 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. Restriction in usage

(i) For consumers opting for supply during restricted hours (Continuous) - 20% increase in the Energy charge as given in Rate of charge. Demand charge and other charges remain same as per rate of charge given above.

(ii) For consumers not opting for supply during restricted hours (Non continuous) - Energy charge, Demand charge and other charges as per rate of charge given above.

(iii) Peak Hour Violation Penalty shall get attracted. Consumers who do not opt for supply during Peak hours/Restricted hours (Non Continuous supply) shall not be allowed to use power in excess of 15% of their contracted demand. Any violation detected shall attract a penalty of Rs. 50 per kVA per day of the contracted demand, for the number of days of such violation. For the month of default, the consumer shall be billed at the rates specified at (i) above (for consumers opting for supply during restricted hours (Continuous)).

(iv) Accordingly the new energy charges in the rate of charge would be

Industries with Load Factor*	Energy Charges during		
	Normal hours	Peak hours	Off Peak Hours
Up to 33%	Rs. 2.64/kVAh	Rs. 3.30/kVAh	Rs. 2.50/kVAh
Above 33% and upto 50%	Rs. 2.88/kVAh	Rs. 3.60/kVAh	Rs. 2.74/kVAh
Above 50%	Rs. 3.18/kVAh	Rs. 3.98/kVAh	Rs. 3.02/kVAh

** Load Factor shall be as defined in Clause 3 above*

(v) Industries who have already opted for continuous power will continue to pay 20% higher tariff as mentioned above. Industries who opt for continuous power after implementation of this order shall be levied above mentioned 20% higher tariff from 1st April 2008 or from the date of connection whichever is later. Consumers shall be allowed to change the option only once in the year subject to the condition that 20% higher charge shall be applicable for entire financial year irrespective of actual period of continuous supply.

(vi) Bill for Penalty under clause (iii) above shall be verified and signed by an officer of UPCL not below rank of Executive Director.

(vii) Licensee shall also provide complete MRI load survey report along with the penalty bill.

(viii) The conditions under “restriction in usage” stipulated above are provisional and subject to revision, if required, by the Commission at a later date as detailed in Section 8.

RTS 8: Mixed Load

1. Applicability

This schedule applies to single point bulk supply connection of more than 50 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, a deemed licesee.

2. Rate of Charge

The following rates shall apply to consumers of this category

Fixed Charges	Energy Charges
Rs. 15 / kW	Rs. 2.50 / 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 10 of General Conditions of Supply.

RTS 9: Railway Traction

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:

Demand Charges	Energy Charges
Rs./kVA/month	Rs./ kVAh
150/-	Rs. 2.75

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. 750 per day
(2) Temporary shops set up during festivals / melas and having load upto 2 kW	Rs. 40 per day
(3) Other Temporary shops / Jhuggi / Jhopris for load upto 1 kW	
3.1) Rural	Rs. 75 / month / connection
3.2) Urban	Rs. 150 / 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.

(iii) This schedule shall also apply for drawl of power by captive generating plants connected to grid, but not a consumer of the licensee, normally injecting power into the grid. However, grid connected captives, which are consumers of licensee, shall be billed for drawl of power under the appropriate rate schedule.

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.

10.2 Annexure 2: Schedule of Miscellaneous Charges

Sl. No	Nature of Charges	Unit	Rates (RS.)
1	**Checking and Testing of Meters**		
	a. Single Phase Meters	Per Meter	35.00
	b. Three Phase Meters	Per Meter	40.00
	c. Recording Type Watt-hour Meters	Per Meter	170.00
	d. Maximum Demand Indicator	Per Meter	335.00
	e. Tri-vector Meters	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	**Subsequent testing and installation other than initial testing**	Per Meter	80.00
3	**Disconnection and Reconnection of supply for any reason, whatsoever, (for any disconnection or reconnection) the charge will be 50%**		
	a. Consumer having load above 100 BHP / 75 kW	Per Job	400.00
	b. Power consumers upto 100 BHP / 75 kW	Per Job	300.00
	c. All other categories of consumers	Per Job	200.00
4	**Replacement of Meters**		
	a. By higher capacity Meter	Per Job	25.00
	b. Installation of Meter and its subsequent removal in case of Temporary Connections	Per Job	50.00
	c. Changing of position of Meter Board at the consumer's request	Per Job	75.00
5	Ser vice of Wireman :		
	a. Replacement of Fuse	Per Job	20.00
	b. Inserting and Removal of Fuse in respect of night loads.	Per Job	15.00
	c. Hiring of services by the consumer during temporary supply or otherwise.	Per wireman / Day of 6hours	50.00
	d. If inspector is obstructed / prevented by the consumer deliberately or otherwise	Per Trip	150.00
6	Resealing of Meters on account of any reason in addition to other charges payable in terms of other provision of charging of penalties, etc	Per Meter	55.00
7	Checking of Capacitors (other than initial checking) on consumer's request:		
	a. At 400 V / 230 V	Per Job	100.00
	b. At 11 kV and above	Per Job	200.00

10.3 Annexure 3 (a): Public Notice on UPCL's Proposals

UTTARAKHAND POWER CORPORATION LTD.

Urja Bhawan, Kanwali Road, Dehradun-248001 Phone: 0135-2763870 Fax: 0135-2763839

PUBLIC NOTICE

UPCL'S PETITION FOR APPROVAL OF ARR AND PROPOSED ELECTRICITY TARIFFS FOR 2007-08

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 financial year 2007-08 and has sought a revision of retail Tariff to be charged from consumers of electricity in the State. The summary of the ARR, Revenue Gap, past losses and the tariff proposal for the year is given below:

2. Annual Revenue Requirement and Revenue Gap: On the basis of the revised estimates of the ARR for FY 2006-07 and projections for the FY 2007-08 the summary of ARR and the revenue Gap is given in following Table:

(Figures in Rs Crore)

S No	Particulars	FY 2006-07 Approved by Commission	FY 2006-07 Actual Estimated by UPCL	FY 2007-08 (Projected by UPCL)
	Expenditure			
1	Power Purchase Expenses	1,559.55	785.7	1102.91
2	Increase in UJVNL power purchase costs due to income tax payable	0.00	0.00	61.14
3	Transmission Charges	67.11	84.99	90.62
4	O&M expenses	159.88	172.01	215.77
5	Interest charges	19.01	39.23	39.93
6	Depreciation	24.27	103.91	117.06
7	Interest on Working Capital	16.25	9.74	11.19
	Gross Expenditure	**1,846.07**	**1,195.57**	**1,638.62**
1	Less: Interest Capitalized	0.00	1.59	1.20
	Other Expenses			
1	Provision for Bad and Doubtful Debts	0.00	22.98	28.92
2	Return on Equity	0.00	0.70	0.70
3	Adjustment for reduction of Steel Units tariffs	0.00	0.00	35.00
A	**Net Expenditure**	1,846.07	1,217.66	1,702.04
B.	Less: Non-tariff income	13.32	8.03	3.18
	Less: Previous Year's adjustments	118.95	0.00	0.00
C.	**Annual Revenue Requirement (A-B)**	**1,713.80**	**1,209.64**	**1,698.86**
D	Revenues from Existing/Approved Tariffs	1722.25	919.03	1,156.62
E	**Revenue Surplus/(Gap) ((D) - (C))**	**8.45**	**-290.60**	**-542.24**

3. **Past Losses**

UPCL has submitted the audited account for FY 05 and management accounts for FY 06 separately to the Hon'ble Commission. The audited accounts for the year ending 31st March 2005 show accumulated loss of Rs.262.48 Crores. The provisional accounts for the year ending 31st March, 2006 (under audit) show an accumulated loss of Rs 477.76 Crores. UPCL has requested the Honourable Commission to recognise its financial losses for the past years, based on the audited accounts submitted and allow for their inclusion as a part of the Regulatory Asset.

4. **Current Gap**

The total revenue gap estimated for FY 2007-08 is Rs 542.24 Crore. Out of this, UPCL in its Petition has proposed a tariff increase to cover a gap of around Rs. 301 Crore and to carry forward the balance gap as a Regulatory Asset.

5. **Summary of Tariff Proposal:**

The following table shows the summary of the existing and the proposed Tariff.

Table: Summary of Existing and Proposed Tariff Schedule

Category	Demand / Fixed Charges (Rs. / Month)		Energy Charges (Rs.)		Monthly Minimum Fixed Charges/Customer Service Charges (Rs.)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
Domestic						
Domestic Metered						
Below Poverty Line including Kutir Jyoti having load upto 1kW (consumption upto 30 units)	NIL	NIL	1.50/kWh	1.50/kWh	NIL	NIL
$ Other Domestic Consumers	NIL	NIL			NIL	15/kW
0 Unit upto 100 Units			2.00/kWh	2.20/kWh		
Above 100 Units upto 200 Units			2.00/kWh	2.50/kWh		
All Units exceeding 200 Units			2.00/kWh	3.00/kWh		
Domestic Unmetered	120/connection	500/kW	NIL	NIL	NIL	NIL
Single Point Bulk Supply	NIL	NIL	1.95/kWh	2.50/kWh	NIL	15/kW
Snow Bound:						
Domestic	NIL	NIL	1.50/kWh	1.50/kWh	NIL	10/kW
Non-Domestic upto 1 kW	NIL	NIL	1.50/kWh	2.00/kWh	NIL	10/kW
$ Non-Domestic						
1. Registered Charitable Organizations functioning only for Charitable purposes						
1.a. With ToD Meters & ToD rebate/surcharge	NIL	NIL	3.00/kWh	2.40/kWh	NIL	50/kW
1.b. Without ToD Meters						
(I) Upto 4 kW	NIL	NIL	3.00/kWh	2.90/kWh	NIL	50/kW
(II) Above 4 kW & upto 25 kW	NIL	NIL	3.50/kWh	2.90/kWh	NIL	50/kW
2. Educational Institutions, Hospitals, Other Charitable institutions						
2.a. With ToD Meters & ToD rebate/surcharge						
(i) 0 Unit upto 100 Units	NIL	NIL	3.00/kWh	3.30/kWh	NIL	50/kW
(ii) Above 100 Units upto 200 Units	NIL	NIL	3.00/kWh	3.50/kWh	NIL	50/kW
(iii) All Units exceeding 200 Units	NIL	NIL	3.00/kWh	4.00/kWh	NIL	50/kW
2.b. Without ToD Meters						
(I) Upto 4 kW						
(i) 0 Unit upto 100 Units	NIL	NIL	3.00/kWh	4.30/kWh	NIL	50/kW
(ii) Above 100 Units upto 200 Units	NIL	NIL	3.00/kWh	4.50/kWh	NIL	50/kW
(iii) All Units exceeding 200 Units	NIL	NIL	3.00/kWh	5.00/kWh	NIL	50/kW
(II) Above 4 kW & upto 25 kW						
(i) 0 Unit upto 100 Units	NIL	NIL	3.50/kWh	4.30/kWh	NIL	50/kW
(ii) Above 100 Units upto 200 Units	NIL	NIL	3.50/kWh	4.50/kWh	NIL	50/kW
(iii) All Units exceeding 200 Units	NIL	NIL	3.50/kWh	5.00/kWh	NIL	50/kW
3. Other Non-Domestic/Commercial Users						
3.a. With ToD Meters & ToD rebate/surcharge						
(i) 0 Unit upto 100 Units	NIL	NIL	3.00/kWh	3.30/kWh	NIL	50/kW
(ii) Above 100 Units upto 200 Units	NIL	NIL	3.00/kWh	3.50/kWh	NIL	50/kW
(iii) All Units exceeding 200 Units	NIL	NIL	3.00/kWh	4.00/kWh	NIL	50/kW
3.b. Without ToD Meters and upto 25 kW						
(i) 0 Unit upto 100 Units	NIL	NIL	3.50/kWh	4.30/kWh	NIL	50/kW
(ii) Above 100 Units upto 200 Units	NIL	NIL	3.50/kWh	4.50/kWh	NIL	50/kW
(iii) All Units exceeding 200 Units	NIL	NIL	3.50/kWh	5.00/kWh	NIL	50/kW

………….. ***Continued***

4. Unmetered (rural)	185/connection	N.A.	NIL	N.A.	NIL	N.A.
$ Public Lamps						
Maintenance Charge	10/light point	10/light point				
Metered	NIL	NIL	2.50/kWh	3.00/kWh	NIL	15/kW
Unmetered	100/100W lamp	N.A.	NIL	N.A.	NIL	N.A.
Private Tube wells / Pumping Sets						
Metered	NIL	NIL	0.70/kWh	1.20/kWh	NIL	15/BHP
Unmetered (Rural)	105/ BHP (plus Rs. 20 for lighting load not more than 2 lamps)	175/ BHP (plus Rs. 20 for lighting load not more than 2 lamps)	NIL	NIL	NIL	15/BHP
Unmetered (Urban)	126/ BHP (plus Rs. 20 for lighting load not more than 2 lamps)	200/ BHP (plus Rs. 20 for lighting load not more than 2 lamps)	NIL	NIL	NIL	15/BHP
Note: If unmetered supply continues beyond 4 months, the Fixed Energy Charges for unmetered supply are proposed to be increased to Rs. 350/BHP/Month and Rs.400/ BHP/Month in case of Rural and Urban areas respectively.						
$ Government Irrigation System						
upto 100 BHP (LT)	NIL	NIL	2.50/kWh	3.00/kWh	NIL	25/BHP
Above 100 BHP (HT)	NIL	NIL	2.15/kV Ah	2.75/kV Ah	NIL	25/BHP
$ Public Water Works	NIL	NIL	2.25/kWh	2.75/kWh	NIL	15/kW
LT & HT Industry (with ToD surcharge/rebate above 25 BHP) #						
$ LT Industries (upto 100BHP)	45/BHP	100/BHP	2.45/kWh	2.90/kWh	NIL	50/ connection
$ HT Industries Other than Steel Units *	125/kVA	250/kVA	1.90/kV Ah	2.35/kV Ah	NIL	250/ connection
HT Steel Units *	350/kVA	400/kVA	2.35/kV Ah	2.75/kV Ah	NIL	500/ connection
$ Mixed Load						
> 60% & = < 70%	NIL	NIL	2.50/kWh	3.00/kWh	NIL	25/kW
> 70% & = < 80%	NIL	NIL	2.35/kWh	3.00/kWh	NIL	
> 80% & = < 90%	NIL	NIL	2.20/kWh	3.00/kWh	NIL	
> 90% & < 100%	NIL	NIL	2.05/kWh	3.00/kWh	NIL	
Railway Traction *	165/kVA	165/kVA	3.25/kV Ah	3.50/kV Ah	NIL	500/ connection
Temporary Supply			NIL	NIL	NIL	NIL
(1) For illumination / public address/ceremonies for load upto 15 kW (per day)	750	1000				
(2) Temporary shops set up during festivals/melas having load upto 2 kW	40	100				
(3) Other temporary shops/Jhuggi/Jhopris for load upto 1 kW						
-Rural (per month per connection)	75	600				
-Urban (per month per connection)	150	600				
(4) Other metered	Appropriate Rate Schedule + 25%					

$ Existing tariffs shown for these categories of consumers is the tariff being charged after moderating their tariffs by about 10% on account of refund of interest on surplus determined by the Commission in last tariff order. The matter related to surplus of UPCL is presently sub-judice.
* Fixed / Demand charges are based on billable demand, which presently is actual maximum demand or 75% of the contracted load, whichever is higher. UPCL has proposed to modify this definition to read as actual maximum demand or 80% of the contracted load, whichever is higher.
# UPCL's proposal for load shedding:
"In case, imposition of load shedding arising due to shortage of electricity on consumers in industrial categories during certain hours in the day, then the following conditions, rates and charges shall start to be applicable.
i) For industrial consumers opting for continuous supply through out the year without load shedding - 50% increase in the Energy Charge throughout the year as given in Rate of Charge in the respective sub-category. The consumer can only be allowed to change option once in a year.
ii) For industrial consumers, who do not opt for continuous supply through out the year without load shedding, but are connected on mixed feeders (which are not subject to load shedding during shortage period), if found using electricity during load shedding period shall be liable to pay Load shedding Violation Penalty for the number of days of such violation as follows:

(a) LT Industry Consumer : Rs. 100 per BHP per day of the contracted load
(b) HT Industry Consumer : Rs. 250 per KVA per day of the contracted load
(c) HT Steel Units Consumer : Rs. 400 per KVA per day of the contracted load

iii) For the month of load shedding violation, the consumer in Para - (ii) above shall be billed at the rates specified at Para (i) above."

6. Non-domestic consumers above 25 kW and industrial consumers above 25 BHP are necessarily required to have TOD meters and TOD rebate/surcharge. The existing and proposed rates of ToD rebate / surcharge for energy charges, in respect of non-domestic consumers with TOD meters, LT (Above 25 BHP) & HT Industry and Railway Traction categories are as follows:

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
Surcharge/ (Rebate)				
Existing	25%	0%	25%	-5%
Proposed	100%	0%	100%	0%

7. Responses/suggestions, if any, are sought from all consumers and other stakeholders on the above proposals. Responses may be sent to the Secretary, Uttarakhand Electricity Regulatory Commission, Ist Floor, Institution of Engineers (I), (Adjacent to 132-KV Sub-station, Majra), Saharanpur Road, Near ISBT, Dehradun by 17.12.2007. The responses may be sent personally or by post or through **e-mail at uttaranchalerc@rediffmail.com or secretaryuerc@indiatimes.com.**
8. Detailed proposals as submitted by UPCL can be seen free of cost on any working day at Commission's office or at offices of General Manager (Commercial) at Urja Bhawan, Kanwali Road, Dehradun/General Manager (Distribution), Garhwal Zone, UPCL, 120-Haridwar Road/General Manager (Distribution), Kumaon Zone, UPCL, Kathgodam, Haldwani. Relevant extracts can also be obtained from the above mentioned offices of UPCL.
9. The proposals filed by the petitioner are also available at the website of the Commission (**www.uerc.in**) and at the Petitioner's website (**www.upcl.org**).

Managing Director

SAVE ELECTRICITY IN THE INTEREST OF NATION

10.4 Annexure 3 (b): Public Notice for Suo-moto Proceedings

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Institution of Engineers (I) Building, 1st Floor, Near ISBT, Majra, Dehradun
TELE FAX- 2641119 Website www.uerc.in E-mail- uerc@indiatimes.com

PUBLIC NOTICE

SUO-MOTO PROCEEDINGS FOR DETERMINATION OF UPCL'S ARR AND RETAIL ELECTRICITY TARIFF FOR 2008-09

In terms of Regulation 56 (4) of UERC (Conduct of Business) Regulations, 2004, every licensee is required to file its Annual Revenue Requirement (ARR) and Tariff Proposals for ensuing financial year before 30th November of each year. However, the distribution licensee in the State, namely Uttarakhand Power Corporation Ltd. (UPCL), failed to file its ARR for the 2008-09 by the stipulated date. Even after extension of due date to 31st December 2007, no such proposals have been received by Commission. Infact, the proposals for 2007-08 were also inordinately delayed and their processing is presently underway. Considering that waiting further for submission of ARR for 2008-09 by the Licensee would amount to determining of tariff for 2007-08 now and again after a short span of 02 to 03 months for 2008-09. Frequent revision of tariff in short span would not only be irritating but give rise to the uncertainties in the mind of consumers and should be avoided.

In order to avoid any confusion and uncertainty, the Commission has decided to initiate suo-moto proceedings for determination of ARR and Retail Tariffs for electricity consumers for 2008-09 on the basis of information filed by licensee for 2007-08, which in most cases has been updated upto September 2007. In any case even if the licensee had filed its proposals for 2008-09 within time there would not have been any additional/ substantial inputs. Hence the Commission has also decided to merge the suo-moto proceedings for 2008-09 with the current proceedings for 2007-08.

Public Notice inviting comments on Petition filed for 2007-08 was issued by UPCL earlier and public hearings on the same are scheduled to be held at different places in the State during this month. A summary of information filed by UPCL is presented below:

S. No.	Particulars	FY 2006-07				FY 2007-08		
		Approved by Commission	Estimated by UPCL in Original Petition	Actual		Projected by UPCL in Original Petition	Projected by UPCL (revised)	Actual for six month - As submitted by UPCL subsequently
				As submitted by UPCL subsequently	As per Provisional Balance Sheet			
A	**Expenditure**							
1	Power Purchase Expenses	1,559.55	785.70	785.70	78 3.21	1102.91	1102.91	503.22
2	Increase in UJVNL power purchase costs due to income tax payable	0.00	0.00	0.00		61.14	61.14	-
3	Transmission Charges	67.11	84.99	84.99	84.12	90.62	92.62	41.39
4	O&M expenses	159.88	172.01	172.01	164.15	215.77	215.77	96.31
5	Interest charges	19.01	39.23	75.11	54.04	39.93	47.81	#23.91
6	Depreciation	24.27	103.91	45.46	105.45	117.06	55.84	*
7	Interest on Working Capital	16.25	9.74	9.74	-	11.19	11.19	–
B	**Gross Expenditure**	**1,846.07**	**1,195.57**	**1,173.01**	**1,190.97**	**1,638.62**	**1,587.28**	**640.92**
8	Less: Interest Capitalized	0.00	1.59	0.00	1.79	1.20		*
9	Less: Expenses Capitalized	0	0.00	0	11.72			*
C	**Other Expenses**	-	-	-	-	-	-	0
10	Provision for Bad and Doubtful Debts	0.00	22.98	22.98	44.53	28.92	28.92	*
11	Return on Equity	0.00	0.70	0.70	0	0.70	0.70	*
12	Adjustment for reduction of Steel Units tariffs	0.00	0.00	0	0.00	35.00	35.00	
D	**Net Expenditure**	**1,846.07**	**1,217.66**	**1,196.69**	**1,221.99**	**1,702.04**	**1,651.90**	**640.92**
13	Less: Non-tariff income	13.32	8.03	8.03	22.41	3.18	3.18	1.67
14	Less: Previous Year's adjustments	118.95	0.00	0	0.00	0.00	0.00	0
E	**Annual Revenue Requirement (A - B)**	**1713.80**	**1209.64**	**1188.66**	**1199.58**	**1698.86**	**1648.72**	**639.25**
15	Revenues from Existing/Approved Tariffs	1722.25	919.03	919.03	897.48	1156.62	1,156.62	510.22
F	**Revenue Surplus/(Gap) ((D) – (C))**	**8.45**	**-290.60**	**-269.63**	**-302.10**	**-542.24**	**-492.10**	**-129.03**
16	Power Purchase (MU)	8,285	5,788	5,824		^6,491	^6,491	3,597
17	Sales (MU)	5,785	3,694	3,694		4,596	4,596	2,229
G	**T&D Loss (%)**	**30.17%**	**36.18%**	**36.57%**		**^29.19%**	**^29.19%**	**38.01%**

**Adjustments for these are carried out at year end*
#Taken as half of full year proposal
^Excluding Transmission Losses

Notice is hereby given to all stakeholders including consumers to send their views/ suggestions on these Suo-moto proceedings to the undersigned latest by 28.01.2008.

Secretary

Advt. No. 27/07-08

10.5 Annexure 4: List of Respondents to UPCL's Proposals

Sl. No.	Name	Designation	Organization	Address
1.	Shri Ramesh Middha	Working President	Hotel and Restaurant Association of Rudrapur	Rudrapur, U.S. Nagar, Uttarakhand
2.	Shri K.K. Sharma	Vice-President (Commercial)	Shivangee Crafts Ltd.	5th Km. Stone, Ramnagar Road, Kashipur
3.	Shri Kamal Raj	General Manager	IDPL	Virbhadra, Rishikesh
4.	Shri Mahesh Tyagi	P.A.	Lal Bahadur Shastri National Academy of Administration	Mussoorie, Dehradun
5.	Dr. K.K. Sharma			Dronanchal, Rajiv Nagar (Lower), 1/51, Rajiv Nagar, Dehradun
6.	Shri J.S. Rana			Dabral Colony, Sitabpur, Devi Road, Kotdwar, Pauri Garhwal
7.	Shri Pradeep Dutta			11, Chandar Road, Dalanwala, Dehradun
8.	Shri Pradeep Dutta	Convener, Panel on Energy	CII	Northern Region, Uttarakhand State Office, 30/1, Rajpur Road, Dehradun
9.	Shri Mahavir Prasad			Kotdwar, Pauri Garhwal
10.	Shri Pawan Agarwal	Vice-President	M/s. Uttaranchal Steel Manufactures Association	C/o Shree Sidhbali Steels Ltd., Kandi Road, Kotdwar
11.	Shri Subhash Kukreti	Director	Kukreti Steels Ltd.	Jashodarpur Industrial Area, Kotdwar
12.	Ms. Lovelena Mody	E.D. & Vice-President	Great Value Hotels Ltd.	74-C, Rajpur Road, Dehradun
13.	Shri D. Tiwari	General Manager	Flex Foods Ltd.	Lal Tappar Industrial Area, P.O. Resham Majri, Haridwar Road, Dehradun
14.	Shri J.S.P. Singh	Chief Elect. Distribution Engineer	Northern Railway	Hd. Qrs. Office, Baroda House, New Delhi
15.	Shri Naveen Chandra Verma	Member	Advisory Committee of UERC	Sharda Market, Haldwani
16.	Shri Jaan Ali			Gram-Bahadarpur Khadar, Laksar
17.	Shri Jitendra Kumar	President	Kumaun Garhwal Chamber of Commerce & Industry (Paper Unit Chapter)	Industrial Estate, Bazpur Road, Kashipur
18.	Shri Pramod Singh	President	Akhil Bhartiya Kshatriya Mahasabha	Prabhu Sadan, Girital Road, Kashipur
19.	Shri Raj Singh	President	Devbhoomi Dharmashala Prabhandhak Sabha (Regd.),	Nar Singh Bhawan, Upper Road, Haridwar
20.	Shri Shyam Lal Shah	District President	Prantiya Udhyog Vyapar Pratinidhi Mandal, Uttarakhand	Kutchery Bazar, Almora
21.	Shri Jagdish Gupta	Mukhya Sanyojka	Jal Kalyan Upbhokta Pasishad	Haridwar
22.	Shri Jagdamba Prasad Dabral	Mantri	Parvatiya Vikas Sangthan (Regd.)	Sector-8D/417, Bauradi, New Tehri
23.	Shri Jayvardhan Dabral		Prop. Himalay Food Products Industry	S-44, Bus Stand, Baurari, New Tehri
24.		Director	Lalkuan Stone Crushers Ltd.	21/1 D1,D2, Civil Lines, Nainital Road, Rudrapur

Sl. No.	Name	Designation	Organization	Address
25.	Shri Shiv Kumar	Director	Kumar Oxygen Ltd.	Rampur Road, Rudrapur, U.S. Nagar
26.	Shri Anil Goel	State General Secretary	Prantiya Udyog Vyapar Pratinidhi Mandal Uttaranchal	13-Gandhi Road, Dehradun
27.	Shri Pankaj Gupta	President	Industries Association of Uttarakhand	C/o Satya Industries, Mohabbewala Indl. Area, Dehradun
28.	Shri Satish Kochhar	Managing Director	Air Liquide North India Pvt. Ltd.	25, C-block, Community Centre, Janakpuri, New Delhi
29.	Shri R.C. Rastogi	Chairman, Uttarakhand Committee	PHD Chamber of Commerce and Industry	PHD House, 4/2, Siri Institutional Area, August Kranti Marg, New Delhi
30.	Shri R.S. Yadav	GM (P&A)	India Glycols Ltd.	Kashipur, U.S. Nagar (Uttarakhand)
31.	Shri Rajeev Gupta	Manager	Shivangee Crafts Ltd.	5th Km. Stone, Ramnagar Road, Kahsipur
32.	Shri Pukhraj Kushwaha		Khatima Fibers Ltd.	UPSIDC Industrial Area, Khatema
33.	Shri J.B. Agarwal	Director	Kashi Vishwanath Steels Ltd.	Narain Nagar Industrial Estate, Bazpur Road, Kashipur
34.	Shri D.K. Agarwal	Chairman	KGCCI (Steel Unit Chapter)	Industrial Estate, Bazpur Road, Kashipur, U.S. Nagar
35.	Shri P.S. Tomar	Director	Galwalia Ispat Udyog Ltd.	Narain Nagar Industrial Estate, Bazpur Road, Kashipur, U.S. Nagar
36.	Shri K.G. Behl, Brig (Retd.)	President	All India Consumers Council, Uttaranchal	8-A, Nemi Road, Dehradun
37.	Shri R.S. Rawat			Rishikesh
38.	Shri K.N. Pande			Jagganath Colony (Hydel Gate), P.O. Kathgodam, Haldwani
39.	Shri Vinod Kumar Joshi			Near Panchakki, Damuadhoonga, P.O. Kathgodam, Haldwani
40.	Shri Lakhiram Singh Sajwan	Member	Rajya Aandolankari SammanParishad	Gram & Post-Virpur Dunda, Distt.-Uttarkashi
41.	Dr. Bhupinder Kaur Aulakh	State Project Director	Uttaranchal Sabhi ke liye Shiksha Parishad	Rajya Pariyojna Karyalaya, Shiksha Sankul, Mayur Vihar, Shastradhara, Dehradun
42.	Sh. Tika Singh Saini	President	Sanyukta Kisan Sangharsh Samiti	97/3, Purana Aawas Vikas, Kashipur, U.S. Nagar
43.	Shri P.C. Sinha	President	Sidcul Entrepreneur Welfare Society	C/o Shachi Plastics, Plot N. 23A, Sector 2, IIE, Pantnagar, Rudrapur, 263153
44.	Shri Ram Kumar	Vice-President	Mussoorie Hotel Association	Hotel Vishnu Palace, Mussoorie
45.		Principal	Shri Mahavir Jain Kanya Pathshala	31, Tilak Marg, Dehradun
46.			M/s. BST Textile Mills Pvt. Ltd.	Plot No. 9, Sector 9, SIDCUL, Pantnagar, Rudrapur, 263153
47.	Er. Devesh Pant	Ret. Duputy GM, UP Power Corpn. Ltd.		16 A, Kalidas Road, Dehradun
48.			Bhartiya Kisan Union	Kashipur, U.S. Nagar
49.	Shri Dinesh Sundriyal			Almora
50.	Shri Kailash Kandpal			Gram Kandanaula, P.O. Dauligad, Distt. Almora
51.	Chaudhry Katar Singh	Rashtriya Sachiv	Bhartiya Kisan Union	Gram Sultanpur Sabatwali, Jhabreda, Hardwar

Sl. No.	Name	Designation	Organization	Address
52.		Principal	Shri Guru Ram Rai Mahila Inter College	Khurbura, Dehradun
53.	Shri Anil Kumar			Gram Pradhan, Gram Churiyala, Mohanpur, Distt. Hardwar
54.	Swami Devanand		Shri Jagadguru Aadhya Shankaracharya	Shri Manav Kalyan Ashram, P.O. Kankhal, Hardwar
55.	Shri Nathu Lal Tamta	Jila Prabhari	Jila Congress Committee, Pauri Garhwal	Jan Evam Sramik Samasya Nivarana Prakostha, Ramleela Maidan (Tamta Mohalla), Srinagar, Uttarakhand
56.	Shri O.P. Pharswan	Lt. Col.	DCWE E/M, for CWE	Commander Works Engineers (Hills), Military Engineer Services, Mall Road, Dehradun Cantt.

10.6 Annexure 5: List of Participants in the Public Hearing

List of Participants in Hearing at Almora on 16.01.2008

SL. No.	Name	Designation	Organization	Address
1.	Shri Prakash Chandra Joshi			Ex. Chairman, Municipal Board, Malla Joshi Khola, Almora
2.	Shri Shyam Lal	District President	Prantiya Udhyog Vyapar Pratinidhi Mandal,	Kutchery Bazar, Almora
3.	Shri Bhupendra Joshi			117, Upper Gali, Jakhan Devi, Almora
4.	Shri Nand Kishor Valmiki			Rajpur Balmiki Basti, Joshikhola, Almora
5.	Shri Hem Chandra Shah			Lala Bazar, Almora
6.	Shri Kaushal Kishor Saxena			Srishti, Ranidhara Road, Almora
7.	Shri Trilochan Joshi			Ranidhara Road, Almora
8.	Shri Sanjay Kandpal			Kandpal Bhawan, Talli Joshikhola, Almora
9.	Shri B.D. Chabdal			Ranidhara Road, Almora
10.	Ms. Neha Rana			D/o. S.S. Rana, Rana Bhawan, N.T.D. Almora
11.	Shri Satish Upadhyay			Dughal Khola, Almora
12.	Shri Umesh Kandpal			Jakhan Devi, Almora

List of Participants in Hearing at Haldwani on 17.01.2008

SL. No.	Name	Designation	Organization	Address
1.	Smt. Neela Arya	Principal	Kanya Purva Madhyamik (Govt.) Vidhyalaya,	Tulsinagar, Haldwani
2.	Shri Krishna Singh Kalakoti			Lohariasal (Malla), P.O. Katgharia, Haldwani
3.	Shri Jai Bhagwan Agarwal		M/s. Kashi Vishwanath Steels Ltd.	Narain Nagar Industrial Estate, Bazpur Road, Kashipur-244713
4.	Shri P.S. Parihar		M/s. Shivangi Craft Ltd.	5th Km. Stone, Ramnagar Road, Kahsipur
5.	Shri Y.S. Malik		Galwalia Ispat Udyog Ltd.	Narain Nagar Industrial Estate, Bazpur Road, Kashipur, U.S. Nagar
6.	Shri Naveen Chandra Verma	Prantiya Adhyaksha,	Devbhoomi Udhyog Vyapar Mandal, Uttarakhand	Sharda Market, Haldwani
7.	Capt. M.S. Bhandari			LIG-280, Awas Vikas Colony, Haldwani

List of Participants in Hearing at Haldwani on 17.01.2008

SL. No.	Name	Designation	Organization	Address
8.	Shri Keshab Datt Paleriya			Vill.-Gaujazali Bichli, Bareilly Road, Haldwani
9.	Shri Bhupal Singh Jantwal			Shishu Bharti School, Suyal colony, Bareilly Road, Haldwani
10.	Shri Vinod Km. Jayswal			6/608, Talla Garakhpur, Haldwani
11.	Shri Kashmiri Lal Sahni			3/453, Govindpura, Haldwani
12.	Shri Manoj Kr. Gupta	Sanyakta Mantri	Vyapar Mandal, Haldwani	Multali Garden, Haldwani
13.	Shri Deewan Singh Negi			Navodaya Colony, Damuadhoonga, Panchakki, Haldwani
14.	Shri Ramnath Shah	Member	Lok Seva Samiti	Gram- Damuadhoonga, Haldwani
15.	Shri A.S. Thathola			Bhawani Bhawan, Tikonia, Haldwani
16.	Shri T.D. Loshali			Vill.-Phattabangar, Goraparav, Haldwani
17.	Shri R.K. Sharma		M/s. Century Pulp & Paper	Lalkuan, Nainital
18.	Shri M.P. Shrivastava		M/s. Century Pulp & Paper	Lalkuan, Nainital
19.	Shri Pukhraj Kushwaha		M/s. Khatima Fibers Ltd.	UPSIDC Industrial Area, Khatema-262308
20.	Shri G.D. Punera			Gaujajali Bichni, Bareilly Road, Haldwani
21.	Lt. Col. B.D. Kandpal (Retd.)			MIG-64, Avas Vikas Colony, Haldwani
22.	Shri Rajeev Agarwal			Amar Bartan Bhandar, Haldwani
23.	Shri Darbara Singh	President	Kumaun Garhwal Chamber of Commerce & Industry	Chamber House, Industrial Estate, Bazpur Road, Kashipur, U.S. Nagar
24.	Shri Ashok Bansal		M/s. Rudrapur Solvents	Vill. & P.O.- Lalpur, Udhamsingh Nagar
25.	Shri C.K. Arora	General Secretary	Kumaun Garhwal Chamber of Commerce & Industry	Kashipur
26.	Shri M.S. Fartyal			Adarsh Nagar, Gali No. 2, Talli Bamori, Kaladhoongi Road, Haldwani.
27.	Shri Gurucharan Singh			Bartan Bazar, Haldwani
28.	Shri Digamber Verma			Patel Chowk, Haldwani
29.	Shri Sanjay Singh Rajput			Patel Chowk, Haldwani
30.	Shri Om Prakash			Gupta Aata Chakki, Mangalparao, Haldwani

List of Participants in Hearing at Haldwani on 17.01.2008

SL. No.	Name	Designation	Organization	Address
31.	Dr. Pramod	Vice-President	Prantiya Uhyog Vyapar Mandal	Haldwani
32.	Shri Shamsher Singh Kohil			Guru Govind Pura, Haldwani
33.	Babulal Gupta			Shankar Traders, Karkhana Bazar, Haldwani
34.	Shri N.B. Guruvant			Amravati Colony, Malli Bamori, Haldwani
35.	Shri Virendra Km. Gupta	Koshadhyaksha	Vyapar Mandal	Virendra Iron & Steel Works, Nawabi Road, Kulyalpur, Haldwani
36.	Shri D.S. Khattri			S.K. Puram, Kusumkhera, Haldwani
37.	Shri D.S. Negi			Uttaranchal Colony, Kusumkhera, Haldwani
38.	Shri Vipin Tyagi		M/s. B.S.T. Textile Mills Pvt. Ltd.	Plot No. 9, Sector-9, SIDCUL, Pantnagar, Rudrapur
39.	Shri P.K. Mishra		M/s. B.S.T. Textile Mills Pvt. Ltd.	Plot No. 9, Sector-9, SIDCUL, Pantnagar, Rudrapur
40.	Shri J.C. Tiwari		M/s. Escorts Ltd.	SIDCUL, Rudrapur
41.	Shri Vinod Vyas		M/s. Endurance Tech. Pvt. Ltd.	SIDCUL, Rudrapur

List of Participants in Hearing at Ramnagar on 19.01.2008

Sl. No.	Name	Designation	Organization	Address
1.	Shri Balkar Ji "Fauji" Ex. Asstt. Commandent	Distt. Chairman	Bhartiya Kisan Union, Kashipur	Office-Bhartiya Kissan Union, Kashipur
2.	Shri Jeet Singh			Dhakia No. 92, P.O. Dhakia-1, Kashipur
3.	Shri Sohan Singh			Ram Shyam Colony, Gali No. 1, Ramnagar Road, Kashipur
4.	Shri Satnam Singh	Pradesh Upadhyaksha	Bhartiya Kisan Union (Uttarakhand)	Chanakpur Farm, Kashipur
5.	Shri Ashok Kumar			Baaz Market, Ramnagar, Nainital
6.	Shri Chandra Mohan Pant			Khalsa Street, Near Gaur Sabha, Kashipur
7.	Shri Satya Veer Sharma	Pradesh Mahamantri	Uttarakhand Pradesh Kisan Congress	97/3, Purana Awas Vikas Chauraha, Kashipur
8.	Shri Teeka Singh Saini	President	Sanyukta Kisan Sangharsh Samiti	33- Katoratal, Kashipur
9.	Shri Balvinder Singh			Biraha Farm, Bazpur

List of Participants in Hearing at Ramnagar on 19.01.2008

Sl. No.	Name	Designation	Organization	Address
10.	Shri Karam Singh			Ramraz Farm, Bazpur
11.	Shri Madan Mohan Pandey		Jan Kalyan Awam Sudhar Samiti	C/o Khajan General Store, Bharatpuri, Ramnagar, Nainital
12.	Shri L.M. Tiwari			Gas Godam Road, Ramnagar, Nainital
13.	Smt. Bhawna Bhatt			Mohalla Edgah Road Khatadi, Ramnagar, Nainital
14.	Shri Ramkumar Agarwal		M/s. U mashakti Steels (P) Ltd.	Bazpur
15.	Shri Manoj Km. Chugh		M/s. Wings Commercial Co. Ltd.	C-1&C-2, UPSIDC Indl. Area, Pipalia, Bazpur
16.	Shri Sanjeev Jindal		M/s. Uttaranchal Ispat Ltd.	Bazpur Road, Kashipur, U.S. Nagar
17.	Shri Shamad Kumar		M/s. Manokamna Steel Pvt. Ltd.	Station Node Kashipur, U.S. Nagar
18.	Shri Prateek Agarwal		M/s. Sun Shine Industries	Station Node Kashipur, U.S. Nagar
19.	Shri Naveen Chandra Papne			Vipin Vihar, Uttari Khatari, Kotdwar Road, Ramnagar
20.	Shri Anand Agarwal		M/s. Shree Tribhuvan Ispta (P) Ltd.	Bazpur
21.	Shri Anil Agarwal "Khulasa"	Pradesh Sachiv	Udyog Vyapar Mandal	Nanda Line, Bambagher, Ramnagar, Nainital
22.	Smt. Mohini Devi			W/o Late Pratap, Gularghati, Ramnagar
23.	Shri Narendra Sharma	Nagar Mahamantri, BJP		Lakhanpur, Ramnagar, Distt.-Nainital
24.	Smt. Dayarani,			R/o-Devichaur, Garjia Mandir Road, Ramnagar, Distt.- Nainital.

List of Participants in Hearing at Roorkee on 21.01.2008

SL. No.	Name	Designation	Organization	Address
1.	Shri Pawan Agarwal	Vice President	Uttarakhand Steel Manufactures Association	C/o Sidhbali Steels Ltd., Kotdwar
2.	Shri Subhash Kukreti	Director	M/s. Kukreti Steel Ltd.	Jashodarpur Industrial Area, Kotdwar
3.	Shri S.N. Bansal		M/s. Amrit Varsha Udyog	Jashodharpur Industrial Area, Kotdwar

List of Participants in Hearing at Roorkee on 21.01.2008

SL. No.	Name	Designation	Organization	Address
			Ltd.	
4.	Shri Deepak Poddar		M/s. Poddar Alloys Ltd.	Jashodharpur Industrial Area, Kotdwar
5.	Shri Rajesh Rathi		M/s. Bhagya Shree Steels	Jashodharpur Industrial Area, Kotdwar
6.	Shri Kurban Ahmed			263/27, Purana Mohalla, Tehsil Roorkee, Roorkee
7.	Shri Mam Chand Tyagi			Gram Tashipur, Rooorkee
8.	Chaudhry Katar Singh	President	Bhartiya Kisan Union	Gram Sultanpur Sabatwali, Jhabreda, Hardwar
9.	Shri Sher Singh			Gram Delna, Block-Roorkee, Roorkee
10.	Shri Tejpal Singh			Majri, Roorkee
11.	Shri Ravi Prakash	President	Roorkee Small Scale Industries Association	C-58/1, New Adarsh Nagar, Roorkee
12.	Shri Mukesh Sharma	Secretary	Roorkee Small Scale Industries Association	M/s. Atma Ram Sharma & Sons, D-4, Industrial Estate, Roorkee
13.	Shri Israr Ahmed			Band Road, Roorkee
14.	Shri Moin Khan			Roorkee
15.	Shri Sanjay Chaudhry	Jiladhyaksha	Bhartiya Kisan Union	Gram Nagla Salaru, P.O. Gurukul, Narsan, Hardwar
16.	Shri B.P. Chaudhry			D-1, Industrial Estate, Roorkee
17.`	Shri Harjeet Singh		Air Liquid North India Pv.t Ltd.	Manglore, Roorkee
18.	Shri A.K. Sharma		Air Liquid North India Pv.t Ltd.	Manglore, Roorkee
19.	Shri Virendra Singh			Gram Katwed, Laldhang, Hardwar
20.	Shri Om Prakash Arya			Vaungla, Hardwar
21.	Shri Naved Ahmed			Badhedi Rajputana, Roorkee, Hardwar
22.	Shri R.P. Chauhan			Shivaji Colony, P.O. Mizapnagar, Roorkee
23.	Shri Mohd. Anis			Mahmoodpur, Tehsil Roorkee, Piran Kaliyar
24.	Dr. Narayan Das Gupta		Jan Chetna Sangthan-Roorkee	35- Rajputana, Roorkee
25.	Shri Subodh Kapoor			Tehsil Roorkee, Hardwar
26.	Shri Vijendra Verma			Roorkee
27.	Shri Anis Gaud			S/o Muhammad Hanif, Vill.-Lathar Devashekh, P.O. Ikbalpur, Hardwar
28.	Shri Naresh Gupta			6/6 Chandra Puri, Roorkee
29.	Shri Raj Singh		Devbhoomi	NarSingh Bhawan, Upper Road,

List of Participants in Hearing at Roorkee on 21.01.2008

SL. No.	Name	Designation	Organization	Address
			Dharmshala	Hardwar
30.	Shri Kailash Sharma		Devbhoomi Dharmshala	NarSingh Bhawan, Upper Road, Hardwar
31.	Shri Dushyant		FCI (P) Ltd	52-C, Sector-63, Noida
32.	Shri Tehram Ahmed			Roorkee

List of Participants in Hearing at Dehradun on 23.01.2008

SL. No.	Name	Designation	Organization	Address
1.	Shri Rajiv Agarwal	Sr. Vice President	Industries Association of Uttarakhand	Mohabbewala Industrial Area, Dehradun
2.	Shri Pankaj Gupta	President	Industries Association of Uttarakhand	Mohabbewala Industrial Area, Dehradun
3.	Shri Hemant Kumar	Secretary	Industries Association of Uttarakhand	Mohabbewala Industrial Area, Dehradun
4.	Shri Ashish Srivastava	Sr. Electrical Engineer	Northern Railway	New Delhi
5.	Shri Anil Goel	State General Secretary	Prantiya Udyog Vyapar Pratinidhi Mandal	13-Gandhi Road, Dehradun
6.	Shri Chatar Singh		State Project Office, Sarva Shiksha Abhiyan	Shiksha Sankul, Mayur Vihar, Shastradhara, Dehradun
7.	Shri Vinod Misra		State Project Office, Sarva Shiksha Abhiyan	Shiksha Sankul, Mayur Vihar, Shastradhara, Dehradun
8.	Shri Ambrish Bisht		State Project Office, Sarva Shiksha Abhiyan	Shiksha Sankul, Mayur Vihar, Shastradhara, Dehradun
9.	Shri Yogesh Tyagi		M/s. Gold Plus Glass Industry	Gold Plus Estate, Vill.-Thithola, Pargana Manglaur, Tehsil Roorkee, Hardwar
10.	Shri S.S. Saxena		M/s. Gold Plus Glass Industry	Gold Plus Estate, Vill.-Thithola, Pargana Manglaur, Tehsil Roorkee, Hardwar
11.	Shri Khursheet Ahmed Siddiqui			Preeti Enclave, Majra, Dehradun
12.	Shri Naval		Flex Foods Ltd.	Lal Tappar Industrial Area, Resham Majri, haridwar Road, Dehradun
13.	Shri D.P. Pandey			101/9, Dharampur, Dehradun
14.	Shri Gulshan Rai		Shri Ganesh Roller Flour Mills	Mohabbewala Industrial Area, Subhash Nagar, Dehradun
15.	Shri Vishwa Mitra			36, Panchsheel Park, Chakrata Road, Dehradun
16.	Shri Rishi Saxena		Kumar Oxygen Ltd	Rampur Road, Rudrapur, U.S. Nagar
17.	Shri S.P. Kochhar		Uttaranchal Hotels & Restaurant Association, Hotel Madhuban	Rajpur Road, Derhadun
18.	Shri A.K. Gandhi		Uttaranchal Hotels &	Rajpur Road, Derhadun

List of Participants in Hearing at Dehradun on 23.01.2008

SL. No.	Name	Designation	Organization	Address
			Restaurant Association, Hotel Madhuban	
19.	Shri R.B. Lal		IDPL	Virbhadra, Rishikesh
20.	Shri P.M. Gupta		IDPL	Virbhadra, Rishikesh
21.	Shri R.C. Rastogi		IDPL	Virbhadra, Rishikesh
22.	Shri Rakesh Aggarwal		CII	Northern Region, 30/1, Rajpur Road, Dehradun
23.	Shri Pradeep Dutta		CII	11, Chandar Road, Dalanwala, Dehradun
24.	Shri D.R. Semwal		Phool Chand Nari Shilp Mandir, Girls Inter College	Chakrata Road, Near Bindal Bridge, Dehradun
25.	Shri Kewal Ram			92-B, MDDA Colony, Indira Nagar, Dehradun
26.	Shri Om Prakash			MIG-171, Indirapuram, Dehradun
27.	Shri Ramesh Mamgain	Sr. Clerk	Rampyari Arya Samaj Inter College	Dehradun
28.	Shri Devesh Pant	Retd. Dy. GM, U PPCL		16-A, Kalidas Road,Dehradun
29.	Shri J.S. Rawat			335/4, Vijay Park Extension, Dehradun
30.	Shri Ram Baboo			8-A, Kaulagarh, Dehradun

10.7 Annexure 6: List of Abbreviations

S. No.	Abbreviation/Acronym	Meaning
	A&G	Administrative & General
	AAD	Advance Against Depreciation
	AC	Alternating current
	Act	The Electricity Act, 2003
	ADB	Asian Development Bank
	AFC	Annual Fixed Charges
	APDRP	Accelerated Power Development Reform Programme
	AREP	Accelerated Rural Electrification Programme
	ARR	Annual Revenue Requirement
	ATC	Annual Transmission Charges
	BHP	Brake Horse Power
	CEA	Central Electricity Authority
	CERC	Central Electricity Regulatory Commission
	CPSU	Central Public Sector Undertaking
	ckt-km	Circuit kilometer
	CoD	Date of Commercial Operation
	CWIP	Capital Work in Progress
	D.A.	Dearness Allowance
	DERC	Delhi Electricity Regulatory Commission
	DGM	Deputy General Manager
	DM	District Magistrate
	EMI	Equated Monthly Instalments
	FY	Financial Year
	GFA	Gross Fixed Asset
	GIS	Government Irrigation System
	GoI	Government of India
	GoU	Government of Uttaranchal / Uttarakhand
	GoUP	Government of Uttar Pradesh
	GPF	General Provident Fund
	HP	Himachal Pradesh
	HPSEB	Himachal Pradesh State Electricity Board
	HT	High Tension
	LT	Low Tension
	MNP	Minimum Needs Programme
	km / bay	Kilometer per bay
	Km / SS	Kilometer per sub-station
	kV	kilo Volt
	kW	kilo Watt
	LL / bay	Line Length per bay
	LL / SS	Line length per sub-station
	MU, MWhr	Million Units
	MW	Mega Watt
	NABARD	National Bank for Agriculture and Rural Development
	NHPC	National Hydroelectric Power Corporation Ltd.

S. No.	Abbreviation/Acronym	Meaning
	NREB	Northern Region Electricity Board
	NTPC	National Thermal Power Corporation Ltd.
	O&M	Operation & Maintenance
	p / u, p / unit	paisa / unit
	Petitioner	PTCUL
	PFC	Power Finance Corporation Limited
	PGCIL	Power Grid Corporation of India Limited
	PIU	Power Intensive Industrial Units
	PLR	Prime Leading Rate
	PMGY	Pradhan Mantri Gramin Yojana
	PPA	Power Purchase Agreement
	PTCUL	Power Transmission Corporation of Uttarakhand Ltd.
	PTW	Private Tube wells
	R&M	Repair & Maintenance
	REC	Rural Electrification Corporation
	Regulation (s)	Uttaranchal Electricity Regulatory Commission (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2004.
	Re-organisation Act	UP Re-organisation Act, 2000 UP Electricity Reforms Act, 1999
	RGGVY	Rajiv Gandhi Gramin Vidyutikaran Yojana
	RLA	Residual Life Assessment
	RMF	Renovation & Modernization Fund
	RoE	Return on Equity
	SBI	State Bank of India
	SLDC	State Load Dispatch Centre
	STU	State Transmission Utility
	T&D	Transmission and Distribution
	Tariff Year	Financial Year 2006-07
	TEC	Techno Economic Clearance
	UERC, Commission	Uttarakhand Electricity Regulatory Commission
	UJVNL	Uttarakhand Jal Vidyut Nigam Ltd.
	Unit / kWh	kWh (kilowatt hour)
	UI	Unscheduled Interchange
	UP	Uttar Pradesh
	UPCL	Uttarakhand Power Corporation Limited
	UPERC	Uttar Pradesh Electricity Regulatory Commission
	UPJVNL	Uttar Pradesh Jal Vidyut Nigam Ltd.
	UPPCL	Uttar Pradesh Power Corporation Limited
	UPPSET	Uttar Pradesh Power Sector Employees Trust
	UPRVUNL	Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited
	UPSEB	Uttar Pradesh State Electricity Board
	UREDA	Uttarakhand Renewable Energy Development Agency