



**UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION**

PETITION NO. : 624,625,626,627,628 OF 2009

FILED BY

U. P. POWER TRANSMISSION CORPORATION LIMITED  
MADHYANCHAL VIDYUT VITARAN NIGAM LIMITED  
DAKSHINANCHAL VIDYUT VITARAN NIGAM LIMITED  
PURVANCHAL VIDYUT VITARAN NIGAM LIMITED  
PASHCHIMANCHAL VIDYUT VITARAN NIGAM LIMITED

IN THE MATTER OF

DETERMINATION OF ANNUAL REVENUE REQUIREMENT (ARR)  
AND TARIFF FOR FY 2009-10

ORDER UNDER SECTION 64 OF  
THE ELECTRICITY ACT 2003

LUCKNOW  
31<sup>st</sup> March 2010



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**Petition No.: 624,625,626,627,628 / 2009**

**IN THE MATTER OF:**

Application dated July 30, 2009 regarding filing of Aggregate Revenue Requirement for FY 2009-2010 and determination of tariffs to be charged by Uttar Pradesh Power Transmission Corporation Limited (UPPTCL / TRANSCO) and the four distribution companies (DISCOMS) viz. Pashchimanchal Vidyut Vitaran Nigam Limited (PVVNL), Purvanchal Vidyut Vitaran Nigam Limited (PuVNNL), Madhyanchal Vidyut Vitaran Nigam Limited (MVNNL) and Dakshinanchal Vidyut Vitaran Nigam Limited (DVNNL)

**And**

**IN THE MATTER OF:**

U.P. Power Transmission Corporation Limited (UPPTCL / TRANSCO)  
Pashchimanchal Vidyut Vitaran Nigam Limited (PVVNL)  
Purvanchal Vidyut Vitaran Nigam Limited (PuVNNL)  
Madhyanchal Vidyut Vitaran Nigam Limited (MVNNL)  
Dakshinanchal Vidyut Vitaran Nigam Limited (DVNNL)

**Before**

**UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION**

**ORDER**

The Commission having deliberated upon the above petitions and also the subsequent filings by the petitioners, and having considered the suggestions / comments / views / objections received from various stakeholders during the course of the above proceedings and also in the public hearings held, in exercise of power vested under Sections 61, 62, 64 and 86 of the Electricity Act 2003, hereby pass this Order signed, dated and issued on 31<sup>st</sup> day of March, 2010. The licensees, in accordance to section 139 of the Uttar Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations 2004, shall arrange to get published within one week from the date of issue of this Order the tariffs approved herein by the Commission. The tariffs thus notified shall, unless amended or revoked, continue to be in force till issuance of the next Tariff Order.



## Chapter 1. BACKGROUND AND BRIEF HISTORY:

### 1.1 BACKGROUND:

1.1.1 The Uttar Pradesh Electricity Regulatory Commission (UPERC) was formed under U. P. Electricity Reform Act, 1999 by Government of Uttar Pradesh (GoUP) in one of the first steps of reforms & restructuring process of the power sector in the State. Thereafter, in pursuance of the reform - restructuring exercise the erstwhile Uttar Pradesh State Electricity Board (UPSEB) was unbundled into the following three separate entities through the first reforms transfer scheme dated 14th Jan 2000:

- Uttar Pradesh Power Corporation Limited (UPPCL): vested with the function of Transmission and Distribution within the State.
- Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL) : vested with the function of Thermal Generation within the State
- Uttar Pradesh Jal Vidyut Nigam Limited (UPJVNL) : vested with the function of Hydro Generation within the State.

1.1.2 Through another Transfer Scheme dated 15th January, 2000, assets, liabilities and personnel of Kanpur Electricity Supply Authority (KESA) under UPSEB were transferred to Kanpur Electricity Supply Company (KESCO), a company registered under the Companies Act, 1956.

1.1.3 After the enactment of the Electricity Act, 2003 (EA 2003) the need was felt for further unbundling of UPPCL (responsible for both Transmission and Distribution functions) along functional lines. Therefore the following four new distribution companies (hereinafter collectively referred to as "DISCOMS") were created vide Uttar Pradesh Transfer of Distribution Undertaking Scheme, 2003 to undertake distribution and supply of electricity in the areas under their respective zones specified in the scheme:

- Dakshinanchal Vidyut Vitaran Nigam Limited : (Agra DISCOM)
- Madhyanchal Vidyut Vitaran Nigam Limited : (Lucknow DISCOM)
- Pashchimanchal Vidyut Vitaran Nigam Limited : (Meerut DISCOM)
- Purvanchal Vidyut Vitaran Nigam Limited : (Varanasi DISCOM)

Under this scheme the role of UPPCL was specified as "Bulk Supply Licensee" as per the license granted by the Uttar Pradesh Electricity Regulatory Commission and as "State Transmission Utility" under sub-section (1) of Section 27-B of the Indian Electricity Act, 1910 as notified by the State Government.





1.1.4 Subsequently, the Uttar Pradesh Power Transmission Corporation Limited (UPPTCL), a Transmission Company (TRANSCO), was incorporated under the Companies Act, 1956 by an amendment in the 'Object and Name' clause of the Uttar Pradesh Vidyut Vyapar Nigam Limited. The TRANSCO started functioning with effect from 26th July 2006 and is entrusted with the business of transmission of electrical energy to various utilities within the State of Uttar Pradesh. This function was earlier vested with UPPCL. Further, Government of Uttar Pradesh (GoUP) in exercise of power under the Section 30 of the EA 2003, vide notification No. 122/U.N.N.P/24-07 dated 18th July, 2007 notified Uttar Pradesh Power Transmission Corporation Limited as the "State Transmission Utility" of Uttar Pradesh.

1.1.5 Thereafter, on 21<sup>st</sup> January, 2010, as the successor distribution companies of UPPCL (a deemed licensee), the DISCOMS which were created through UP Power Sector Reforms (Transfer of Distribution Undertakings) Scheme, 2003 and were issued fresh distribution licenses which replaced the UP Power Corporation Ltd (UPPCL) Distribution, Retail & Bulk Supply License, 2000..

## **1.2 DISTRIBUTION & TRANSMISSION TARIFF REGULATIONS:**

1.2.1 Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2006 (hereinafter referred to as the "Distribution Tariff Regulations") were notified by the Commission on 6th October, 2006.

1.2.2 These regulations are applicable for the purposes of ARR filing and Tariff determination to all the distribution licensees within the State of Uttar Pradesh.

1.2.3 Similarly, the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Transmission Tariff) Regulations, 2006 (hereinafter referred to as the "Transmission Tariff Regulations") were notified by the Commission on 6th October, 2006.

1.2.4 These regulations are applicable for the purposes of ARR filing and Tariff determination of the transmission licensees within the State of Uttar Pradesh.

## **1.3 FILING OF ARR / TARIFF PETITION:**

1.3.1 The utilities in the State have filed the ARR and Tariff petition in line with the provisions of the Regulations and the same is being processed by the Commission accordingly.



#### **1.4 ISSUES / CONCERNS OF THE COMMISSION:**

1.4.1 Certain issues / concerns arising out of the statutory provisions of the Act, which have been deliberated upon by the Commission in detail in this Tariff Order, are listed below:

- Requirement for Separate Transmission License for the UPPTCL
- Allocation of Power to the Distribution Companies
- Transfer Scheme for UPPTCL
- Need to have SLDC functioning as an independent body
- Metering of Consumers
- Implementation of Open Access on Transmission and Distribution Networks
- Power Trading and Market Development
- Power Exchange Model

#### **1.4.2 RESPONSE TO THE ISSUES:**

The Commission had sought vide letter No. UPERC/ARR/Tariff 09-10 /825 dated 1<sup>st</sup> September 2009 details from the licensees regarding compliance / progress on the issues mentioned above. The response of the licensees is detailed below.

##### **1.4.2.1 SEPARATE TRANSMISSION LICENSE FOR THE UPPTCL:**

UPPTCL had submitted during the process of ARR and Tariff determination for FY 2007-08 and 2008-09 that it is in the process of obtaining separate license for the transmission business. However, in spite of several reminders by the Commission no application had been received by the Commission for grant of separate transmission license. UPPTCL in its letter dated 8th October 2009 has submitted that under EA 2003, Part-IV (Licensing) which deals with application & grant of license for Transmission, Distribution & Trading of Electricity, as per section 14 a deemed licensee is not required to obtain a license.

UPPTCL has further mentioned in the letter that Government of UP has already notified UPPTCL as STU vide GO No 122/U.N.N.P/24-07 dated 18<sup>th</sup> July 2007 and as per above mentioned provision of the Act, UPPTCL is a deemed transmission licensee. So there is no need for a fresh license for UPPTCL. The Commission however does not agree with the views of UPPTCL. The Act clearly exempts only two deemed licensees viz. the Appropriate Government under the third proviso and the Damodar Valley Corporation under the fourth proviso of section 14 from obtaining a licence.

The Commission therefore directs UPPTCL to obtain the transmission licence.



#### 1.4.2.2 ALLOCATION OF POWER TO THE DISCOMS:

UPPCL in the previous Tariff Order had mentioned that the proposal for allocation of PPAs to DISCOMS is under consideration of GoUP. Also in its response dated 8th October, 2009 UPPCL has submitted that the proposal for allocation of PPAs to DISCOMS is still under consideration of GoUP.

UPPCL has reminded Energy Department, GoUP vide its letter dated 2<sup>nd</sup> June, 2007, 10<sup>th</sup> October, 2008 and 9<sup>th</sup> April, 2009 to expedite the process and has provided the copy of the correspondences and the draft notification alongwith its response.

The Commission directs UPPCL to pursue and expedite the process.

#### 1.4.2.3 TRANSFER SCHEME FOR UPPTCL:

The Commission is concerned that the Transfer Scheme for UPPTCL as submitted by UPPCL / UPPTCL is yet to be approved. In view of this, UPPTCL / UPPCL are directed to get the issue resolved expeditiously.

#### 1.4.2.4 SEPARATE SLDC FUNCTIONING BODY:

As per Section 31 of EA 2003, SLDC functions need to be carried out by a separate / independent body / authority to be established by the State Government. Though proviso (1) of sub-section 2 of Section 31 provides that until such notification by the State Government, STU shall operate SLDC functions, it is mandatory to have an apex body for carrying out separate functions of SLDC. This has become all the more necessary to meet the requirements envisaged under the proposed Renewable Energy Certificate mechanism expected to be in place shortly.

The Commission directs UPPTCL to request State Government to constitute a separate SLDC body which shall have independent functioning.

#### 1.4.2.5 METERING OF CONSUMERS:

During the course of public hearing for the current ARR many consumers requested for proper metering facilities in their premises. This is in tune with the directions of the Commission in earlier Tariff Orders.

The Commission directs UPPCL and the four DISCOMS to take appropriate measures in this regard.



## Chapter 2. PROCEDURAL HISTORY:

### 2.1 ARR & TARIFF PETITION FILING BY THE COMPANIES:

2.1.1 The DISCOMS had submitted their ARR/Tariff petition for FY 2009-10 on 30th July 2009, under section 64 of the Electricity Act, 2003. The provision under the Distribution Tariff Regulations requires the licensees to submit their ARR / Tariff petitions latest by 30th November each year to be made applicable for the subsequent financial year.

2.1.2 In this context, Chairman UPPTCL and the four DISCOMS i.e. Paschimanchal Vidyut Vitran Nigam Ltd., Purvanchal Vidyut Vitran Nigam Limited, Madhyanchal Vidyut Vitran Nigam Limited and Dakshinanchal Vidyut Vitran Nigam Limited had sought time extension up to 10<sup>th</sup> January, 2009. It was mentioned that the directions from Government of Uttar Pradesh (GoUP) regarding tariff and related matters have not yet been received and therefore, in absence of the above information they are unable to design tariff of various categories including rural domestic and Private Tube Wells (PTW). The requested time extension was allowed by the Commission. However, in its order dated 23<sup>rd</sup> December, 2008, the Commission had observed that the licensees could have submitted full cost tariff proposals in absence of any direction from the GoUP regarding subsidy.

Instead of submitting full cost tariff proposals, the licensees again requested for further time extension upto 15<sup>th</sup> February, 2009 citing the same reasons as mentioned above. The Commission granted the requested time extension.

2.1.3 The licensees again requested for time extension up to 31st March, 2009 vide UPPCL letter No. 164/RAU/Tariff Filing/2009-10 dated 19th February, 2009 and upto 31st May, 2009 vide UPPCL letter No. 318/RAU/Tariff Filing/2009-10 dated 4th April 2009 as the directions from GoUP regarding tariff, amount of subsidy and related matters had not yet been received. In the meanwhile, Election Commission of India had announced the time table for Lok Sabha elections and Model Code of Conduct came into force from 3rd March, 2009. In view of this the Commission vide its order dated 15th April, 2009 granted time extension till 31st May, 2009.

The ARR / Tariff petitions for the FY 2009-10, were finally filed by the distribution companies and UP Power Transmission Corporation Limited on 30<sup>th</sup> July 2009 almost eight months from scheduled date of filing as mandated under the Distribution Tariff Regulations.



## **2.2 PRELIMINARY SCRUTINY OF THE PETITIONS:**

2.2.1 Subsequent to receipt of the ARR / Tariff Petitions for the FY 2009 - 10 a preliminary scrutiny of the Petitions was carried out by the Commission. It was observed that certain data required as per Distribution Tariff Regulations had not been furnished with the submissions made by the licensees. Hence a detailed deficiency note was sent to the licensees vide letter No. UPERC/D (SKS)/ARR/Tariff 2009-10/825 dated 1st September, 2009 directing them to provide the required information within 10 days. In response to the deficiency note, the licensees provided vide letter dated 8th October, 2009 some of the critical data required by the Commission for acceptance / admission of the petition.

2.2.2 The Commission also noted that the licensees had not submitted the audited accounts with their petition. The audited accounts are primarily required for the purpose of undertaking the 'true – up' exercise for any given financial year. They serve the limited purpose of recognising the actual performance of the utilities and in permitting / not permitting the 'true – up' for performance variations vis-a'-vis the Tariff Order. The ARR & Tariff determination process on the other hand is based on forecast of number of consumers likely to take supply, expected quantum of energy required to meet the demand, anticipated load etc. and requires accounts / information as per Regulatory provisions. Further, the characteristic of power sector business is such that more often than not the Regulatory Commissions would have to deal with insufficient / inaccurate information on various factors and base the tariff order on judgemental prognosis adopting a balanced approach in addressing interests of both the consumers and the licensees.

The licensees are already reeling under tremendous financial pressure on account of various factors including increase in Employee Cost, Administrative Costs, R&M Costs and cost of Raw Materials etc. While the licensees should not be allowed to recover any additional costs on account of inefficiencies, they should be allowed to recover the legitimate increase in costs through tariff revision as deemed necessary. As such delay in submission of audited accounts should not lead to stoppage of the process of ARR & Tariff determination.

2.2.3 The Commission vide its letter No. UPERC/ D(SKS) /ARR /Tariff 2009-10 / 825 dated 1st September, 2009 directed the utilities to submit the audited / provisional accounts for the past years.



In response to the same, the DISCOMS submitted the audited accounts for FY 2005-06 and provisional / unaudited accounts from FY 2006-07 to FY 2008 - 09 and UPPTCL has submitted provisional/unaudited accounts for FY 2008 - 09.

- 2.2.4 Accordingly, the Commission has not undertaken true-up process. For this very reason the Commission has been again and again seeking the audited annual accounts from the licensees. The final approval of actual expenses will be undertaken at the time of truing up process.
- 2.2.5 The Commission once again directs the licensees (DISCOMS/TRANSCO) to ensure finalisation of audited accounts for the past years at the earliest and for the future years within a reasonable time frame. Further, the licensees (DISCOMS/TRANSCO) are also directed to ensure that the annual accounts are submitted along with the next ARR / Tariff filing by the licensees to enable true up process to be undertaken.
- 2.2.6 The Commission would also like to mention here that Hon'ble High Court of Judicature at Allahabad in the matter regarding finalisation of ARR/Tariff proposals of Distribution Companies for the financial year 2009-10 in WRIT-C No. 12752 of 2010 dated 30.3.2010 has stated that, "*Commission may consider the representation of the petitioner and take steps in accordance with the Act and Regulations*". With respect to this, the Commission in exercise of power vested under Section 61, 62, 64 and 86 of the Electricity Act, 2003 has determined this ARR/ Tariff in accordance with the Act and Regulations after taking into consideration the views/ comments/ suggestions/ objections/ representations received from various stakeholders.

### **2.3 INTERACTION WITH THE PETITIONERS:**

- 2.3.1 Subsequent to the admission of the petition a series of written & oral interactions were held with the petitioners wherein additional information / clarifications were sought. The Commission held a meeting with UPPCL / Licensees in its office on 23rd October, 2009 to hear their case. Therein UPPTCL presented a revised ARR / Tariff proposal for FY 2009 - 10. Compared to the first petition this had significant changes in the cost estimates. Moreover, the Commission found certain other shortcomings in the data submitted and in the presentation made by the licensees. Hence the Commission served another deficiency note vide letter No. UPERC / Secy / ARR / Tariff 09-10 / 1092 dated 23rd October, 2009 directing the licensees to provide the required information within 7 days. The Commission also directed UPPTCL to submit a revised ARR /



Tariff Petition for consideration of admittance by the Commission. Thereafter, the DISCOMS vide letter dated 6th November, 2009 furnished most of the data as required by the Commission. However, UPPTCL informed that it shall be submitting the revised ARR & Tariff Petition for FY 2009 - 10 separately in due course of time.

2.3.2 The Commission while admitting the ARR / Tariff petition of the DISCOMS directed UPPTCL on 10<sup>th</sup> November, 2009 to submit its revised ARR / Tariff petition within 15 days. Further, the Commission clarified that on receipt of the revised ARR / Tariff petition of UPPTCL, it shall issue a separate admittance order for UPPTCL and shall capture the impact of the revised ARR / Tariff petition of UPPTCL on the ARR / Tariff Petition of the distribution companies at the time of issue of the Tariff Orders for the Distribution Licensees. Thereafter, as directed, UPPTCL submitted its revised ARR / Tariff petition on 1<sup>st</sup> December, 2009.

2.3.3 The Commission on scrutiny of the revised petition of UPPTCL found certain shortcomings in the revised petition and accordingly convened a meeting with the representatives of UPPCL / UPPTCL in UPPCL's office in Lucknow on 8th December, 2009. Subsequently UPPCL / UPPTCL submitted their detailed response to the Commission on 9th December, 2009.

## **2.4 ADMITTANCE OF ARR / TARIFF PETITION OF THE LICENSEES FOR FY 2009-10:**

2.4.1 Notwithstanding the fact that the structure of UP Power Sector is still not completely in line with the spirit of the Act, the Commission in the larger interest of consumers as well as licensees and to honour its commitment to abide by the major statutory obligation of tariff determination cast upon it by EA 2003 admitted the petitions filed by the licensees.

2.4.2 The Commission admitted the ARR / Tariff Petitions of the four distribution licensees on 10<sup>th</sup> November, 2009. Thereafter, the Commission admitted the revised petition submitted by UPPTCL for further processing on 11<sup>th</sup> December, 2009.

2.4.3 The Commission through its admittance orders dated 10<sup>th</sup> November, 2009 & 11<sup>th</sup> December, 2009 for UPPCL & UPPTCL respectively, directed the licensees to publish the Public Notice detailing the salient information and facts of the ARR petitions for FY 2009-10 in at least two daily newspapers (one English and one Hindi) for two successive days for inviting comments / objections / suggestions by all stakeholders and public at large within 3 days from the issue of this order.



## 2.5 PUBLICITY OF THE PETITION:

2.5.1 The Public Notice detailing the salient information and facts of the ARR petitions appeared in various Hindi & English language daily newspapers as detailed below:

a) By UPPCL on behalf of all DISCOMS

- Hindustan : 13.11.2009
- Hindustan Times : 14.11.2009

b) By UPPTCL

- Hindustan Times : 18.12.2009
- Amar Ujala : 18.12.2009
- Indian Express : 19.12.2009
- Rashtriya Sahara : 19.12.2009

## 2.6 PUBLIC HEARING PROCESS:

The Commission invited comments / suggestions from consumers and all other stakeholders on the ARR & Tariff proposals of the licensees. To provide an opportunity to all sections of the population in the State and to obtain feedback from them public hearings were held by the Commission at various places in the State. Consumer representatives, industry associations and other individual consumers participated actively in the public hearing process.

The place and date of the public hearings held is given below.

- ❖ Jhansi : 23.11.2009
- ❖ Allahabad : 26.11.2009
- ❖ Greater NOIDA : 19.12.2009
- ❖ NOIDA : 19.12.2009
- ❖ Saharanpur : 20.12.2009
- ❖ Lucknow : 22.12.2009
- ❖ Kanpur : 23.12.2009

## 2.7 STATE ADVISORY COMMITTEE:

2.7.1 Thereafter, the Commission convened a meeting of the State Advisory Committee on 22<sup>nd</sup> February, 2010 and discussed issues related with ARR / Tariff proposal filed for FY 2009-10. The members of the State Advisory Committee deliberated upon the issues and offered valuable comments / suggestions which have been taken into consideration and suitably incorporated while finalizing this Tariff Order.





## Chapter 3. SUMMARY OF THE ARR AND TARIFF PETITIONS:

### 3.1 ANNUAL REVENUE REQUIREMENT AND TARIFF PETITIONS:

3.1.1 This chapter describes the proposal contained in the Annual Revenue Requirement (ARR) and Tariff petitions for FY 2009 - 10 as filed by the four distribution companies (DISCOMS) namely, Dakshinanchal Vidyut Vitaran Nigam Limited (Agra DISCOM), Madhyanchal Vidyut Vitaran Nigam Limited (Lucknow DISCOM), Pashchimanchal Vidyut Vitaran Nigam Limited (Meerut DISCOM) and Purvanchal Vidyut Vitaran Nigam Limited (Varanasi DISCOM) and the transmission company (TRANSCO) Uttar Pradesh Power Transmission Corporation Limited (UPPTCL); also collectively referred to as 'the licencees'.

3.1.2 The information presented in this chapter is merely a reproduction of the details given in the ARR & Tariff petitions submitted by the licensees and the details furnished by them in subsequent submissions without removing any inconsistencies or contradictions that may appear apparent therein. This chapter provides the summary of the petitions filed by the DISCOMS and TRANSCO.

3.1.3 The analysis of the petitions and the 'expenditure head wise' ARR & Tariff approved by the Commission is presented in **Chapters 5 and 6**.

### 3.2 ARR & TARIFF PETITIONS OF DISCOMS:

3.2.1 The ARR & Tariff petitions of the DISCOMS are structured as follows:

- Background;
- Performance Review for FY 2007-08 & FY 2008-09.
- Load Forecast and Revenue Assessment.
- ARR for Wheeling & Retail Supply Business for FY 2009-10.
- Proposed Bulk Supply Tariff for FY 2009-10.
- Tariff Design.
- Proposal for meeting the revenue gap.

3.2.2 This chapter also highlights the following elements:

- Review of UPERC Tariff order FY 2007-08 & FY 2008-09.
- Efficiency improvement plans.
- Summary of compliance of Commission's directives by UPPCL & DISCOMS.
- Forecast of Retail Sales and Revenue Assessment.
- ARR Summary.



### 3.3 TREATMENT OF REVENUE GAP:

3.3.1 In their ARR & Tariff petitions for FY 2009 - 10 the licencees have projected a consolidated revenue gap of **Rs. 7895 cr.** The tariff proposals submitted to bridge the gap are as outlined in **TABLE 3-1** below:

**TABLE 3-1: DETAILS OF REVENUE GAP FOR FY 2009-10: (DISCOMS & UPPTCL)**

Particulars	Amount (Rs. Cr)
Total Consolidated Revenue Gap for FY 2009 - 10	<b>9727</b>
GoUP Subsidy	1832
Revenue Gap after considering subsidy	<b>7895</b>
Proposed Sources to meet the Revenue Gap:	
a) Revenue from proposed tariff Increase	2549
b) Additional subsidy from Government of UP / Loan from Bank & Financial Institutions	5346
<b>Total Amount proposed to meet Revenue Gap (a + b)</b>	<b>7895</b>

3.3.2 The details of GoUP subsidy commitments are as given in **TABLE 3-2** below:

**TABLE 3-2: SUBSIDY COMMITMENT BY GoUP FOR FY 2009-10**

S.N	Letter Date	Letter Reference	Particulars of Subsidy Support	Amount (Rs. Cr)
1	09.04.09	1129 (1)/24-1-2009	Revenue Subsidy Sanctioned	1341.80
2	13.05.09	1506 (1) /24-1-2009	Revenue Subsidy – Disbursement Schedule	
3	19.06.09	1802 (1) /24-1-2009	Adjustment of Electricity Duty	250
4	24.04.09	1469 (1) /12-2-2009	Subsidy for Private Tube Wells	240
<b>TOTAL SUBSIDY</b>				<b>1831.80</b>

Remarks:

1. Revenue Subsidy paid in April '09 & May '09 is Rs. 132 Cr. & Rs. 110 Cr. respectively. Balance to be paid in five equal instalments of Rs.220 Cr. During the period from June '09 to Oct '09.
2. Electricity Duty to be adjusted in ten equal instalments.
3. Subsidy for Private Tube Wells to be adjusted in 12 equal instalments.

3.3.3 UPPCL, in their submission dated 08.10.2009 furnished letter nos. 1707/24 -1-2009-54P/02 TC-5 dated 23.05.2009 and 2831/24-1-2009-1836 (Guarantee) / 2009 dated 02.09.2009 for Rs.800 Cr and Rs. 2000 Cr respectively against the commitment of GoUP towards Loan / Revolving Bank Guarantee.



3.3.4 UPPCL in their letter dated 08.10.2009 has also mentioned that a request will be made to the GoUP to provide additional Government Guarantee of Rs.2500 Cr to bridge the revenue gap of **Rs.5887 Cr.**

3.3.5 Further, UPPCL has requested GoUP for additional subsidy for the period April 2009 to August 2009 as per details given in **TABLE 3-3** below:

**TABLE 3-3: DETAILS OF ADDITIONAL SUBSIDY CLAIM BY UPPCL FOR FY 2009-10**

S.No	Letter dt	Claim for the month	Sales on Rural Feeders (MUs)	Billing @ Rs.5.10/kWh Avg CoS (Rs.Crs)	Actual Billing at Subsidised rate (Rs.Crs)	Committed Subsidy (Rs.Crs)	Additional Claim (Rs.Crs) *
1	16.6.2009	April 2009	1,684	858.83	264.48	152.65	441.70
2	17.7.2009	May 2009	1,492	761.07	240.89	152.65	367.53
3	22.8.2009	June 2009	1,622	826.99	237.47	152.65	436.87
4	16.10.09	July 2009	1,600	816.14	249.80	152.65	413.69
5	16.10.09	August 09	1,649	841.05	273.24	152.65	415.16
				<b>4,104.08</b>		<b>763.25</b>	<b>2,074.95</b>

\* The cumulative amount shown in letters is **Rs.2074.44 Cr**

### 3.4 PERFORMANCE REVIEW FOR FY 2007-08 & FY 2008-09:

3.4.1 This section compares the performance of the licensees' vis-à-vis the targets set in the Tariff Orders approved for FY 2007 - 08 & FY 2008 - 09 and issued on 15.04.2008. The performance data for FY 2007 - 08 & FY 2008 - 09 have been considered from the data contained in the tariff petition for FY 2009 - 10. The data for all the four DISCOMS has been considered on consolidated basis. Corresponding data for individual DISCOMS, wherever provided, is given in the respective Annexures relevant to the data.

#### 3.4.2 ENERGY SALES:

The actual energy sales figures for FY 2007 - 08 & FY 2008 - 09 are lower than the figures approved by the Commission in the Tariff Order for the corresponding periods by **11% & 7%** respectively as shown in **TABLE 3-4** below:



**TABLE 3-4: ENERGY SALES FY 2007-08 & FY 2008-09 (MUs)**

Consumer Categories	FY 2007-08			FY 2008-09		
	As per Tariff Order	Actual Unaudited	Difference	As per Tariff Order	Provisional	Difference
LMV 1:Domestic	15850	13449	2,401	16608	14,511	2,097
LMV 2:Commercial	3043	2601	442	3144	2,650	495
LMV 3:Public Lamps	442	422	20	446	512	-67
LMV 4:Public Institutions	1795	1461	334	1912	1,349	563
LMV 5:Private Tubewells	4531	4317	213	4496	4,654	-158
LMV 6:Small & Medium Power	1975	1866	108	1990	2,104	-114
LMV 7: Public Water Works	873	741	132	903	787	117
LMV 8:State Tubewells	1789	1311	478	1798	1,586	212
LMV 9:Temporary Supply	74	40	34	77	42	35
LMV10:Employees & Pensioners	144	149	-6	145	379	-233
HV 2:Large & Heavy Power	6775	6431	344	7048	7,459	-411
HV 3:Railway Traction	754	653	101	734	614	121
HV 4:Lift Irrigation Works	665	558	107	682	602	80
<b>Sub Total</b>	<b>38708</b>	<b>34000</b>	<b>4,708</b>	<b>39985</b>	<b>37,247</b>	<b>2,738</b>
Extra State & Bulk	<b>3037</b>	3096	-60	<b>3167</b>	3,010	157
<b>Total</b>	<b>41745</b>	<b>37097</b>	<b>4,648</b>	<b>43152</b>	<b>40,258</b>	<b>2,895</b>
<b>% age difference</b>			<b>11.1%</b>			<b>6.7%</b>

\* This table doesn't contain data for HV-1 category as DISCOMS were unable to create this category till the end of FY 2008-09. However, the DISCOMS submitted sales data for first six months of FY 2009-10 as additional information.

3.4.3 The average supply hours from feeders supplying to various areas was 12.8 hours & 11.4 hours in FY 2007-08 & FY 2008-09 respectively.

#### 3.4.4 EXPENDITURE:

The total expenditure (ARR) for FY 2007 - 08 & FY 2008 - 09 vis-à-vis the approved figures shows a reduction of **6.9%** in FY 2007 - 08 & an increase of **8.7%** in FY 2008 - 09 as given in **TABLE 3-5** below:

The DISCOM-wise comparison for FY 2007-08 & FY 2008-09 is given in **ANNEXURE - I**.



**TABLE 3-5: ARR COMPARISON FOR FY 2007-08 & FY 2008-09 - (Rs. Cr)**

ARR Comparison For FY 2007-08 & FY 2008-09 - Consolidated Discom						
Particulars	FY 2007-08 Tariff Order	FY 2007-08 (Actual) (Unaudited)	Difference	FY 2008-09 Tariff Order	FY 2008-09 (Provisional)	Difference
Power Purchase Cost	12,676	11,824	853	13,686	14,560	(874)
Transmission Charges	1,025	636	389	1,127	590	538
Employee Costs	811	778	32	867	902	(35)
Admin & General Expenses	112	102	10	120	121	(1)
Repair & Maintenance Expense	248	340	(91)	265	442	(177)
Provision for Bad Debts	-	66	(66)	-	138	(138)
Depreciation Expense	942	646	296	1,062	861	202
Interest and Finance Charges	724	668	56	719	1,221	(502)
Less: Capitalised Expenses	208	255	(48)	236	238	(3)
<b>Total</b>	<b>16,332</b>	<b>14,805</b>	<b>1,527</b>	<b>17,611</b>	<b>18,596</b>	<b>(985)</b>

#### 3.4.5 TRUE-UP PROCESS:

The licensees in their petition have not submitted the audited accounts for the past years; however in the subsequent data gaps submission vide dated 8<sup>th</sup> October 2009 and dated 6<sup>th</sup> November 2009, UPPCL has provided provisional annual accounts for FY 2006-07 to FY 2008-09 for four DISCOMS and provisional accounts for TRANSCO for FY 2008-09. Further licensees in their petitions have neither claimed / requested for any true-up of the past years in line with Tariff Regulations. In view of the same, the Commission has not undertaken the exercise of true-up for the past years in the present order.

#### 3.5 EFFICIENCY IMPROVEMENT PLANS:

3.5.1 The DISCOMS have submitted that concerted efforts have been made by them to bring the AT&C losses to the desired levels and to increase revenue realization through various initiatives which have been discussed in subsequent paragraphs.

#### 3.5.2 DISTRIBUTION LOSSES:

The DISCOMS have stated that with all out efforts they have been able to restrict the overall T&D losses for the FY 2008 - 09 to 24 % against the target of 23.4 % set by the Commission.

3.5.3 The DISCOMS on consolidated basis have set a target of reduction in loss level by 1.7% (24% in FY 2008-09 to 22.32% projected for FY 2009-10) for FY 2009-10.

3.5.4 The DISCOMS losses are based on energy received by them from UPPTCL. Out of the energy received the DISCOMS supply power to Bulk Consumers.



### 3.5.5 COLLECTION EFFICIENCY:

The DISCOMS have submitted collection efficiency targets for FY 2009 – 10 as given in **Table 3-6** below:

**TABLE 3-6: COLLECTION EFFICIENCY TARGET (IN %)**

Discoms	FY 2007-08	FY 2008-09	FY 2009-10
	Actual Unaudited	Provisional	Projected
Meerut Discom	97%	94%	98%
AgraDiscom	81%	82%	92%
Lucknow Discom	85%	86%	96%
Varanasi Discom	70%	74%	95%

3.5.6 The DISCOMS have also enumerated the efficiency improvement activities being undertaken:

- a) Introduced collection based franchisee system for rural areas and input based franchisee system for urban areas to increase revenue collection.
- b) Undertaken double metering system for proper accounting of energy & reducing chances of theft.
- c) Established a Call Centre in Lucknow and has set up Control Rooms in all major cities & DISCOM HQ for speedy redressal of consumer grievances.
- d) Taken up the replacement of overhead conductors with Arial Bunch Conductors.
- e) Undertaken Special Drives for detecting theft of energy/unauthorized use of electricity and checking of excess load.
- f) Special camps being organized to collect bill amount from the consumers and to solve their problems on the spot.
- g) Regularization of illegal connections and documentation of connections being monitored.
- h) Surprise inspections being conducted by Special Vigilance teams comprising of the licensee's officials and police personnel to detect theft of energy / unauthorised connections.
- i) Regular monitoring of the NA/NR/IDF/ADF meters and replacement of defective meters being done.
- j) Efforts being made to install meters on distribution transformers.
- k) Hand held billing, disconnection and reconnection activities outsourced.
- l) Replacement of over head cables with buried cables being done.
- m) System improvement being implemented through APDRP schemes.



### **3.6 SUMMARY OF COMPLIANCE WITH COMMISSION'S DIRECTIVES:**

3.6.1 DISCOMS & UPPTCL in their ARR / Tariff petitions for FY 2009-10 have submitted that they have complied majority of the directives issued by the Commission. Report on compliance with rest of the directives shall be submitted along with the filing of the next ARR & Tariff petition. The compliance status on the directives issued is provided in **ANNEXURE – XVI**.

### **3.7 LOAD FORECAST AND REVENUE ASSESSMENT FOR FY 2009-10:**

3.7.1 The methodology used for load forecast and revenue assessment is described as under:

- For each distribution division, a forecast of number of customers in each of the tariff sub-categories is prepared based on the available population data, the proposed rural electrification program, the expected conversion of unauthorized connections and connected load factor and number of category specific growth factors.
- Sub-category wise specific consumption level is then forecast based on expected growth in incomes and prices, effect of demand side management and impact of extended hours of service.
- The specific consumption level and the number of customers in each sub-category are used to arrive at the sales figure for that particular sub-category.
- Connected load is estimated for each of the tariff sub-category.
- The division level forecasts are then aggregated to arrive at zone-wise forecasts. Aggregated zone-wise forecasts yield forecasts for various DISCOMS which are further aggregated to arrive at consolidated DISCOMS forecast.
- Bulk sales are then added to the consolidated DISCOMS forecast.
- Technical and commercial losses are added to the sales estimates to determine energy required at the generating end.

3.7.2 To meet the requirement of uniform state-wide tariffs, the sales forecast is computed and consolidated for all DISCOMS. Forecast for each DISCOM is computed separately using DISCOM - specific base data. The main drivers / assumptions used for the forecast are:

a) **GROSS DOMESTIC PRODUCT (GDP) :**

The GDP structure for U.P., based on historical data, for FY 2009-10 has been considered as 40% for agriculture, 45% for commercial/services and 15% for industry. It is assumed that the UP agriculture sector will grow at an annual rate of **5.2%** in FY 2009 - 10. This is slightly lower than UP's five-year plan target but higher than the historical average. Corresponding growth rates for



the commercial / services sector is estimated to be **5.5%** in FY 2009 - 10. However, keeping in view the vast difference in the industrial sales growth rate of Meerut and Agra DISCOMS; higher industrial GDP growth rate has been considered for them as compared to **8%** considered for the other DISCOMS.

**b) POPULATION:**

It is assumed that urban and rural population growth will follow historical pattern. For each DISCOM urban and rural population growth rates are estimated based on 1991 and 2001 Census data. These ten - year growth rates are applied to relevant consumer data given in FY 2008 - 09 to project consumer growth for FY 2009 - 10.

**c) RURAL AND URBAN SUPPLY HOURS :**

It is assumed that the average daily supply in rural areas will be 14 hours in FY 2009 - 10. Variations in urban supply hours are also introduced in the forecast. The average daily supply for Tehsil towns is estimated at 14 hours, for District towns 16 hours, for Commissionaires 20 hours and for Mahanagars 22 hours.

**d) RURAL ELECTRIFICATION:**

The DISCOM wise rural electrification program considered in the forecast is as given in **TABLE 3-7** below:

**TABLE 3-7: DISCOM-WISE RURAL ELECTRIFICATION PROGRAM (No. of Villages)**

S.No	Discom	FY 2009-10 (Projection)
1	Meerut Discom	496
2	Agra Discom	771
3	Lucknow Discom	1096
4	Varanasi Discom	1171
	<b>TOTAL</b>	<b>3534</b>

3.7.3 The DISCOMS have stated that for FY 2007-08; the detailed divisional CS3(Commercial reporting format of DISCOMS) reports are reconciled and "normalized" for unmetered categories as per the following consumption norms established in UPPCL order No.2649-CUR/L, dated 20-07-2001 and given in the **TABLE 3-8** below:





**TABLE 3-8: CONSUMPTION NORMS FOR UN-METERED CATEGORIES**

S. N	Category of Un-metered Consumer	Consumption of Energy per month
1	Private Tube Well	68.38 kWh/BHP or 91.66 kWh/KW
2	Domestic Rural Consumers	72 kWh/Kw
3	Rural Commercial Consumers	72 kWh/kW
4	Rural State Tube Well	3562.35/kWh/Pump
5	Street Light – Rural Area	300 kWh/kW/Month
	Street Light – Urban Area	360 kWh/kW/Month

3.7.4 The “normalization” is done in order to:

- Ensure that year end number of customers, connected load and energy sales in MU are consistent with the reported consolidated CS3/CS4 (Commercial reporting formats of DISCOMS) sales by major tariff category level;
- Adjust the number of customers and connected load to represent annual averages in order to estimate the expected annual tariff revenues;
- Adjust the consumption of un-metered consumer categories in accordance with the adopted norms.

Two other databases have been used to supplement CS3 data are:

- The billing agent database; and
- The large customer database.

3.7.5 The Commission has tabulated the energy sales of all the DISCOMS for FY 2007 – 08, FY 2008 - 09 and the sales projections for FY 2009 - 10 in the **Table 3-9** below. The DISCOM wise Sales Comparison vis-a-vis’ approved numbers of FY 2007 - 08 & FY 2008 - 09 is being submitted in **ANNEXURE – II**.



**TABLE 3-9: ENERGY SALES FOR FY 2007-08 , FY 2008-09 & FY 2009-10**

Consolidated Discoms	Units Sold (MU)				
	FY 2007-08	FY 2007-08	FY 2008-09	FY 2008-09	FY 2009-10
	Tariff Order	Actual Unaudited	Tariff Order	Provisional	Projected
LMV 1:Domestic	15,850	13,449	16,608	14,511	15,263
LMV 2:Commercial	3,043	2,601	3,144	2,650	2,875
LMV 3:Public Lamps	442	422	446	512	574
LMV 4:Public Institutions	1,795	1,461	1,912	1,349	1,362
LMV 5:Private Tubewells	4,531	4,317	4,496	4,654	4,840
LMV 6:Small & Medium	1,975	1,866	1,990	2,104	2,209
LMV 7: Public Water Works	873	741	903	787	822
LMV 8:State Tubewells	1,789	1,311	1,798	1,586	1,581
LMV 9: Temporary Supply	74	40	77	42	53
LMV10:Employees &	144	149	145	379	385
HV 2:Large & Heavy Power	6,775	6,431	7,048	7,459	7,854
HV 3:Railway Traction	754	653	734	614	634
HV 4:Lift Irrigation Works	665	558	682	602	614
<b>Sub Total</b>	<b>38,708</b>	<b>34,000</b>	<b>39,985</b>	<b>37,247</b>	<b>39,067</b>
Extra State & Bulk	3,037	3,096	3,167	3,010	3,146
<b>Total</b>	<b>41,745</b>	<b>37,097</b>	<b>43,152</b>	<b>40,258</b>	<b>42,214</b>

\* This table doesn't contain data for HV-1 category as DISCOMS were unable to create this category till the end of FY 2008-09. However, the DISCOMS submitted sales data for first six months of FY 2009-10 as additional information.

Further, the category - wise tabulation of the annual average consumers, connected load and year end retail sales on a consolidated basis and DISCOM - wise for FY 2007 - 08, FY 2008 - 09 and FY 2009 - 10 is given in **ANNEXURE – III**

3.7.6 The DISCOMS have stated that the DISCOM wise T&D loss targets discussed earlier are applied to the corresponding sales forecasts of the respective DISCOMS to arrive at the estimated energy to be delivered by UPPCL. The energy received by DISCOMS at Transmission & Distribution Interface is enhanced by 4% Intra State Transmission loss to arrive at energy to be purchased by UPPCL at UP State's transmission periphery.

3.7.7 Based on the above, the energy balance for the DISCOMS as projected in the petition is given in the **Table 3-10** below:



**TABLE 3-10: ENERGY BALANCE FOR DISCOMS**

Particulars		FY 2007-08 (Actual) (Unaudited)	FY 2008-09 Provisional	FY 2009-10 (Projected)
Purchase Required (MU) - UP State Periphery	A	53,708	55,049	56,609
Energy Received by Discom. (MU) - (Transmission-Distribution Interface)	B	51,493	52,779	54,345
Intra-State Transmission Losses (%)	C = 1-B/A	4.12%	4.12%	4.00%
Sales (MU)	D	37,097	40,258	42,214
Distribution Losses (% of Energy Received)	E = 1-D/B	27.96%	23.72%	22.32%

3.7.8 The DISCOM wise Energy Balance is attached as **ANNEXURE –V**. However the total quantum to be purchased by DISCOMS including Inter-State Transmission Loss i.e. PGCIL losses is 57800 MUs for FY 2009 - 10. The same is arrived by UPPCL considering weighted average loss of 2.06 % i.e.  $(57800-56609)/57800$  %).

3.7.9 The sales forecast described above combined with billing determinant (i.e. number of consumers, connected load, units sold) information is used for assessment revenue for FY 2007-08 and FY 2008-09 and projected revenue for FY 2009-10.

3.7.10 The assessment revenue for FY 2007-08 is derived from weighted average tariff effective from dated 1<sup>st</sup> December, 2004 (4.4 month), dated 13<sup>th</sup> August, 2007 (2.9 month) and dated 11<sup>th</sup> November, 2007 (4.7 month) from UPERC Tariff Order FY 2004-05, TO FY 2006-07 and TO 2007-08.

3.7.11 Further, estimated revenue for FY 2008-09 is derived from the weighted average tariff effective from 11.11.2007 (1.0 month) and 27.04.2008 (11.0 month) from UPERC Tariff Orders for FY 2007 - 08 and FY 2008 - 09.

3.7.12 The assessment revenue, sales & through rate for FY 2007-08 and FY 2008 – 09 is given below in **TABLE 3-11** and **TABLE 3-12** respectively.



**TABLE 3-11: ASSESSMENT REVENUE, SALES & THROUGH RATE FOR FY 2007-08**

Consumer Category	Assessment Revenue (Rs. Crores)				Electricity Sales	Through Rate
	1/12/2004	13/08/2007	11/11/2007	Aggregated	MU	Rs./kWh
LMV-1: Domestic Light, Fan & Power	<b>2490</b>	<b>2530</b>	<b>2530</b>	<b>2516</b>	<b>13449</b>	<b>1.87</b>
(a) Consumer getting supply as per "Rural Schedule"	632	632	632	632	6132	1.03
(b) Supply at Single Point for Bulk Loads	52	52	52	52	166	3.15
(c) Other Metered Domestic Consumers	1806	1845	1845	1830	7145	2.56
(d) Life Line Consumers	0	1	1	1	5	1.76
LMV-2: Non Domestic Light, Fan & Power	<b>969</b>	<b>964</b>	<b>985</b>	<b>974</b>	<b>2601</b>	<b>3.75</b>
(a) Non-Domestic (Rural)	72	71	77	74	498	1.48
(b) Non-Domestic (Urban Metered)	897	894	908	901	2103	4.28
LMV-3: Public Lamps	113	146	113	121	422	2.87
LMV-4: Institutions	520	489	495	502	1461	3.44
LMV-5: Private Tube Wells	476	476	476	476	4317	1.10
LMV 6: Small and Medium Power	738	746	758	747	1866	4.01
(a) Small and Medium Power for Power	47	52	55	51	420	1.21
(b) Small and Medium Power	691	694	703	696	1446	4.82
LMV-7: Public Water Works	283	234	235	252	741	3.41
LMV-8: State Tubewells and Pumped	380	272	277	314	1311	2.39
LMV-9: Temporary Supply	18	18	18	18	40	4.43
LMV-10: Departmental Employees and	23	24	25	24	149	1.61
HV-2: Large and Heavy Power	2909	2776	2821	2842	6431	4.42
HV-3: Railway Traction	259	250	258	256	653	3.92
HV-4: Lift Irrigation Works	216	212	223	218	558	3.90
<b>Sub Total</b>	<b>9392</b>	<b>9138</b>	<b>9214</b>	<b>9261</b>	<b>34000</b>	<b>2.72</b>
Bulk & Extra State	696	696	696	696	3096	2.25
<b>Total</b>	<b>10089</b>	<b>9834</b>	<b>9910</b>	<b>9957</b>	<b>37097</b>	<b>2.68</b>



**TABLE 3-12: ASSESSMENT REVENUE, SALES & THROUGH RATE FOR FY 2008-09**

Consumer Category	Assessment Revenue (Rs. Crores)			Electricity Sales	Through Rate
	11/11/2007	27/04/2008	Aggregated	MU	Rs./kWh
LMV-1: Domestic Light, Fan & Power	<b>2434</b>	<b>2974</b>	<b>2935</b>	<b>14511</b>	<b>2.02</b>
(a) Consumer getting supply as per "Rural Schedule"	686	686	686	6417	1.07
(b) Supply at Single Point for Bulk Loads	104	103	103	317	3.24
(c) Other Metered Domestic Consumers	1640	2180	2141	7757	2.76
(d) Life Line Consumers	4	5	5	20	2.43
LMV-2: Non Domestic Light, Fan & Power	<b>1005</b>	<b>1082</b>	<b>1077</b>	<b>2650</b>	<b>4.06</b>
(a) Non-Domestic (Rural)	111	142	140	733	1.91
(b) Non-Domestic (Urban Metered)	895	941	937	1917	4.89
LMV-3: Public Lamps	104	167	162	512	3.17
LMV-4: Institutions	373	491	483	1349	3.58
LMV-5: Private Tube Wells	509	509	509	4654	1.09
LMV 6: Small and Medium Power	603	840	823	2104	3.91
(a) Small and Medium Power for Power Loom	98	156	151	540	2.80
(b) Small and Medium Power	505	684	671	1564	4.29
LMV-7: Public Water Works	215	250	247	787	3.14
LMV-8: State Tubewells and Pumped Canals	229	459	442	1586	2.79
LMV-9: Temporary Supply	3	18	17	42	4.01
LMV-10: Departmental Employees and Pensioners	38	46	46	379	1.20
HV-2: Large and Heavy Power	3187	3486	3465	7459	4.64
HV-3: Railway Traction	240	241	241	614	3.93
HV-4: Lift Irrigation Works	182	199	198	602	3.29
<b>Sub Total</b>	<b>9122</b>	<b>10763</b>	<b>10645</b>	<b>37247</b>	<b>2.86</b>
Bulk & Extra State	810	810	810	3010	2.69
<b>Total</b>	<b>9932</b>	<b>11573</b>	<b>11454</b>	<b>40258</b>	<b>2.85</b>

\* This table doesn't contain data for HV-1 category as DISCOMS were unable to create this category till the end of FY 2008-09. However, the DISCOMS submitted sales data for first six months of FY 2009-10 as additional information.

3.7.13 Meanwhile, projected revenue for FY 2009-10, is derived on the basis of current Tariff as given in UPERC Tariff Order FY 2008-09. The projected revenue for the FY 2009-10 is given in **TABLE 3-13** below:



**TABLE 3-13: ASSESSMENT REVENUE, SALES & THROUGH RATE FOR FY 2009-10**

Consumer Category	Assessment Revenue	Electricity Sales	Through Rate
	Rs Cr	MU	Rs./kWh
LMV-1: Domestic Light, Fan & Power	<b>3175</b>	<b>15263</b>	<b>2.08</b>
<i>Schedule"</i>	687	6584	1.04
<i>(b) Supply at Single Point for Bulk Loads</i>	138	475	2.90
<i>(c) Other Metered Domestic Consumers</i>	2342	8162	2.87
<i>(d) Life Line Consumers</i>	9	42	2.04
LMV-2: Non Domestic Light, Fan & Power	<b>1134</b>	<b>2875</b>	<b>3.94</b>
<i>(a) Non-Domestic (Rural)</i>	173	921	1.88
<i>(b) Non-Domestic (Urban Metered)</i>	961	1953	4.92
LMV-3: Public Lamps	<b>189</b>	<b>574</b>	<b>3.30</b>
LMV-4: Insitutions	<b>492</b>	<b>1362</b>	<b>3.61</b>
LMV-5: Private Tube Wells	<b>534</b>	<b>4840</b>	<b>1.10</b>
LMV 6: Small and Medium Power	<b>907</b>	<b>2209</b>	<b>4.11</b>
<i>(a) Small and Medium Power for Power Loom</i>	118	585	2.02
<i>(b) Small and Medium Power</i>	789	1624	4.86
LMV-7: Public Water Works	<b>260</b>	<b>822</b>	<b>3.16</b>
LMV-8: State Tubewells and Pumped Canals	<b>506</b>	<b>1581</b>	<b>3.20</b>
LMV-9: Temporary Supply	<b>36</b>	<b>53</b>	<b>6.81</b>
LMV-10: Departmental Employees and Pensioners	<b>48</b>	<b>385</b>	<b>1.26</b>
HV-2: Large and Heavy Power	<b>3693</b>	<b>7854</b>	<b>4.70</b>
HV-3: Railway Traction	<b>250</b>	<b>634</b>	<b>3.94</b>
HV-4: Lift Irrigation Works	<b>201</b>	<b>614</b>	<b>3.27</b>
<b>Sub Total</b>	<b>11425</b>	<b>39067</b>	<b>2.92</b>
Bulk & Extra State	<b>846</b>	<b>3146</b>	<b>2.69</b>
<b>Total</b>	<b>12271</b>	<b>42214</b>	<b>2.91</b>

Note: This table doesn't contain data for HV-1 category as DISCOMS were unable to create this category till the end of FY 2008-09. However, the DISCOMS submitted sales data for first six months of FY 2009-10 as additional information.

### 3.8 ARR FOR WHEELING & RETAIL SUPPLY BUSINESS FOR FY 2009-10:

3.8.1 The DISCOMS have submitted that as per the Distribution Tariff Regulations, 2006 issued by the Commission the ARR petition shall indicate separately the Aggregate Revenue Requirement for Wheeling function & Retail Supply function embedded in the Distribution function. Further, till complete segregation of accounts between Wheeling and Retail Supply Business takes place, ARR proposals for Wheeling and Retail Supply Business shall be prepared based on an allocation statement whose preparation shall be left to the best judgement of the distribution licensee. The DISCOMS have adopted the same methodology for deriving wheeling charges as done in the last tariff order as complete segregation of accounts between wheeling and retail supply business has not yet taken place.



3.8.2 The petitioner has submitted that the objective of the petitioner while estimating aggregate revenue requirement has been to reduce or at least control the expenses to the extent possible, thereby reducing cost burden on consumers.

**3.8.3 ARR PROPOSAL FOR FY 2009-10:**

3.8.4 To meet the requirement of uniform state - wide tariff structure the ARR for FY 2009 - 10 is submitted by licensees for each DISCOM as well as on a consolidated basis for all the DISCOMS.

3.8.4.1 Distribution Tariff Regulations state that annual expenditure of distribution licensee comprising following components:-

- Power purchase costs
- Transmission charges
- SLDC charges
- Operation & Maintenance charges
- Depreciation
- Interest & Financing charges
- Bad & Doubtful Debts
- Return on Equity
- Other expenses
- Taxes on Income
- Contribution to Contingency Reserve

3.8.4.2 DISCOMS have estimated the ARR for FY 2009 - 10 based on the provisional un-audited annual Accounts for FY 2007 - 08 and expenses available at the time of filing of petition. In order to put the various estimated amounts in proper context, the corresponding figures for FY 2007 - 08 and various estimates for FY 2008 - 09 & FY 2009 - 10 are based on data available till the time of filing of the petition. Wherever considered appropriate, explanation has been provided for derivation of major accounts heads along with the logic for departing from preceding year values, if applicable.

**3.8.5 POWER PURCHASE COST FOR FY 2009-10:**

3.8.5.1 The DISCOMS have submitted that power purchase has been done ensuring that merit order dispatch is followed and unscheduled interchange (UI) is avoided. Also purchases are currently being optimized on a "short-term" day-to-day and hour-to-hour basis. The current power procurement plan submitted is based on an exercise of merit order dispatch and probabilistic analysis conducted on a monthly basis.

**3.8.5.2 PROJECTED POWER PURCHASE PRICES OF UPRVUNL STATIONS:**



The variable cost of power procured / to be procured by the DISCOMS from these power stations has been proposed for FY 2009-10 based on the January 2009 energy bills. The fixed cost for these stations for the FY 2009-10 has been evaluated on the basis of Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions of Generation Tariff) Regulations, 2009 & UPRVUNL's tariff order for FY 2008-09.

#### 3.8.5.3 PROJECTED POWER PURCHASE PRICES OF UPJVNL STATIONS:

The fixed costs for different Power Stations have been evaluated on the basis of Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions of Generation Tariff) Regulations, 2009 & UPJVNL's tariff order for FY 2008-09. O&M cost as mentioned in the above mentioned Order has been escalated by 10% for FY 2009-10 as provided in the Generation Tariff Regulations and Return on Equity has been grossed up by Corporate Tax Rate of 33.99%. Apart from that separate income tax has been claimed (calculated @ 48.5% of ROE) which along with incentives etc. has been clubbed together as 'Other Fixed Charges'. The variable charges for Sheetla and Belka & Babail Power Station is taken from the UPPCL tariff order for FY 2008-09 dated 15.04.08 and has been escalated it by 6% for FY-2009-10, as provided therein.

#### 3.8.5.4 PROJECTED POWER PURCHASE PRICES FROM CENTRAL SECTOR STATIONS:

The assumptions considered by UPPCL for projecting the cost of power purchase from Central Sector Thermal power stations are detailed out as under:

- Allocated share to UP from various Central Sector Plants is as per NRPC allocation w.e.f. 08.01.09 (Revision No-13/2008-09) issued vide letter no. NRPC/SE (O)/Allocations/2008-09.
- The variable costs of CGS thermal plants and other plants for FY 2009-10 have been considered based on the energy bills for the month of January 2009. The variable cost considered is inclusive of Fuel Price Adjustment (FPA).
- The variable cost of the energy from gas based power stations (Anta, Auriya & Dadri) has been calculated on the following ratio of energy delivered from LNG, Naptha and Gas respectively in month of February, 2009.

**TABLE 3-14: VARIABLE COST FOR GAS BASED STATIONS - FY 2009-10**

Power Stations	Gas	Liquid	LNG
Anta	70%	20%	10%
Auriya	75%	20%	5%
Dadri (Gas)	65%	25%	10%





- Parameters such as fixed cost, ROE and other technical parameters for FY 2009-10, have been taken from the parameters as approved by CERC in Tariff order for FY 2008-09 and Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 issued by CERC vide notification No.L-7/145(160)/2008-CERC dated 19.01.09.
- The tariffs for Narora and Rajasthan Atomic Power Stations have been taken from the energy bills for the month of January, 2009.
- The tariff for RAPP Unit # 5 & 6 is same as of Unit # 3 & 4.
- The tariff for energy from co-generation plants is Rs.3.26/kWh.
- The tariff for energy from new power stations Dadri-II and Rosa Power Plant has been assumed as Rs.3.35/kWh and Rs.3.00/kWh respectively.
- The Water-Cess, Incentives etc. have been taken from the energy bills for the month of January, 2009 and assumed same for FY 2009-10. These are mentioned under head 'Other Fixed Charges'

The assumptions considered by UPPCL for projecting the cost of power purchase from Central Sector Hydro stations are detailed out as under:

- The fixed and variable costs of Central Sector Hydro plants have been taken from the various tariff orders of CERC and actual energy bills for the month of January, 2009.
- Tariff for the NHPC Sewa-II Hydro Plant to be commissioned in FY 2010 has been taken as Rs.2.79/kWh.

#### 3.8.5.5 POWER PROCUREMENT FROM OTHER SOURCES:

The cost of Power Procurement from other / UI sources is considered at Rs.6.35/kWh & from short term bilateral transactions at Rs.7.70/kWh in FY 2009-10. Power is purchased by UPPCL and allocated to each DISCOM based on the quantum required. The power purchase cost incurred by each DISCOM has been estimated based on the assumption that they would have paid the same average power purchase rate, as applicable, for the entire quantum purchased in FY 2009 - 10. Power purchase costs as described above, are summarized in **TABLE 3-15** below:



**TABLE 3-15: POWER PURCHASE SUMMARY FOR FY 2007-08, FY 2008-09 & FY 2009-10 (MU)**

Name of Power Station / Organisation	FY 2007-08	FY 2008-09	FY 2009-10
	(Actual) (Unaudited)	(Provisional )	(Projection)
<b>Power Procurement</b>			
UPRVUNL	18600	19628	20401
UPJVNL	890	1058	912
NPCIL(NAPP & RAPP)	506	544	777
NTPC	24440	24191	24743
NHPC	2412	2471	2489
Nathpa Jhakri	1122	1111	1244
VishnuPrayag	1625	1767	1774
Tala Power	141	168	184
Tehri Hydro	1026	1237	1241
Rosa Thermal Project	0	0	613
Captive and Cogen	1966	1678	1678
Power purchased trough Trading	254	1760	1100
Power drawn under UI	2018	760	642
WR	1	1	0
<b>Total Power Purchase Units ( MU)</b>	<b>55002</b>	<b>56375</b>	<b>57800</b>
<b>Power Procurement Cost</b>			
UPRVUNL	3221	4422	4862
UPJVNL	33	110	100
NPCIL(NAPP & RAPP)	122	134	190
NTPC	4860	5119	6045
NHPC	494	489	521
Nathpa Jhakri	287	356	387
VishnuPrayag	364	463	459
Tala Power	26	31	34
Tehri Hydro	456	627	599
Rosa Thermal Project	0	0	184
Captive and Cogen	548	508	547
Power purchased trough Trading	154	1250	847
Power drawn under UI	837	526	408
WR / UPJVNL - order 10.10.08 (for FY10)	0	1	10
PGCIL	419	524	604
<b>Total Power Purchase cost (Rs Cr)</b>	<b>11824</b>	<b>14559</b>	<b>15795</b>
UPRVUNL	1.73	2.25	2.38
UPJVNL	0.37	1.04	1.10
NPCIL(NAPP & RAPP)	2.41	2.46	2.45
NTPC	1.99	2.12	2.44
NHPC	2.05	1.98	2.09
Nathpa Jhakri	2.56	3.20	3.11
VishnuPrayag	2.24	2.62	2.59
Tala Power	1.84	1.85	1.84
Tehri Hydro	4.45	5.07	4.83
Rosa Thermal Project			3.00
Captive and Cogen	2.79	3.03	3.26
Power purchased trough Trading	6.07	7.10	7.70
Power drawn under UI	4.15	6.92	6.35
WR	4.07	6.50	
PGCIL	0.12	0.18	0.22
<b>Power Purchase Cost per Unit (Rs./kWh)</b>	<b>2.15</b>	<b>2.58</b>	<b>2.73</b>



3.8.5.6 The consolidated DISCOMS summary for power purchase costs including the proposed transmission charges by UPPCL is given in the **TABLE 3-16** below:

**TABLE 3-16: POWER PURCHASE COSTS – CONSOLIDATED DISCOMS**

Details	Power Purchase Cost and Projections - Consolidated Discoms				
	FY 2007-08 (Actual) (Unaudited)	FY 2007-08 Tariff Order	FY 2008-09 (Provisional)	FY 2008-09 Tariff Order	FY 2009-10 (Projected)
Energy Procured: Net Generation (MUs)	55,003	56,428	56,375	58,328	54,487
Cost of Generation (Rs.Cr)	11,824	12,676	14,560	13,686	15,795
Energy Delivered by UPPTCL (MU)	51,493	53,607	52,779	55,411	51,230
Transmission Rate (Rs./kWh)	0.124	0.191	0.112	0.216	0.137
Cost of Transmission (Rs.Cr)	636	1,025	590	1,127	746
<b>Total Power Purchase Cost (Rs.Cr)</b>	<b>12,460</b>	<b>13,702</b>	<b>15,150</b>	<b>14,813</b>	<b>16,541</b>

3.8.5.7 The details of DISCOM wise projected power purchase costs projected are given in **ANNEXURE – IV**.

3.8.5.8 The substantial increase in power purchase costs (inclusive of PGCIL charges) for FY 2009-10, projected at Rs. 16541 Cr, has been attributed to the T&D loss assumptions used, load growth and higher-than-usual price escalation in oil and coal. The PGCIL charges are embedded in the total power purchase cost of UPPCL and recovered from all the DISCOMS. Further in the subsequent data gaps submission, UPPCL on behalf of DISCOMS has mentioned that NTPC has got Income Tax refund of Rs.321.36 Cr for FY 1998-99, FY 2000-01, FY 2001-02 and FY 2002-03 and the same is adjusted in bills of May 2009. To this extent the power purchase amount will get reduced for FY 2009-10.

### 3.8.6 TRANSMISSION AND SLDC CHARGES:

3.8.6.1 Transmission charges for years in consideration are payable by DISCOMS on the basis of actual energy received & the uniform charges to be paid by all the four Distribution Licensees. Accordingly, the total transmission charges payable by all the DISCOMS for FY 2009-10 as per petition filed by UPPTCL is Rs.746.46 Cr. The details of UPPTCL's ARR are discussed in detail in the subsequent sections.

3.8.6.2 The charges payable to UPPTCL also include the SLDC charges, as UPPTCL is also performing the function of SLDC. These charges are to be paid uniformly by all distribution licensees. The SLDC charges are embedded in the transmission charges payable by the DISCOMS.



### 3.8.7 OPERATION & MAINTENANCE EXPENSES:

3.8.7.1 Operation & maintenance expenses of DISCOMS comprising Employee Costs, Administrative & General Expenses and Repair & Maintenance expenses which are estimated as under:

#### 3.8.7.2 EMPLOYEE COST:

The Employee Cost for FY 2009-10 have been estimated based on un-audited data of FY 2007-08 and available data for FY 2008-09 at the time of filing. Impact of the 6<sup>th</sup> Pay Commission has also been undertaken while projecting expenses for FY 2009-10. The assumptions and estimation methodology used by the DISCOMS to estimate the employee cost for FY 2009-10 is described below:-

- Basic Salaries for FY 2009-10 will increase by over 69% from FY 2008-09 cost due to implementation of sixth pay commission recommendation & due to time bound increment and annual increase in pay ;
- Dearness Allowance (DA) is estimated to be 52.25% (47% for 3 month & 54% for 9 month) for FY 2008-09 and for FY 2009-10, DA has been projected as 25%;
- Other allowance has been forecast to be 8% of Basic Salary ;
- Likewise, Medical Expenses have been forecast to increase by inflation index per year from FY07, taking 3% as contingency;
- Pension and Gratuity have been calculated at 16.7% and 2.38% (i.e., 19.08%) of Basic Salary and Dearness Allowance;
- Leave Travel Assistance & Compensation is assumed to be 0.01% & 0.2% of Basic Pay respectively;
- Staff welfare expenses are assumed to in same ratio as actually incurred in FY 2008-09;
- Employee Expenses Capitalized has been calculated as 15% of total Employee Costs, which is in line with the policy adopted by the Commission in its last tariff order.

Based on above assumptions the Employee Cost estimated for DISCOMS on consolidated basis is outlined in the **TABLE 3-17** below:



**TABLE 3-17: EMPLOYEE COSTS –DISCOMs (Rs. Cr)**

Details	FY 2007-08 (Actual) (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Basic Salaries	412.78	457.10	772.50
Overtime	-	-	-
Dearness Allowance	194.08	238.83	193.12
Other allowances	33.24	36.57	61.80
Bonus / Ex-gratia	(0.82)	11.59	16.09
Medical expenses reimbursement	9.37	10.38	11.50
Leave travel assistance	0.16	0.05	0.08
Interim Relief/ Other	4.29	-	-
Earned leave encashment	26.08	10.15	14.08
Payment under workmen's compensation Act	0.85	0.91	1.54
Staff welfare expenses	2.78	3.26	5.51
Employers Contribution for Pension &	95.52	132.78	184.24
<b>Employee Costs (before charge to capital)</b>	<b>778.33</b>	<b>901.62</b>	<b>1,260.46</b>
Less expenses capitalized	176.19	135.24	189.07
<b>Net employee cost</b>	<b>602.14</b>	<b>766.38</b>	<b>1,071.39</b>

### 3.8.7.3 ADMINISTRATION & GENERAL EXPENSES:

The DISCOMS have stated that the regulatory expenses are estimated as 0.05% of the revenue plus an additional expense of Rs. 10 lac as application fee for FY 2009-10.

- The DISCOMS are continuing to commit and keep the expenses under control and as a result; have forecasted the other A&G expenses to rise by inflation index only;
- Further the DISCOMS have submitted that there is outsourcing of billing works like use of hand held machines, consumer indexing & GIS mapping of consumers. Further DISCOMS are planning to use various information technology (IT) initiatives such as implementation of software solution, networking (Both local area network & wide area network), retail billing solution, Energy billing System, Energy accounting system etc, to drive operational efficiency improvement and therefore an additional expense shall be incurred per DISCOM at Rs. 1.25 Cr in FY 2009-10;
- The capitalisation rate assumed by DISCOMS for A&G expenses is 15% & the **TABLE 3-18** below summarises the A&G expenses for DISCOMS.



**TABLE 3-18: A&G EXPENSES –DISCOMS (Rs. Cr)**

Details	FY 2007-08 (Actual) (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Rent, Rates & Taxes	1.19	1.28	1.38
Insurance	0.91	0.97	1.05
Telephone, Postage & Telegrams,	7.15	7.69	8.27
Legal charges	2.72	2.92	3.14
Audit fees	0.04	0.05	0.05
Consultancy charges	0.21	0.23	0.25
Technical fees and professional	0.01	0.01	0.01
Conveyance and traveling	8.02	8.63	9.29
Regulatory expenses	-	6.13	6.54
Electricity Charges	43.07	46.33	49.84
Other expenses	8.08	11.62	12.50
Billings and Collection Expenses	28.11	35.24	37.53
<b>Total A&amp;G Expenses</b>	<b>99.51</b>	<b>121.10</b>	<b>129.83</b>
Capitalized	24.65	18.17	19.47
<b>Net A&amp;G Expenses</b>	<b>74.87</b>	<b>102.94</b>	<b>110.36</b>

### 3.8.8 GFA BALANCES AND CAPITAL FORMATION ASSUMPTIONS:

3.8.8.1 The estimates for GFA and other fixed assets are provided in this section. The additions during the year are dependent upon the capitalisation from the investment plan. The investment plan for FY 2008-09 and FY 2009-10 for consolidated DISCOMS is given in **TABLE 3-19** below:



**TABLE 3-19: INVESTMENT PLAN: DISCOM (Rs. Cr)**

Fund/ Source	FY 2008-09 (Provisional)					FY 2009-10 (Projection)				
	Loan	Grant	Deposit	Equity	Total	Loan	Grant	Deposit	Equity	Total
RGGVY	-	-	-	513	513	-	-	-	1,000	1,000
PTW	-	-	-	214	214	-	-	-	150	150
<b>Replacement of :</b>	-	-	-	-	-	-	-	-	-	-
a) Poles	-	-	-	29	29	-	-	-	33	33
b) Conductors	-	-	-	27	27	-	-	-	30	30
c) Old Switchgears	-	-	-	108	108	-	-	-	57	57
Laying of ABC	123	-	-	158	281	231	-	-	503	735
Bifurcation of feeders	-	-	-	89	89	70	-	-	111	181
Installation of 1phase meters	-	-	-	43	43	-	-	-	152	152
Installation of 1phase meters	-	-	-	14	14	-	-	-	1	1
Augmentation of Distribution System	-	-	-	306	306	-	-	-	956	956
Metering of DTR	-	-	-	265	265	-	-	-	-	-
IT	-	-	-	29	29	-	-	-	117	117
Equity for shell companies	-	-	-	-	-	-	-	-	-	-
Ambedkar Gram Sabha	-	-	-	473	473	-	-	-	413	413
GoUP Equity for Distribution Works	-	-	-	1,151	1,151	-	-	-	-	-
APDRP	82	-	-	-	82	100	-	-	-	100
	-	-	-	-	-	-	-	-	-	-
Deposit Works	-	-	235	-	235	-	-	350	-	350
<b>TOTAL</b>	<b>206</b>	<b>-</b>	<b>235</b>	<b>3,418</b>	<b>3,859</b>	<b>401</b>	<b>-</b>	<b>350</b>	<b>3,522</b>	<b>4,274</b>

3.8.8.2 For capitalisation purposes the licensees have assumed 40% as the opening CWIP and 40% of investment made during the year as expenses capitalised & interest capitalised (40% of total investment) during the year. Based on this the assets capitalized during FY 2008-09 and FY 2009-10 is given in **TABLE 3-20** and **TABLE 3-21** below:

**TABLE 3-20: ASSETS CAPITALISATION DURING FY 2008-09 (Rs. Cr)**

Particulars	Balance 31-Mar-08	Investments	Cap interest	Cap expenses	To GFA	Depreciation	Balance 31-Mar-09
	1	2	3	4	5	6	7
Gross Fixed Assets	9,824	-	-	-	2,304	-	12,128
Accumulated Depreciation	5,197	-	-	-	-	861	6,058
Work in Progress	1,896	3,625	85	153	(2,304)	-	3,455

**TABLE 3-21: ASSETS CAPITALISATION DURING FY 2009-10 (Rs. Cr)**

Particulars	Balance 31-Mar-09	Investments	Cap interest	Cap expenses	To GFA	Depreciation	Balance 31-Mar-10
	1	2	3	4	5	6	7
Gross Fixed Assets	12,128	-	-	-	3,071	333	15,199
Accumulated Depreciation	6,122	-	-	-	-	1,071	7,193
Work in Progress	3,455	3,924	90	208	(3,071)	-	4,606



The DISCOM wise asset capitalisation submitted by the DISCOMS is being annexed in **ANNEXURE – VI**

**3.8.9 REPAIR & MAINTENANCE EXPENSES:**

3.8.9.1 The DISCOMS have estimated the R&M expenses at 4.5% of the opening GFA for DISCOMS for FY 2009-10.

3.8.9.2 The DISCOMS have stated that there is a slight increase over previous years in assuming R&M expenses as 4.5% of the opening GFA. They have stated that the maintenance of the distribution network in the State is currently inadequate and is having an adverse impact on the quality and quantity of supply of power. Therefore, there is an urgent need to provide more funds for R&M activities. The increase in projected expenses is mainly attributed to substantial increase in cost of fuel and raw materials. The metal prices have increased phenomenally over the past few years. Moreover, there has been an increase in the amount of annual maintenance contracts being awarded due to addition of a number of transformers, cables, grid substation etc. This has translated into higher R&M expenses. Unfortunately, due to weak financial position and heavy cash losses, system improvement and preventive maintenance are not achieved to the expected levels even though frequent breakdowns and supply interruptions occur.

3.8.9.3 The DISCOMS have been spending money which is urgently required for restoration of supply. In addition to these planned activities there would be some unforeseen R&M expenses, which would be inevitable. The amount worked out by the DISCOMS for this purpose has been spread out proportionally among the sub-accounts.

3.8.9.4 Based on the above assumptions, the R&M expenses estimated by DISCOMS are summarized in the **TABLE 3-22** below:





**TABLE 3-22: R&M EXPENSES - DISCOMS (Rs. Cr)**

Details	FY 2007-08 (Actual) (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Plant & Machinery	150.06	189.58	235.52
Building	6.73	8.21	10.24
Civil works	0.06	0.08	0.11
Other Expenses	0.02	0.02	0.02
Lines, Cable Network, etc	173.78	230.84	283.84
Vehicles	8.18	12.30	14.75
Furniture & Fixtures	0.07	0.09	0.11
Office equipment	0.85	0.96	1.17
<b>Total</b>	<b>339.75</b>	<b>442.08</b>	<b>545.76</b>

**3.8.10 SUMMARY OF OPERATION & MAINTENANCE EXPENSES:**

3.8.10.1 The Employee Cost, A&G Expenses and R&M Expenses have been summarised to arrive at the total O&M expenses as given in **TABLE 3-23** below:

**TABLE 3-23: SUMMARY OF O&M EXPENSES – DISCOMS (Rs. Cr)**

O&M Expenses	FY 2007-08 (Actual) (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Employee Expenses (after capitalisation)	602	766	1071
A&G Expenses (after capitalisation)	75	103	110
R&M Expenses	340	442	546
<b>Total O&amp;M Cost</b>	<b>1017</b>	<b>1311</b>	<b>1728</b>

**3.8.11 DEPRECIATION EXPENSES:**

3.8.11.1 Depreciation expenses have been estimated by the DISCOMS by applying a weighted average depreciation rate of 7.84% on the opening Gross Fixed Asset (GFA), which was used by the Commission in the last Tariff Order. The GFA is estimated by the DISCOMS by taking into account the investment plan/capital expenditure, work in progress and addition to asset from the current capital expenditure. The depreciation expenses and the Gross Fixed Asset (GFA) thus estimated by the DISCOMS is shown in **Table 3-20 & Table 3-21** above.



### 3.8.12 PROVISION FOR BAD & DOUBTFUL DEBTS:

3.8.12.1 The DISCOMS submitted that provision for bad & doubtful debts are accepted accounting principle even in sector like Banking, the provisioning of uncollectible dues are considered as a normal commercial practice. Therefore, DISCOMS maintain this as a legitimate ARR component and have made a provision for bad and doubtful debts at 2% of revenue receivables in line with the section 4.4 of UPERC (Terms and Conditions for Determination of Distribution Tariff) Regulations, 2006.

3.8.12.2 The DISCOMS have submitted that they have prepared the following action plan to write off bad debts;

- Consumers in all categories who have not paid their electricity dues / arrears for last 10 years shall be identified.
- Field officers shall inspect the premises of such identified consumers to assess the actual position / consumption and take suitable action for either realization of the dues or permanent disconnection of supply.
- Notices under Section-3 and Section-5 shall be served to the defaulting consumers. Thereafter, a list of all such consumers shall be prepared who have either shifted their premises, gone elsewhere or are not traceable and the notice sent to them is returned unserved. The outstanding amount shall then be calculated and declared as bad debt. Finally, action for writing off such bad debts shall be initiated.

3.8.12.3 The estimated amount towards bad & doubtful debts for FY 2009-10 is given in **TABLE 3-24** below:

**TABLE 3-24: PROVISION FOR BAD AND DOUBTFUL DEBTS- DISCOMS (Rs. Cr)**

Description	FY 2007-08	FY 2008-09	FY 2009-10
	(Actual) (Unaudited)	(Provisional)	(Projection)
Revenue Receivables	6,276	6,917	7,469
Percentage of Debt allowed	1%	2%	2%
<b>Provision for bad and doubtful debts</b>	<b>66</b>	<b>138</b>	<b>149</b>



### 3.8.13 INTEREST & FINANCING CHARGES:

3.8.13.1 The DISCOMS have considered following interest & financing charges:

- Interest charges based on current schedule of long-term debt repayment and new debt requirements for capital investment plan & working capital requirement.
- Discount to Consumers.
- Interest on consumer's security deposit.

Summary of Interest & financing charges for FY 2009-10 are given in the **TABLE 3-25** below:

**TABLE 3-25: INTEREST & FINANCING CHARGES - DISCOMS (Rs Cr)**

Particulars	FY 2007-08 (Actual) (Unaudited)	FY 2007-08 Tariff Order	FY 2008-09 (Provisional)	FY 2008-09 Tariff Order	FY 2009-10 (Projected)
Gross Interest & finance charges	588.89	654.09	1,136.45	641.70	1,296.74
Discount to consumer	11.38	16.40	14.14	19.35	14.87
Interest on consumer security deposit	67.94	53.79	70.47	58.05	74.31
<b>Subtotal</b>	<b>668.21</b>	<b>724.28</b>	<b>1,221.06</b>	<b>719.10</b>	<b>1,385.92</b>
<i>Less: Interest &amp; finance charges Capitalised</i>	59.90	69.18	85.03	87.84	90.01
<b>Total</b>	<b>608.31</b>	<b>655.10</b>	<b>1,136.03</b>	<b>631.26</b>	<b>1,295.91</b>

### 3.8.14 OTHER INCOME:

3.8.14.1 Other Income for the each of the DISCOMS includes other miscellaneous income from retail sources, income from Investments, Non Tariff Income and Delayed Payment Surcharge (DPS). The other income projected for FY 2009-10 is Rs. 226.08 Cr which is forecasted to grow at the rate of inflation index from base figure of FY 2007-08. The other income details for FY 2007-08, FY 2008-09 & FY 2009-10 is given in **TABLE 3-26** below:

**TABLE 3-26: SUMMARY OF OTHER INCOME –DISCOMS ( Rs Cr)**

Particulars	FY 2007-08 (Actual) (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Other Income from Retail Sources	17.04	18.33	19.71
Non Tariff Income	132.87	142.92	153.74
Delayed Payment Charges from consumers	45.48	48.92	52.63
<b>Total</b>	<b>195.38</b>	<b>210.17</b>	<b>226.08</b>



### 3.8.15 GOVERNEMENT SUBSIDY:

3.8.15.1 In addition to the income from retail sources, DISCOMS have submitted that Government of Uttar Pradesh is likely to provide subsidy of Rs. 1832 Cr in FY 2009-10 to partially cover the revenue shortfalls arising due to tariffs lower than the Cost of Supply (CoS) for the Rural Domestic and PTW categories. These subsidy amount is allocated to each DISCOMS based on the number of PTW and Rural Domestic consumers. The subsidy amount for FY 2007-08 and FY 2008-09 was Rs.1821.80 Cr and Rs.1531.80 Cr respectively.

### 3.8.16 REASONABLE RETURN / RETURN ON EQUITY:

3.8.16.1 Although DISCOMS are permitted to earn a return on equity @ 16% on the equity bases as per Distribution Tariff Regulations, they have requested for a zero return on equity. They have stated that any ROE would further increase their revenue gap and put extra burden on the consumers. The DISCOMS have further submitted that to bridge the revenue shortfall they would have to ask for additional subsidy from GoUP and may also have to resort to taking short term loans from the market. Therefore they feel it would be unjustified to further widen the revenue gap by seeking return on equity.

### 3.8.17 CONTINGENCY RESERVE:

3.8.17.1 Creation of contingency reserve is permitted as per the Distribution Tariff Regulations. This would be up to 0.5% of opening gross fixed assets to be included in the ARR of the licensee. As there is a big revenue gap between ARR and revenue forecast this component will only enhance the revenue gap and create extra burden on the consumers. Therefore in the present ARR proposal the licensees have not claimed this component. The contingency reserve estimated on a consolidated basis is Rs. 49.12 cr. & Rs. 60.64 cr. for FY 2008-09 & FY 2009-10 respectively.

### 3.8.18 SPECIAL APPROPRIATIONS:

#### 3.8.18.1 ONE TIME SETTLEMENT SCHEME:

DISCOMS had launched two one-time settlement (OTS) schemes to recover blocked arrears by providing the consumers a rebate in surcharge. Consolidated OTS waiver amount is provided in **TABLE 3-27** below:

**TABLE 3-27: OTS WAIVER AMOUNT (Rs. Cr)**

Particular	10/12/2007 to 31/01/2008	09/06/2008 to 31/07/2008	Total
OTS Waiver amount	46.65	7.81	54.46



### 3.8.18.2 POWER PURCHASE ARREARS:

UPPCL have claimed power purchase arrears as per clause 6.9 of the Distribution Tariff Regulations which provides for recovery of increase in fuel cost through tariff. In the FY 2008-09 UPPCL had purchased power from various sources at an average rate of Rs. 2.58/unit against Rs. 2.35/unit approved by the Commission in its last Tariff Order. It purchased total 56375 MUs at the cost of Rs. 14560 cr. on behalf of the DISCOMS. In FY 2008-09 the Commission approved power purchase of 58328 MUs at a total cost of Rs. 13686.11 cr. Therefore, on account of increase in per unit average power purchase cost, UPPCL incurred an extra burden of Rs. 1332.14 cr. UPPCL on behalf of the DISCOMS, vide additional submission dated 06.11.2009, revised the above mentioned power purchase arrears to Rs. 1469.92 cr.



### 3.8.19 CONSOLIDATED ARR OF DISTRIBUTION LICENSEES:

3.8.19.1 The consolidated ARR for FY 2007-08, FY 2008-09 & FY 2009-10 is given in **TABLE 3-28** below:

**TABLE 3-28: ARR OF DISCOMS ON CONSOLIDATED BASIS (Rs. Cr)**

	<b>FY 2007-08</b>	<b>FY 2008-09</b>	<b>FY 2009-10</b>
<b>Particulars</b>	<b>Unaudited Actual</b>	<b>Estimated</b>	<b>Projected</b>
Power Purchase Expenses (incl PGCIL charges)	11,824	14,560	15,795
Transmission Charges - Intra state (incl SLDC Charges)	636	590	746
Employee cost	778	902	1,260
A&G expenses	102	121	130
R&M expenses	340	442	546
Interest & Finance charges	668	1,221	1,386
Depreciation	646	861	1,071
<b>Gross Expenditure</b>	<b>14,994</b>	<b>18,696</b>	<b>20,935</b>
<b>Expense capitalization</b>			
<i>Employee cost capitalized</i>	176	135	189
<i>Interest capitalized</i>	60	85	90
<i>A&amp;G expenses capitalized</i>	19	18	19
<b>Net Expenditure</b>	<b>14,739</b>	<b>18,458</b>	<b>20,636</b>
<b>Special Appropriations</b>			
<i>Provision for Bad &amp; Doubtful debts</i>	66	138	149
<i>Provision for Contingency Reserve</i>	0	0	0
<i>Prior Period Adjustments/Power Purchase Arrears</i>	0	0	1,332
<i>OTS Waivers</i>	0	0	54
<b>Total net expenditure with provisions</b>	<b>14,805</b>	<b>18,596</b>	<b>22,172</b>
Add: Return on Equity	0	0	0
Less: Non Tariff Income	150	161	173
<b>Annual Revenue Requirement (ARR)</b>	<b>14,655</b>	<b>18,435</b>	<b>21,999</b>
Less: GoUP Subsidy	1822	1532	1832
<b>Revenue From Existing Tariff</b>	<b>9,957</b>	<b>11,454</b>	<b>12,271</b>
<b>Net Revenue Gap</b>	<b>2,876</b>	<b>5,449</b>	<b>7,895</b>

The ARR submitted by the respective DISCOMS is given in **ANNEXURE – VII**.

### 3.9 SEPARATION OF ARR INTO WHEELING & SUPPLY BUSINESS FOR FY 2009-10:

3.9.1 DISCOMS have submitted that segregation of accounts between Wheeling and retail supply has not yet taken place. Therefore, the allocation of expenses has been done in line with the methodology used by Commission in its last Tariff Order.



**TABLE 3-29: SEPARATION OF ARR - WHEELING & SUPPLY BUSINESS: FY 2009-10 (Rs. Cr)**

Particulars	Allocation (%)		Allocation FY 2009-10		
	wheeling	supply	wheeling	supply	Total
Power purchase Expenses	0%	100%	0	15,795	15,795
Transmission charges	0%	100%	0	746	746
Employee Costs	60%	40%	756	504	1,260
A&G Costs	40%	60%	52	78	130
Repair & Maintenance expense	90%	10%	492	55	546
Interest & Finance Charges	90%	10%	1,247	139	1,386
Depreciation	90%	10%	964	107	1,071
<b>Gross Expenditure</b>			<b>3,511</b>	<b>17,424</b>	<b>20,935</b>
Expenses Capitalisation					
<i>Employee Costs</i>	60%	40%	113	76	189
<i>Interest &amp; Finance Charges</i>	90%	10%	81	9	90
<i>A&amp;G Costs</i>	40%	60%	8	12	19
<b>Net Expenditure</b>			<b>3,309</b>	<b>17,328</b>	<b>20,637</b>
Special Appropriation					
<i>Provision for Bad &amp; Doubtful</i>	0%	100%	0	149	149
<i>Contingency Reserve</i>	0%	100%	0	0	0
<i>Prior Period Adjustment</i>	0%	100%	0	1,387	1,387
<b>Total Net Expenditure with Appropriation</b>			<b>3,309</b>	<b>18,863</b>	<b>22,172</b>
Less:Return on Equity	90%	10%	0	0	0
Less:Non Tariff Income	0%	100%	0	173	173
<b>Total ARR</b>			<b>3,309</b>	<b>18,690</b>	<b>21,999</b>

### 3.9.2 BULK SUPPLY TARIFF:

3.9.2.1 DISCOMS have computed bulk supply tariff applicable to all DISCOMS including bulk consumers based only on power purchase cost and sale to DISCOMS as under for FY 2009-10.

**TABLE 3-30: BULK SUPPLY TARIFF FOR FY 2009-10 (Rs. Cr)**

Details	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Power Purchase Expenses (Rs	14560	15795
Sales to Discom (MU)	52779	54345
Bulk Supply Tariff (Rs/Kwh)	2.76	2.91



### 3.9.3 UPPCL INTEREST & FINANCE CHARGES:

3.9.3.1 The DISCOMS have submitted that bills of Rs. 917.37 cr. in addition to the bills raised as per Tariff Order for FY 2008-09 has been raised for FY 2008-09 in proportion to the energy delivered to them to settle the burden of interest and finance charges on the working capital loans raised by UPPCL to meet the power purchase obligations. This has been done to settle the burden as per the internal mechanism between UPPCL and the DISCOMS in line with the directives issued by UPERC under clause 5.13.7.4 of the last Tariff Order dated 15.04.2008. Further in subsequent data submission UPPCL has clarified that such expenses have not been charged to consumers and it is only an internal adjustment between DISCOMS and UPPCL.

### 3.9.4 RATE SCHEDULE OF FY 2009-10:

3.9.4.1 The DISCOMS have submitted a Rate Schedule for FY 2009-10 which is enclosed in **ANNEXURE – VIII**.





### **3.10 TARIFF FILING BY TRANSCO:**

3.10.1 UPPTCL filed their ARR & Tariff petition for FY 2009-10 on 30th July 2009. During the course of ARR proceedings, a presentation was made by UPPCL / UPPTCL in the office of the Commission in Lucknow on 23rd October 2009 wherein UPPTCL presented a revised ARR / Tariff proposal which indicated significant changes in the cost estimates. Therefore, UPPTCL were asked to submit the revised ARR / Tariff Petition for consideration of the Commission. UPPTCL submitted this on 1st of December, 2009. On close scrutiny of the revised petition certain shortcomings were observed which were addressed in a meeting held in Lucknow in the office of Director (Commercial), UPPTCL on 8th December 2009.

### **3.11 ARR SUMMARY FOR FY 2007-08, FY 2008-09 & FY 2009-10:**

3.11.1 The total ARR of TRANSCO comprises of the following components:

- Employee Costs
- Administration and General Expenses
- Investment Plan
- Repairs and Maintenance Expenses
- Depreciation Expenses
- Interest & Financing charges
- Other Income
- Reasonable return/Return on Equity
- Proposed Transmission tariff and SLDC Charges

3.11.2 The UPPTCL has submitted corresponding figures for actual unaudited data for FY 2007-08, provisional accounts for FY 2008-09 and estimates/ projections for FY 2009-10.

3.11.3 Each of the ARR items as submitted by UPPTCL is described in the sections below with special mention of remarks / assumptions made by UPPTCL.

### **3.12 EMPLOYEE COST:**

3.12.1 The employee cost projected by UPPTCL for FY 2009-10 includes impact of 6<sup>th</sup> Pay Commission computed over actual unaudited data of FY 2007-08 and data available of FY 2008-09 till the date of filing.

3.12.2 The summarised employee cost has been provided in **TABLE 3-31** below:



**TABLE 3-31: EMPLOYEE COST – TRANSCO (Rs. Cr)**

Details	FY 2007-08 (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Basic Salaries	119.18	124.72	199.74
Overtime	-	-	-
Dearness Allowance	47.85	62.01	43.94
Other allowances	7.94	8.34	15.98
Bonus / Ex-gratia	2.68	3.22	4.06
Medical expenses reimbursement	4.13	5.45	6.04
Leave travel assistance	-	-	0.02
Interim Relief/ Other	1.28	1.87	-
Earned leave encashment	4.97	7.02	14.21
Leave Salary Contribution	-	-	-
Payment under workmen's compensation	0.04	0.11	0.40
Staff welfare expenses	0.49	0.59	0.94
Employers Contribution for Pension & Gratuity	29.24	31.61	46.49
<b>Employee Costs (before charge to capital)</b>	<b>217.80</b>	<b>244.94</b>	<b>331.82</b>
Less expenses capitalized	75.40	87.70	96.23
<b>Net employee cost</b>	<b>142.40</b>	<b>157.24</b>	<b>235.59</b>

### 3.13 ADMINISTRATION & GENERAL EXPENSES:

3.13.1 UPPTCL has mentioned in the petition that A&G expenses include day-to-day expenses related to administration of its offices, insurance, communication, professional charges, audit fees, advertisement expenses, freight etc. They have further mentioned that all these expenses are directly affected by inflation. Therefore, they have made projections after taking into account impact of inflation. Also, they have taken into consideration the need for creating additional substations and offices. The A&G expenses projected by UPPTCL for FY 2009-10 along with data / information for FY 2007-08 and FY 2008-09 are given in **TABLE 3-32** below:



**TABLE 3-32: ADMINISTRATION & GENERAL EXPENSES – TRANSCO (Rs. Cr)**

Details	FY 2007-08 (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Rent, Rates & Taxes	0.40	0.59	0.62
Insurance	0.09	0.05	0.06
Telephone, Postage & Telegrams & Telex	1.51	1.80	1.91
Legal charges	0.88	1.01	1.07
Audit fees	0.10	0.34	0.36
Consultancy charges	0.13	0.31	0.33
Technical fees and professional charges	0.62	0.11	0.11
Conveyance and traveling	3.91	4.11	4.36
Regulatory expenses	-	-	-
Electricity Charges	1.37	1.84	1.95
Other expenses	7.56	5.06	5.36
<b>Total A&amp;G Expenses</b>	<b>16.57</b>	<b>15.22</b>	<b>16.13</b>
Capitalized	4.30	5.00	3.07
<b>Net A&amp;G Expenses</b>	<b>12.27</b>	<b>10.22</b>	<b>13.06</b>

### 3.14 INVESTMENT PLAN:

3.14.1 UPPTCL has submitted that the actual capital investments during the FY 2007-08 and FY 2008-09 were Rs. 729.27 Cr and Rs. 850.94 Cr respectively as against the envisaged capital investment plan of Rs. 1016 Cr and Rs. 1192 Cr respectively. This variation from the envisaged capital investment occurred due to certain policy issues as well as non-availability of government guarantee for drawl of financial institutional loans. This adversely affected the creation of assets due to which the depreciation and interest and finance charges had lower incidence than the approved levels. The investment plan proposed for FY 2009-10 along with its funding is presented in the **TABLE 3-33** below:

**TABLE 3-33: INVESTMENT PLAN – TRANSCO (Rs. Cr)**

Details	FY 2009-10
	Petition
Loan	372.16
Equity	304.50
Deposit Work	116.67
<b>Total</b>	<b>793.33</b>



### 3.15 REPAIR & MAINTENANCE EXPENSES:

3.15.1 The UPPTCL has mainly attributed the increase in raw materials, metal prices and fuel cost as the main cause for substantial rise in R&M expenses and projections. Moreover, UPPTCL has added a number of transformers, cables, grid substation, etc. due to which there has been an increase in the amount of annual maintenance contracts being awarded. The R&M expenses projected for FY 2009-10 along with the actual unaudited data for FY 2007-08 and provisional accounts for FY 2008-09 are depicted in the **TABLE 3-34** below:

**TABLE 3-34: REPAIRS & MAINTENANCE EXPENSES – TRANSCO (Rs. Cr)**

Details	FY 2007-08 (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Plant & Machinery	54.13	56.22	62.96
Building	4.50	4.61	5.17
Civil works	0.06	0.01	0.01
Other Expenses	-	-	-
Lines, Cable Network, etc	5.79	7.23	8.10
Vehicles	-	-	-
Furniture & Fixtures	-	0.01	0.01
Office equipment	0.01	0.02	0.02
<b>Total</b>	<b>64.49</b>	<b>68.10</b>	<b>76.27</b>

### 3.16 SUMMARY OF OPERATION & MAINTENANCE EXPENSES:

3.16.1 The Employee Cost, A&G expenses and R&M expenses have been summarised to arrive at the total O&M expenses as given in **TABLE 3-35** below:

**TABLE 3-35: SUMMARY OF O&M EXPENSES – TRANSCO (Rs. Cr)**

O&M Expenses	FY 2007-08 (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Employee Expenses	142.40	157.24	235.59
A&G Expenses	12.27	10.22	13.06
R&M Expenses	64.49	68.10	76.27
<b>Total O&amp;M Cost</b>	<b>219.16</b>	<b>235.56</b>	<b>324.92</b>

### 3.17 DEPRECIATION EXPENSES:

3.17.1 UPPTCL has mentioned in their petition that the actual depreciation for FY 2007-08 & FY 2008-09 is Rs.214.17 Cr and Rs. 166.24 Cr respectively, and depreciation expense for FY 2009-10 has been estimated at Rs. 173.55 Cr.



### 3.18 INTEREST & FINANCE CHARGES:

#### 3.18.1 INTEREST ON LONG TERM LOANS:

3.18.1.1 The interest and financing costs projected by UPPTCL for FY 2009-10 are based on the current schedule of long-term debt, repayments and new debt requirements.

3.18.1.2 The summary of the interest and finance costs is given in the **TABLE 3-36** below:

**TABLE 3-36: INTEREST AND FINANCE CHARGES – TRANSCO (Rs. Cr)**

Details	FY 2007-08 (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Gross Interest Cost	198.62	209.86	216.14
Less: Interest Capitalised	37.46	50.65	59.08
<b>Net Interest Cost</b>	<b>161.16</b>	<b>159.21</b>	<b>157.06</b>
<b>Other Interest &amp; Finance Charges</b>	<b>9.60</b>	<b>5.92</b>	<b>20.21</b>
<b>Total Interest &amp; Financing Costs</b>	<b>170.76</b>	<b>165.13</b>	<b>177.27</b>

#### 3.18.2 INTEREST ON WORKING CAPITAL:

3.18.2.1 UPPTCL has submitted that the interest on Working capital/Overdraft/ Consumer Contributions for FY 2007-08 was Rs. 15.39 Cr. UPPTCL further submitted that no working capital loans have been taken for FY 2008-09 & FY 2009-10.

### 3.19 OTHER INCOME:

3.19.1 Other income estimated by the UPPTCL includes only non-tariff income, which comprises interest on loans and advances to employees, income from fixed rate investment deposits and interest on loans and advances to DISCOMS. The summary of other income is given in the **TABLE 3-37** below:

**TABLE 3-37: SUMMARY OF OTHER INCOME – TRANSCO (Rs. Cr)**

Details	FY 2007-08 (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Share of Income from Other Business	-	-	-
Interest on Loan to staff	0.02	0.02	0.36
Income from Investments	0.25	-	1.63
Revenue from Surcharge for Late payment	-	-	-
Any Other Income	10.36	23.37	17.88
<b>Total</b>	<b>10.63</b>	<b>23.39</b>	<b>19.87</b>



### 3.20 REASONABLE RETURN / RETURN ON EQUITY:

3.20.1 As per the Transmission Tariff Regulations, the return on equity permitted for Transmission Company is to an extent of 14% of the total equity base. UPPTCL in their petition has asked for Return on Equity @ 2% only, in view of the huge gap in the recovery of cost of supply at the DISCOMS level. UPPTCL have further mentioned that return on equity at normative level of 14% would result in accumulation of receivables. Moreover, during their discussions with the GoUP at various levels, it had been deliberated that it should not seek any return on equity for the FY 2007-08 and FY 2008-09.

**TABLE 3-38: RETURN ON EQUITY – TRANSCO (Rs. Cr)**

Details	FY 2007-08 (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Regulatory equity at the beginning	1,842.97	1,947.74	2,062.30
Capitalised assets during the year	349.22	381.89	583.33
Equity portion of expenditure on capitalised assets	104.77	114.57	175.00
Regulatory Equity at the end	1,947.74	2,062.30	2,237.30
<b>Return computation</b>			
Return Regulatory equity at the beginning	-	-	41.25
Return on Equity portion of expenditure on capitalised assets	-	-	1.75
<b>Total return on regulatory equity</b>	-	-	<b>43.00</b>

### 3.21 SUMMARY OF ARR OF UPPTCL:

3.21.1 The ARR of UPPTCL has been summarised in the **TABLE 3-39** below:

**TABLE 3-39: ARR OF TRANSCO (Rs. Cr)**

Details	FY 2007-08 (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Employee Costs (net of capitalization)	142.41	157.24	235.60
A&G Costs (net of capitalization)	12.27	10.22	13.07
Repair & Maintenance Expense	64.49	68.10	76.27
Depreciation	214.17	166.24	173.55
Interest & Finance Charges	186.14	165.13	177.27
Less Other Income	10.63	23.39	19.87
Reasonable Return	-	-	43.00
Debits, Write-offs & Any other items	27.27	46.20	47.58
<b>Annual Revenue Requirement</b>	<b>636.12</b>	<b>589.74</b>	<b>746.47</b>



### 3.22 PROPOSED TRANSMISSION TARIFF:

3.22.1 TRANSCO has submitted that the transmission tariff proposal has been based on the methodology defined in the Transmission Tariff Regulations for a transmission system having more than one long term customer. The formulae for estimating the same is defined as given under:

**Transmission Tariff = (Net ARR/12)\*(CL/SCL)** Where,

CL =Allotted Transmission Capacity in MW of particular long term customer.

SCL=Sum of the Allotted Transmission Capacities (in MW) to all long-term customers.

3.22.2 The transmission tariff has been calculated on the basis of number of units wheeled since allotment of transmission capacities to DISCOMS has not yet been done. Therefore the licensee has provided estimated tariff which is given in **TABLE 3-40** below:

**TABLE 3-40: COMPUTATION OF TRANSMISSION TARIFF ( Rs./kWh)**

Details	FY 2007-08 (Unaudited)	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
UPPTCL ARR (Rs Cr)	636	590	746
Total Energy Delivered (MU)	51,493	52,779	54,345
<b>Transmission Tariff (Rs/Kwh)</b>	<b>0.12</b>	<b>0.11</b>	<b>0.14</b>

### 3.23 SLDC CHARGES:

3.23.1 The estimated cost of running the UPPTCL Central Load Dispatch Centre in Lucknow and the four regional Load Dispatch Centres at Panki, Sahupuri, Modipuram and Moradabad is summarised in this section.

3.23.2 Employee Cost, A&G expenses and R&M expenses have been obtained by UPPTCL from the Central Load Dispatch Centre. However, capital related costs such as interest & finance charges, depreciation and return on equity could not be separated because SLDC is functioning as an integral part of UP TRANSCO. As such the same have been approximated as follows:

- The depreciation expense for TRANSCO is 86% of the sum of above cash expenses for FY 2008-09.
- In the absence of precise information on cost of SLDC assets an “adding factor” has been applied to SLDC cash costs to account for SLDC depreciation expense.
- Interest and Finance charges & Other Income have been similarly approximated.



3.23.3 The SLDC charges thus arrived by UPPTCL and embedded in their ARR for FY 2009-10 is given in **TABLE 3-41** below:

**TABLE 3-41: BREAK UP OF SLDC CHARGES (Rs. Cr)**

Details	FY 2008-09 (Provisional)	FY 2009-10 (Projected)
Employee Costs	5.02	7.52
A&G Costs	0.20	0.22
Repair & Maintenance Expense	0.29	0.29
<b>Subtotal</b>	<b>5.51</b>	<b>8.03</b>
Depreciation	3.89	4.29
Interest & Finance Charges	3.86	4.38
Less: Other Income	0.55	0.49
Return on Equity	0.00	1.06
Debits, Write-offs & Other items	1.08	1.18
<b>Total SLDC ARR</b>	<b>13.79</b>	<b>18.45</b>





## Chapter 4. OBJECTIONS TO ARR / TARIFF PETITIONS OF FY 2009-10:

**4.1** The various provisions of Electricity Act, 2003 and UPERC (Conduct of Business) Regulations, 2004 provides for hearing the representations and propositions being filed by the consumers in matters related to tariff determination. The Commission, in order to achieve the twin objective that has been conferred upon it under the Electricity Act, 2003 i.e. to observe transparency in its proceedings and functions and to protect interest of consumers, has always attached importance to the objections / suggestions / comments of the public on the ARR / Tariff petitions submitted by the licensees. The process gains significant importance in a “cost plus regime”, where the entire cost allowed to the licensee gets transferred to the consumer. The consumers therefore have a locus-standi to comment on the ARR / Tariff Petition filed by the licensees.

**4.2** The Commission has provided **public hearings** as one of the platforms to obtain the views of various stakeholders to encourage a transparent and participative approach in the process of tariff determination. The public hearings were conducted from November 23, 2009 to December 23, 2009 at different places in the State to get the views / comments / objections, if any, of the various stakeholders on the proposals submitted by the licensees. The Petitioner was also given an opportunity to respond to the stakeholders. The Commission has also taken into consideration the oral and written suggestions / comments / views / objections received from various stakeholders through post, e-mail and in person during the public hearings while disposing the ARR / Tariff petitions filed by the licensees.

### **4.3 PUBLIC HEARING PROCESS:**

The Commission invited suggestions from consumers and all other stakeholders and conducted public hearings at various places in the State. Consumer representatives, industry associations and other individual consumers participated actively in the hearing process.

The details of the public hearings held are given below:

❖ Jhansi	:	23.11.2009
❖ Allahabad	:	26.11.2009
❖ Greater NOIDA	:	19.12.2009
❖ NOIDA	:	19.12.2009
❖ Saharanpur	:	20.12.2009
❖ Lucknow	:	22.12.2009
❖ Kanpur	:	23.12.2009



- 4.4** The suggestions / comments / views / objections on the ARR filings received from the public were forwarded to the licensees for their response. The comments of the consumers play an important role in the determination of rate design and tariff schedule as factors like quality of electricity supply and the service levels have to be considered while determining the tariff. The Commission considers these submissions of the consumers before it embarks upon the exercise of determining the tariff for a particular period.
- 4.5** The Commission has taken note of the various views and suggestions made by the stakeholders and appreciate their keen participation in the process to provide feedback to the Commission on various issues. The list of the consumers, who have submitted their suggestions / comments / views / objections is appended at the end of this chapter. The major comments / views of various stakeholders in response to the Petition, the replies given by the Petitioner and the views of the Commission have been summarised under various categories as detailed below:

**GENERAL ISSUES:**

**4.6 MINIMUM CONSUMPTION CHARGES:**

**CONSUMER'S VIEWS:**

- 4.6.1 The consumers have made submissions that the minimum consumption charges (MCG) and fixed / demand charges should not be charged simultaneously. Further, the consumers have submitted that there is considerable difference between the demand and supply of electricity and minimum supply commitment is not fulfilled by the DISCOMS and infact there should be a minimum supply guarantee from the DISCOMS. The consumers cited examples of other states where consumers are charged either MCG or fixed charges but not both. There was also a submission that even if the MCG is to be charged, adjustment should be provided on an annual basis keeping in view occasional drop in demand and more so for seasonal consumers. One of them further submitted that LMV-2 consumers having load upto 2 kW (such as carpenters, betel nut sellers, small shop owners and offices) must not be charged MCG charges as they utilize minimal energy. Only fixed charge and energy charges should be levied on them.
- 4.6.2 LMV-6 consumers have submitted that MCG charges should be abolished for their category in synchronisation with HV-2 category since all LMV-6 consumers below 25 kW load are being billed under kVAH regime and consumers having



higher load have double metering in place, thus their monitoring is as good as that of HV-2 consumers.

#### **RESPONSE OF DISCOMS:**

- 4.6.3 The DISCOMS have submitted that Minimum Consumption Guarantee charges and fixed / demand charges are part of tariff which are levied to recover the Cost of Service (fixed + variable). Guiding principle for determination of tariff has been laid in Electricity Act, 2003 (Tariff) which emphasizes that the interest of consumers be protected and at the same time DISCOMS be permitted to recover the Cost of Service in a reasonable manner. Fixation of MCG level has been done in such a way that if a consumer consumes electricity for 3-4 hours per day, then the amount fixed for MCG gets recovered. So far, all consumers are getting supply much more than required to ensure minimum consumption guarantee levels are met. DISCOMS have given reference to tariff order of FY 2003 (Para 8.3) wherein it is stated that “the prescribed minimum charges are recovered as DISCOM keeps in readiness the energy for consumer to the extent of contracted demand”. However, the Commission has addressed this issue in accordance with the findings of Hon’ble Supreme Court in the matter of Raymond Limited & Ors. Vs. MPSEB & Ors., the relevant portion of which is being reproduced below:

*“The question of exonerating the consumer from the liability undertaken to pay minimum guaranteed charges for a month and billing only for the actual consumption of energy or allowing a consumer to pay the rates on the actual consumption of electricity measured in units will and can arise and has also been considered for determination only in case the supply by the Board itself fell short of the minimum of energy, the consumption of which goes to make up the minimum guaranteed sum. It is well settled and there could be no controversy over the position that if only the supply was available for consumption but the consumer did not consume so much of energy up to the extent of the obligation cast upon him to pay the minimum charge there is no escape from the payment of minimum guarantee charges..... In fact the tariff inclusive of such a provision for payment of a minimum guaranteed sum irrespective of the supply factor appears to be the consideration for the commitments undertaken by the Board as a package deal and it is not possible or permissible to allow the consumer to wiggle out of such commitments merely on the ground that the Board is not able to supply at any point of time or period the required or agreed quantum of supply or even supply up to the level of the minimum guaranteed rate of charges.”*

Therefore imposition of minimum charges is not directly linked with the availability of supply. The Demand Charge is meant to defray the capital related



and other fixed costs while Energy Charges is meant to meet the running expenses i.e. fuel cost / variable portion of power purchase cost, etc. A DISCOM requires machinery, plant equipment, sub-stations, and transmission lines, etc., all of which need a large capital outlay. For this purpose it has to raise funds by obtaining loans. The loans have to be repaid with interest. In the total cost, provision is also to be made for depreciation on machinery, equipment and buildings, plants, machines, sub-stations and lines that have to be maintained. All these activities require large staff and their related cost. These costs are largely fixed in nature and are levied as a part of tariff to recover such costs. The fixed charges should enable the utility to recover the fixed portion of the costs, based on the proportionate share in the cost drivers and according to the burden imposed on the system.

- 4.6.4 In this regard, the DISCOMS have submitted that their tariff proposal is before the Commission for consideration.

**COMMISSION'S VIEWS:**

- 4.6.5 The Commission feels that minimum charges are there to compensate the risk of the DISCOMS arising out of its commitment to honour the contractual obligation. This is also upheld by the Honourable Supreme Court as mentioned in the matter of Raymond Limited & Ors. Vs. MPSEB & Ors., mentioned above. The Commission has accordingly retained the concept of minimum charges in certain categories but at the same time it has done away with it in few of the categories / sub-categories in its FY 2006-07 tariff order. Therefore the Commission has not retained the existing provisions in this Tariff Order also.

The Commission would also like to mention here that consumers opting for seasonal benefit have a flexibility to declare their off seasonal maximum demand subject to a maximum of 25% of the contracted demand. The tariff rates (demand charge per kW/ kVA and energy charge per kWh/ kVAh) for such industries during off-season period will be the same as for normal period but without imposition of minimum charges requirement. Further, during the off season, fixed charges shall be levied on the basis of maximum demand recorded by the meter and not on normal billable demand nor on percentage contracted demand. The same has been elaborated under LMV-6 Rate Schedule, Clause 4.0.

- 4.6.6 The Commission would also like to mention that under 'Option to migration to HV2 category', consumers under LMV-1, LMV-2, LMV-4, LMV-6 with contracted load above 50 kW and getting supply at 11 kV and above voltage shall have an



option to migrate to the HV-2 category. Hence, the eligible consumers may opt to avail this benefit.

#### **4.7 BILL COLLECTION:**

##### **CONSUMER'S VIEWS:**

4.7.1 Many consumer groups and associations have requested for creation of alternative mechanism for timely payment of electricity bills such as through Banks, Post Offices, Mobiles or through internet. They have also complained about the slow, error prone computer servers used for bill payment by the DISCOMS. Few consumers have complained about 'on-the-spot' bills being too complicated, illegible and difficult to comprehend since it uses short forms of English language and have requested that bills should be in two languages, Hindi and English so that general public may understand them.

4.7.2 Consumers have also requested for rebate / incentives for timely payment.

4.7.3 Some consumers have requested that technical personnel should not be appointed as billing agents.

##### **RESPONSE OF DISCOMS:**

4.7.4 The DISCOMS have responded that installation of prepaid meters is being planned. Initially it is proposed for Government premises and subsequently it will be installed for other class of consumers.

4.7.5 No Comments.

4.7.6 DISCOMS have submitted that owing to limited availability of technical personnel, bill collection is being carried out through franchisees.

##### **COMMISSION'S VIEWS:**

4.7.7 The Commission has been pursuing the DISCOMS to explore alternative measures such as payment through internet, Banks etc but the DISCOMS have failed to take necessary corrective measures though the same could have led to better realisation of revenue. Such schemes are already in place in other parts of the country. Hence the Commission directs the DISCOMS to explore the innovative modes of payment within 3 months from the date of issue of tariff



order. Further the DISCOMS shall keep the Commission updated on monthly basis.

- 4.7.8 The Commission, on the issue of timely payment, has already clarified its view in its last tariff order, stating that;

*“while discharging its function under the Act to improve economy and efficiency of the electricity industry, the Commission introduces rebates on account of technical considerations such as load factor rebate and power factor rebate but as far as revenue related rebates are concerned, the same should be proposed by the licensee if it leads to better realization. Therefore, if a proposal to this effect is submitted by licensees in future filings, the same may be considered by the Commission.”*

The Commission therefore stands by its above view and awaits such proposal by the licensees.

- 4.7.9 The Commission feels that billing and collection activities can be outsourced / franchised by the DISCOMS which will make technical personnel available to DISCOMS for utilisation in other areas of its operation. Commission feels that DISCOMS should outsource more and more activities through competitive bidding process.

#### **4.8 POWER LOOMS:**

##### **CONSUMER’S VIEWS:**

- 4.8.1 Many power loom consumers have shown concern on the fact that the difference between their actual bill based on consumption and the amount being charged on flat rate basis, which should be shown as subsidy, is being shown as outstanding against power loom consumers, which is in contradiction with the order of the Commission as well as the directives of the GoUP. They have requested the Commission to have this directive mentioned in the tariff schedule.

##### **RESPONSE OF DISCOMS:**

- 4.8.2 The DISCOMs have clarified that they are taking cognizance of GoUP’s order while issuing bills to Power Loom consumers. On the issue of the mention of the said directive in the Tariff Order, the matter is before the Commission for consideration.



**COMMISSION'S VIEWS:**

4.8.3 On the issue of outstanding payment shown against power loom consumers, the order dated 11<sup>th</sup> July, 2006 of the Commission is very clear that the difference between actual bill, based on the consumption, and the flat rate has to be indicated as subsidy. Therefore, to show it as an arrear against the consumer, even if it is done for accounting purposes, is a violation of Commission's order. Accordingly the Commission reiterates that the practice to show it as arrear in consumers' bills should be stopped immediately and the same should be reflected as subsidy. Commission further states that continuing to show the subsidy as an arrear item in consumers' bills shall be considered as contravention of its order and shall be appropriately dealt with.

**4.9 INCENTIVE TO CONSUMER IN LOW LOSS AREAS:**

**CONSUMER'S VIEWS:**

4.9.1 Many consumers have requested that the DISCOMS should take cognizance of the fact that the loss level in their region such as NOIDA, Ghaziabad etc. is low compared to that in the rest of the State and therefore they should be given discount in their electricity bills. Also they should be supplied more hours of power compared to areas with higher losses.

**RESPONSE OF DISCOMS:**

4.9.2 The DISCOMS have offered no comments on this issue.

**COMMISSION'S VIEWS:**

4.9.3 The Commission is of the view that areas having lower AT&C losses should get power for more number of hours in comparison to districts with higher AT&C losses except in cases where specific directions have been issued by any Court of Law. Further the Commission has also introduced a scheme for reducing distribution losses for all consumers under LMV-1, LMV-2 & LMV-6 categories who give consent for installation of check meter outside their premises. These consumers would be entitled to a discount of 5% if the variation in reading of consumers' meter and the check meter is less than 2%.

The Commission would further like to add that it had directed the DISCOMS to conduct energy audit studies for segregation of technical & commercial losses so



that it can use tested results to provide incentive / penalty to the consumers on circle / division wise basis depending on their respective loss levels.

In this regard, the DISCOMS have submitted that the first step towards achieving this objective, i.e. D.T. Metering, is being carried out in all distribution Zones and in order to increase the supply hours the capacities of overloaded distribution transformers is being increased gradually. Infact, the DISCOMS have submitted an investment plan of Rs.735 cr. (given in TABLE 3-19 of the last chapter) for laying ABC conductors to achieve the said objective.

#### **4.10 POOR SUPPLY CONDITION:**

##### **CONSUMER'S VIEWS:**

4.10.1 There was a general discontent among consumers for the poor supply and service conditions in the State for which submissions were made by the consumers that the DISCOMS should improve their efficiencies and should reduce T&D loss levels in the areas of their supply to generate additional revenue to bridge the revenue gap. Furthermore, there was submission that the consumers should only be charged for the amount of electricity being supplied taking into consideration the quality and quantum of supply. Few consumers were of the view that there should be penalty for the DISCOMS and rebate to the consumers if proper voltage levels are not maintained. Some were also of the view that supply hour linked tariff should be introduced in the State. The consumers resented DISCOMS proposal to raise power tariff when they are not able to supply electricity for the minimum committed hours.

##### **RESPONSE OF DISCOMS:**

4.10.2 The utilities have submitted that all out efforts are made to supply as much energy as available. It is a fact that at present there is a vast gap in availability of supply and demand. Hence some times there is no option but to go for emergency rostering to maintain the grid with in permissible frequency range. The DISCOMS have also submitted that to maintain power quality they have installed capacitor banks at substations. The DISCOMS have also submitted that occurrence of low voltage may be due to some local problem and could be sorted out with local officials.





### **COMMISSION'S VIEWS:**

4.10.3 With regards to the issue of supply condition, the DISCOMs had submitted the proposal of hour linked tariff which was subsequently withdrawn. Further, in this regard, the Commission directs the DISCOMS to initiate immediate steps to procure more long term power at reasonable rates to mitigate the demand supply gap. DISCOMS should also undertake necessary strengthening and R&M of the distribution networks to reduce losses which would result in higher availability of power for sale to consumers.

Regarding the issue of resentment of the consumers in respect to raising of tariff and improving efficiency on the part of DISCOMS, the Commission recognises the power situation in the State where supply is far short of the demand due to poor augmentation in generating capacity in last many years and also due to higher T&D losses. DISCOMS have been taking measures to reduce T&D losses by implementing various schemes like laying Aerial Bunch Conductors (ABC) etc. but the efforts are yet to yield satisfactory results. Moreover, the increase in fuel prices will definitely have an impact on tariff despite expectations of reasonable efficiency in operating parameters of DISCOMS.

### **4.11 SECURITY DEPOSIT:**

#### **CONSUMER'S VIEWS:**

4.11.1 Following was submitted by the consumers with regards to the provision of security deposit and interest to be paid by the DISCOMS:

- a) The security deposit should be reduced to one month from two months and consumer be given at least fifteen days time to pay the bill as is being done in the State of Uttarakhand;
- b) Interest on Security deposit be paid on market rates and not bank rate of 6%;
- c) Bank Guarantee system should replace current cash security system & pledge of National Saving Certificates and Government bonds may be allowed as security deposit.

#### **RESPONSE OF DISCOMS:**

4.11.2 The DISCOMS have responded in the following manner:

- a) Security Amount has been specified in Cost Data Book issued by UPERC.
- b) Interest paid @ 6% p.a. as per the norms laid down by the Commission.
- c) The DISCOMS have offered no comments on this issue.

### **COMMISSION'S VIEWS:**



4.11.3 The provisions related to security deposit and the interest payable on the same are very clear and dealt in detail in Supply Code 2005 and the Cost Data Book and hence needs to be followed in same spirit by the DISCOMS and consumers.

#### **4.12 POWER FACTOR:**

##### **CONSUMER'S VIEWS:**

4.12.1 The industrial consumers have submitted that current surcharge on poor power factor @ 15% is pretty high and should be reduced to 2% i.e. equal to power factor rebate. Many consumers have complained that they have to pay power factor surcharge due to poor service conditions being maintained by the DISCOMS. Some of them complained about the meters which are unable to measure power factor in line with Commission's orders. Consumers have also submitted that industrial and commercial consumers having unbalanced load such as fabricators, small chemical industries, printing industries using conventional DC motor controls & falling in the category of LMV 6 (25HP and below) may be given some relief in maintaining power factor at a 0.85 as it is very difficult for them to balance their reactive power technologically and they are being burdened under high power factor surcharge.

4.12.2 Few of them requested the Commission to create awareness about need for improvement in power factor.

##### **RESPONSE OF DISCOMS:**

4.12.3 DISCOMS have submitted that it is in the best interest of consumers as well as the utilities to maintain power factor above 0.85. To improve power factor consumer may install rated capacity capacitors as prescribed in the tariff order. Imposition of penalty is essential for healthy operation of grid.

4.12.4 The DISCOMS have offered no comments on this issue.

##### **COMMISSION'S VIEWS:**

4.12.5 The Commission's views on the power factor are very clear and had decided to make kVAh tariff essential for all consumers above 25 kW/25 BHP having static TVM / TOD meters installed at their premises and accordingly done away with power factor rebate/power factor surcharge for cases covered in kVAh billing.



Accordingly Commission feels that the provision is amply clear and there is no need to modify the same.

As regards the issue of leading power factor, the Commission in the previous tariff order had mentioned as follows:

*“If the power factor of a consumer is leading and is within the range of 0.95-1.00 then for tariff application purposes the same shall be treated as unity. The bills of such consumers shall be prepared accordingly. However, if the leading power factor is below 0.95 (lead) then the consumer shall be billed as per the kVAh reading indicated by the meter.”*

The same has been retained with the exception of Railway Traction (HV-3) in this order.

- 4.12.6 The Commission agrees with the suggestion of the consumers regarding creating awareness to improve power factor in the State and directs the DISCOMS to explore the means and ways to achieve it.

#### **4.13 LOAD FACTOR REBATE:**

##### **CONSUMER’S VIEWS:**

- 4.13.1 Many consumers have submitted that they have been unable to claim current load factor rebate in present power supply situation wherein power cuts are being carried out from 10 p.m to 6 a.m. Some suggested that if on any particular day if the power cut is more than 2 hours, energy during peak hours must be supplied at normal rates. Few of them also requested that load factor rebate should be calculated on the basis of actual supply of hours.

- 4.13.2 Consumers have also submitted that rebate in tariff to 33 kV consumers should also be extended to 11 kV / 6.6 kV consumers who are willing to raise their voltage level at places where UPPCL is unable to supply power at 33 kV level.

##### **RESPONSE OF DISCOMS:**

- 4.13.3 The DISCOMS have submitted that the load factor is being calculated as per the norms specified in Electricity Supply Code, 2005 and rebate is being provided as per the rate given in the tariff order.



4.13.4 The DISCOMS have stated that all the facts and figures in the ARR & Tariff proposal submitted to the Commission including detailed calculation are in the best interest of consumers as well as the utilities.

**COMMISSION'S VIEWS:**

4.13.5 The Commission in its previous tariff order had provided hourly linked tariff which had inbuilt load factor rebate however the same could not be implemented as DISCOMS had gone for review. Further, this year the DISCOMS had submitted proposal of supply hours linked tariff which they withdrew stating that their collection system is not capable enough to monitor and undertake the same.

4.13.6 Load factor for the consumers is to be computed and rebate is to be provided as per the provisions of the tariff order. Power supply to the consumers will depend upon the location of the consumer and the feasibility to provide supply at the desired voltage level. However Commission requests the DISCOMS to explore opportunities to provide consumers supply at their desired voltage level.

**4.14 TIME OF DAY (TOD) TARIFF:**

**CONSUMER'S VIEWS:**

4.14.1 The consumers submitted that the existing system of penalty of 15.0% during peak hours should be either reduced to 7.5% or rebate during off-peak hours be increased to 15% from 7.5%. Some of them also submitted that TOD meters for LMV-1 & LMV-2 categories shall mean extra burden on the consumers.

**RESPONSE OF DISCOMS:**

4.14.2 The DISCOMS have submitted that the rebate of 7.5% during off peak hours is made to neutralize the consumer's loss due to available system condition. It has further stated that one may visualize from the load curve of the system that availability of supply during off peak hours is not much different from the normal supply hours and thus, 7.5% rebate has been proposed keeping the interest of the consumers in mind.

The DISCOMS further submitted that the availability of power during last summer from different sources was far below the projection / expectation. It is also clear that after imposing 15% penalty during peak hour the conditions



remained critical and DISCOMS were forced to impose rostering. If this penalty is withdrawn more consumers will shift to these hours and system will be at greater risk leading to grid collapse. Hence it is not at all in the interest of the system as well as the consumers to withdraw or reduce the penalty during peak hours.

**COMMISSION'S VIEWS:**

4.14.3 The Commission disagrees with the DISCOMS contention on rebate provided to consumers during off-peak period citing flat load curve of the system. In fact the rebate is provided in off-peak period to consume more energy in that period and thus acts as a Demand Side Management (DSM) measure.

The Commission would like to mention that TOD tariff is to balance the consumption between peak and off-peak period as well as to maintain the grid stability. The Commission had decreased TOD rate for peak period from 20% to 15% and for off-period it was modified to (-) 7.5% from (-) 5% with an aim to incentivise consumers to optimise their consumption profile and quantum and also to stagger their load in accordance to these charges.

In response to Commission's directive in FY 2008-09 tariff order to submit consumption history of off-peak and peak period for HV-2 category, the DISCOMS have submitted that TOD metering is done for all HV-2 consumers and accordingly revenue is assessed and realised. However, Commission redirects DISCOMS to substantiate their stand with more DISCOM-wise data for consumers at various voltages of HV-2, rather than adopting a general assumption across all voltage levels as has been done in its present filing.

Further, with regards to consumers' concern about TOD meters for LMV-1 and LMV-2, the Commission opines that since the DISCOMS have rolled back their proposal of hourly linked proposal for these categories there is no additional burden on the consumers.

**4.15 POWER PURCHASE AGREEMENTS BETWEEN DISCOMS:**

**CONSUMER'S VIEWS:**

4.15.1 Few consumers have asked about whether the new projects being developed by the likes of Adani, Reliance has any separate allocation for industries in the State



of UP. Also some consumers have asked about the status of allocation of PPAs amongst DISCOMs and their status on grant of license.

**RESPONSE OF DISCOMS:**

4.15.2 The DISCOMS have offered no comments on this issue.

**COMMISSION'S VIEWS:**

4.15.3 Commission understands that new PPAs signed with Private developers may have clauses that earmarks certain quantum allocation to industries and that Commission only has an advisory role in framing these PPAs.

**4.16 AUDITED ACCOUNTS OF DISCOMS:**

**CONSUMER'S VIEWS:**

4.16.1 Many consumers expressed reservations over ARR's validity over unaudited statements and said that financial statements must be Auditor General audited or audited by external agencies.

**RESPONSE OF DISCOMS:**

4.16.2 DISCOMS have replied that unaudited financial statements upto FY 2008-09 and audited statements upto FY 2005-06 have been submitted to Commission.

**COMMISSION'S VIEWS:**

4.16.3 The Commission agrees that approval of costs without audited accounts leaves true - up exercise unattended. However, the same can be taken care at the time of submission of audited accounts. Commission has time and again directed DISCOMS to expedite the process of finalisation of audited accounts. Further, now that MYT regime is going to take place soon, it is desirable to have audited accounts in place.



**CATEGORY SPECIFIC OBJECTIONS:**

**4.17 LMV – 1:**

**CONSUMER'S VIEWS:**

4.17.1 LMV-1 consumers had following objections regarding the ARR / Tariff petition filed by the DISCOMS:

- a) TOD meter implementation as per new tariff proposal will put excess pressure on consumers as such B.L form for LMV-1 & LMV-2 connections till 25 kW should not be compulsory.
- b) NA/NR provision in the bill is totally baseless when meters are outside consumer premises.
- c) General Provision Clause No. 7(ii) for LMV-1 & LMV-2 consumers be removed since these consumers during festive occasions use electricity for lighting purposes and they don't get temporary connection as they have permanent connection and thus penalty imposed on them in this regard is highly unjustified.
- d) Attachment of 'pole meter' term along with 'check meter' under General Provisions Clause No. 9(a).
- e) BPL consumers be given free connection and no fixed charges should be levied from them.
- f) Goshala, Ashrams etc. should be transferred from LMV-4 category to LMV-1(A) and rebate being given to religious institutions must be extended to them.
- g) LMV 1-(c) rebate to doctors, advocates etc. who practice within the area of 500 Sq. feet must be extended to Tea-makers, Paanwalas, Barber shops etc. also. Mixed commercial and domestic load in the tariff schedule for residential premises wherein shops have been opened be identified. UP Chambers of Commerce submitted that it is a registered society and it doesn't do any commercial activity and hence it should be included in LMV-1 category.



**RESPONSE OF DISCOMS:**

4.17.2 The DISCOMS have responded as follows:

- a) The norm for B.L forms can not be replaced due to matters concerning electrical safety. Moreover, there is a provision for installation of TVM and TOD meters on more than 25 BHP connections.
- b) All new meters are being installed outside the consumers' premises but still there are a few that are not completely outside.
- c) Without this provision there won't be any measurement of electricity usage and therefore it should not be removed.
- d) The Commission has the prerogative to decide on this matter.
- e) Minimal tariff for BPL consumers has been proposed.
- f) This category should not be extended as they are bound to lose revenue in this regard.
- g) The Commission has the prerogative to decide on this matter.

**COMMISSION'S VIEWS:**

4.17.3 The Commission has the following views on the above mentioned issues:

- a) B.L form is important from electrical safety perspective.
- b) Provision of NA / NR bills is for those consumers whose meters are still inaccessible to the extent they are installed in the consumers' premises.
- c) During festive season the demand of electricity becomes very high. However, supply resources are limited. Therefore the penal clauses were made for reasonable and efficient usage of power for all purposes.
- d) To incentivise honest consumers, it has been provided in General Provisions Clause No. 9 that if a consumer gives his consent to the DISCOMS for installation of a check meter outside their premises on an electric pole or otherwise in a separate or collective meter housing created for the purpose a discount of 5% on energy charge shall be applicable to them provided the variation in the reading of the consumers' meter and the check meter is less than 2%.
- e) Various RGGVY schemes are already providing free connections to BPL consumers in rural areas. Further, the Commission ensures that the tariff payable by the BPL consumers is very low keeping in mind that they belong to most disadvantaged section of the society.
- f) The Commission with an intention of providing subsidized tariff has brought religious institutions into the ambit of LMV-4(A) i.e. public institution.





Accordingly they had been clubbed along with the charitable institutions including orphanage etc. providing services free of cost or at the charges / structure of charges not exceeding those in similar Government operated institutions. Hence Commission feels that there is no further need to modify the provisions.

- g) The Commission has altered the said provision in this tariff order because of implementation issues. The current provision reads as under:

*“For mixed loads less than 50 KW, however, if some portion of the above load is utilized for conduct of business for non-domestic purposes then the entire energy consumed shall be charged under the rate schedule of higher charge.”*

With regards to query of U.P. Chamber of Commerce (UPCC), the Commission feels that LMV-1 is predominantly for domestic use and the usage of UPCC may not be for domestic use i.e. light, fan, power & other domestic purposes. Further with regards to query of UP Chambers of Commerce which claims itself as a registered society, it is not strictly a registered society. It is having residential flats / apartments and the nature of use is also not domestic and hence do not qualify under LMV-1 category.

#### **4.18 LMV – 2:**

##### **CONSUMER’S VIEWS:**

4.18.1 LMV-2 consumers had following objections regarding the ARR / Tariff petition filed by the DISCOMS:

- a) LMV-2 (3) (b)'s additional charges are unjustified as getting separate connections for signboards is difficult and cumbersome for consumers.
- b) Power factor surcharge is being levied from them in the bill even when there is no mention of the power factor in the bill. Also, KVAH metering is still not maintained for more than 25 kW Loads in LMV-2 Category.
- c) Surcharge on A.C. is unjustified and that a consumer must be made to submit information about A.C. on an affidavit and penalty or any surcharge may be imposed if the consumer is flouting the information submitted in the affidavit



### **RESPONSE OF DISCOMS:**

4.18.2 The DISCOMS have responded as follows:

- a) Additional charges are being levied from this category keeping in mind the increase in cost of power and especially that of peak demand.
- b) The DISCOMS have offered no comments on this issue.
- c) Additional charges for installation of A.C. by LMV-2 consumer has been levied by the Commission in order to save the energy and provided it to those consumers who are not getting adequate supply of power during summer season. These charges are not at all to harass the consumer but to help the needy ones.

### **COMMISSION'S VIEWS:**

4.18.3 The Commission has the following views on the above mentioned issues:

- a) Keeping in line with the philosophy of discouraging non-essential utilisation of essential services, the Commission had considered that the consumption of electricity for the purposes of commercial advertisement should be discouraged. The Commission proposes to proceed with the same philosophy in the present order as well.
- b) Any specific case where the above procedure has not been adopted needs to be referred to the concerned DISCOM. The DISCOMS are directed to review such cases and take necessary action in line with the provisions of the tariff order.
- c) The Commission has decided to withdraw additional surcharge on A.C. usage as it finds the consumers' plea appropriate.

### **4.19 LMV – 4:**

#### **CONSUMER'S VIEWS:**

4.19.1 The consumers submitted that Clause 1 (C) should be made invalid as it is very complex. It was further requested that only charitable organizations be included in LMV-4 category and other private institutions / companies should be adjusted in LMV-2 & LMV-6 categories.



4.19.2 There was a submission from K.K. Hospital that it has been treating UPPCL employees for last 12 years without any increment in their charges but they have been asked to pay retrospective demand charges. They have made the following requests to the Commission:

- a) Withdrawal of demand or minimum charges, if the units consumed are more than minimum required for sanctioned load.
- b) Withdrawal of A.C charges imposed at the rate of Rs.150/- over & above the already paid bill from all hospitals and especially charitable hospitals in the interest of patients.
- c) Have raised worries over proposed tariff of Rs.5.00/- per unit.

**RESPONSE OF DISCOMS:**

4.19.3 The Commission may consider creating a new category.

4.19.4 The DISCOMS have responded as follows:

- a) Minimum Consumption Guarantee (Charges) and fixed / demand charges are part of tariff which are levied to recover the Cost of Service (fixed+ variable). Guiding principle for determination of tariff has been laid in Electricity Act, 2003 (Tariff) which emphasizes to ensure the interest of consumers at the same time allows DISCOMS to recover the Cost of Service in a reasonable manner. Fixation of MCG level has been done in such a way that if a consumer consumes electricity only for 3-4 hours per day, then the amount fixed for MCG is covered. So far all consumers are getting supply much more than required to ensure minimum consumption guarantee level. DISCOM have given reference of Commission's tariff order for FY 2003 (Para 8.3) which has justified and stated that "the prescribed minimum charges are recovered as DISCOM keeps in readiness the energy for consumer to the extent of contracted demand". However, in its previous tariff order, the Commission has addressed this issue in accordance with the findings of Hon'ble Supreme Court in the matter of Raymond Limited & Ors. Vs. MPSEB & Ors., the relevant portion of which is being reproduced below:

*"The question of exonerating the consumer from the liability undertaken to pay minimum guaranteed charges for a month and billing only for the actual consumption of energy or allowing a consumer to pay the rates on the actual consumption of electricity measured in units will and can arise and has also been considered for determination only in case the supply by the Board itself fell short*



*of the minimum of energy, the consumption of which goes to make up the minimum guaranteed sum. It is well settled and there could be no controversy over the position that if only the supply was available for consumption but the consumer did not consume so much of energy up to the extent of the obligation cast upon him to pay the minimum charge there is no escape from the payment of minimum guarantee charges..... In fact the tariff inclusive of such a provision for payment of a minimum guaranteed sum irrespective of the supply factor appears to be the consideration for the commitments undertaken by the Board as a package deal and it is not possible or permissible to allow the consumer to wiggle out of such commitments merely on the ground that the Board is not able to supply at any point of time or period the required or agreed quantum of supply or even supply up to the level of the minimum guaranteed rate of charges.”*

Therefore imposition of minimum charges is not directly linked with the availability of supply. The Demand Charge is meant to defray the capital related and other fixed costs while Energy Charges is meant to meet the running expenses i.e. fuel cost/variable portion of power purchase cost, etc. A DISCOM requires machinery, plant equipment, sub-stations, and transmission lines, etc., all of which need a large capital outlay. For this purpose it has to raise funds by obtaining loans. The loans have to be repaid with interest. In the total cost, provision is also to be made for depreciation on machinery, equipment and buildings, plants, machines, sub-stations and lines that have to be maintained. All these activities require large staff and their related cost. These costs are largely fixed in nature and are levied as a part of tariff to recover such costs. The fixed charges should enable the Utility to recover the fixed portion of the costs, based on the proportionate share in the cost drivers and according to the burden imposed on the system.

- b) DISCOMS have responded that additional charges for installation of A.C. for LMV-2 consumers has been levied in order to discourage use of A.C., save energy and to provide adequate supply to consumers during summer season. These charges are not at all to harass the consumer but to help the most needy one.
- c) The well considered proposals taking into account all relevant facts and figures have been submitted to the Commission.



### **COMMISSION'S VIEWS:**

- 4.19.5 The Commission has tried to balance the existing energy rates & the proposed energy rates of the DISCOMS. However, the fixed charges have been given a hike of around 10%. For private institutions, the rates are kept almost equal to the rates as applicable for the commercial category as the private institutions are commercial in nature whereas public institutions are generally non-profit seeking.
- 4.19.6 The Commission understands that K.K. Hospital, Lucknow (ISO 9001-2000 certified) is a charitable hospital run on 'No Profit No Loss' basis and hence it can recover its full cost from all the patients as per its policies.
- The Commission feels that minimum charges (MCG) are there to compensate the risk of the DISCOM arising out of its honoring the contractual obligation, as is also upheld by the Hon'ble Supreme Court as referred to by the DISCOM
  - Further, the A.C. surcharge stands withdrawn.
  - The Commission finds no reason as to why it is charging the same rates to UPPCL since last 12 years when it is a charitable hospital and is running on 'No Profit No Loss' basis. Further it is totally out of Commission's jurisdiction to comment on charges to be levied to UPPCL employees.

### **4.20 LMV – 5:**

#### **CONSUMER'S VIEWS:**

- 4.20.1 LMV-5 consumers had following objections regarding the ARR / Tariff petition filed by the DISCOMs:
- Fixed charges with respect to 7.5 Kw load per connection is very high. Infact, PTW consumers should be given 3 Kw or 5 Kw connections depending on the water table of the particular region. Also it was requested that electricity be made free for PTW consumers.
  - At present agriculture consumers are paying full amount for installation of meters & transformers whereas industrial consumers are paying only 50% of the amount.
  - No surcharge on arrears be recovered from the agriculture consumers since agriculture is an activity which generates revenue on yearly basis.
  - Option of unmetered / metered connection must be given to the Urban PTW consumer.



### **RESPONSE OF DISCOMS:**

4.20.2 The DISCOMS have responded as follows:

- a) The DISCOMS have offered no comments on this issue.
- b) This does not relate to tariff.
- c) The present billing system must be retained.
- d) Urban Feeders have been given a special provision in this regard under LMV-5 (3(B)).

### **COMMISSION'S VIEWS:**

4.20.3 The Commission has the following views on the above mentioned issues:

- a) As far as the rates for private tube well i.e. LMV-5 category is concerned, the Commission has recommended no change in view of the GoUP subsidy committed to this category as per the proposal of the DISCOMS and its utility for agricultural purposes which is of paramount importance in the agrarian economy.
- b) The issue relates to Supply Code and Cost Data Book and hence needs to be addressed at a separate forum.
- c) The Commission considers that timely payment of bills is necessary for smooth functioning of any commercial organization and DISCOMS are no exception. Thus, arrears on account of consumers' revenue cycle may mean further losses for DISCOMS and hence the waiver of the same cannot be approved for any particular category.
- d) The Commission would like to stress upon the fact that Electricity Act, 2003 mandates 100% metering. Infact, the Commission & DISCOMS are always putting in every possible effort to achieve the highest metering levels. Accordingly, the DISCOMS have also been directed from time to time to undertake 100% metering. With this view in mind, this option is removed for the entire LMV-5 category.

### **4.21 LMV – 6:**

#### **CONSUMER'S VIEWS:**

4.21.1 Few Cold storage consumers have submitted that as per the new orders of GoUP cold storages are supposed to run for 9.5 months while electricity tariff allows



maximum seasonal benefit when cold storages run for 9 months. They have further submitted that the off season discount should not be dependent on number of months for which the cold storages remain closed. Infact this may be calculated on the basis of number of days during which the load remains less than 30% of contracted load. Few of them have also requested for removal of 25 BHP limit on LMV-6 & HV-2 consumers so that more consumers may avail the seasonal rebate.

- 4.21.2 Consumers also submitted that contract for LMV-6(4)'s subcategory should be done in KVA and not in HP as billing is being carried out in KVA. This shall relieve the consumer from cumbersome conversion from HP to KVA.

**RESPONSE OF DISCOMS:**

- 4.21.3 The DISCOMS have submitted that the tariff for all seasonal industries / consumers including cold storages has been proposed taking into account all the relevant factors and most reasonable proposal for tariff as well as rebate has been submitted to the Commission for approval.

**COMMISSION'S VIEWS:**

- 4.21.4 The Commission would like to refer to the provision for LMV-6 in rate schedule, clause 4 (ii) wherein it is mentioned that continuous period of operation of such industries shall be at least 4 months but not more than 9 months in a financial year. The Commission has not received any proposal from DISCOMS for 9.5 months. Hence, no change has been made in the existing provisions.
- 4.21.5 The Commission has explained the said matter in General Provisions of Rate Schedule Clause No. 5 given in **ANNEXURE – XII** .

**4.22 LMV – 9:**

**CONSUMER'S VIEWS:**

- 4.22.1 During construction of house, power should be levied at the rates specified for LMV-1 category.



**RESPONSE OF DISCOMS:**

4.22.2 The DISCOMS have submitted that this should not be considered as Electric Safety directorate does not issue B.L form unless the construction of the house is completed and B.L form is a necessary for release of permanent connection.

**COMMISSION'S VIEWS:**

4.22.3 The Commission opins that the requirements of BL form as per the Electric Safety Directorate is valid and therefore retains the existing provisions.

**4.23 HV – 1:**

**CONSUMER'S VIEWS:**

4.23.1 Clause 3(a) should be valid on commercial and private organizations only and charitable and social organizations should be considered under HV-1(3) (B) category.

**RESPONSE OF DISCOMS:**

4.23.2 The DISCOMS have submitted that the definition of these subcategories is very clear and thus no change should be considered in this regard.

**COMMISSION'S VIEWS:**

4.23.3 Definition of Public Institution for HV-1 is clearly identified in the tariff schedule.

**4.24 HV – 2:**

**CONSUMER'S VIEWS:**

4.24.1 Some consumers have submitted that their demand charges are excessive as compared to LMV-6 consumers and thus this anomaly must be rectified. Also demand charges must be linked with supply hours as per MRI report.

4.24.2 There was a submission made by the 132 kV level consumers in this category that increase of 0.75 Paise/Unit in their tariff is not justified as their transmission losses are almost nil, their network have negligible amount of capital employed by DISCOMS and that they do not require any infrastructure ramp-up.





- 4.24.3 There was also a submission from 11 kV consumers that their charges were steep as compared to the 33 kV levels and laid stress on the fact that the cost involved to ramp-up their infrastructure to 33 kV is substantial and therefore the rebate passed on to the 33 kV consumers should also be given to them.
- 4.24.4 Consumers while making further submissions opposed any tariff hike and requested that a time frame should be developed for elimination of cross subsidy in a phased manner. Few consumers gave a comparative analysis with respect to other states like Uttaranchal, Haryana and Himachal Pradesh where the HV-2 tariff structure is considerably lower as compared to Uttar Pradesh and pleaded that any further tariff hike shall make them uncompetitive compared to the other states.

**RESPONSE OF DISCOMS:**

- 4.24.5 The DISCOMS have offered no comments on this issue.
- 4.24.6 The DISCOMS have submitted that the average cost of service (CoS) of the DISCOMS has increased by about 13% from a value of Rs. 4.72/unit in FY 2009 to Rs.5.35/unit in FY 2010. This increase in CoS is mainly due to hike in coal and fuel price of about 24% during last two years. As there is no provision of leverage of fuel cost adjustment charges the DISCOM has no option but to increase this tariff to cover the cost of supply. Thus mere hike of Rs.0.75 /unit in HV-2 tariff is justified.
- DISCOMS have also submitted that the total estimated transmission losses for FY 2009-10 are projected at 5.98% which includes 2.06% as losses upto interconnection point & UPPTCL Transmission losses as 4.0%
- 4.24.7 The DISCOMS have offered no comments on this issue.
- 4.24.8 The DISCOMS have submitted that the tariff increase has been proposed in line with the Tariff Policy notified by Govt. of India, which states that tariff, should be fixed at  $\pm 20\%$  of the average cost of supply. In FY 2009-10 average cost of supply worked out to be Rs. 5.35/unit. Even with this hike the DISCOMS are incurring losses on this account. Therefore this moderate hike is justified keeping in view the hike in the input cost. The DISCOMS have further submitted that in Uttaranchal & H.P power is predominantly hydel whereas U.P is mostly dependent on thermal power. Hence, their cost of power purchase is low as such comparison with U.P is unjustified.



**COMMISSION'S VIEWS:**

- 4.24.9 The Commission would like mention that under ideal conditions, fixed costs of DISCOMS need to be recovered through fixed charges from consumers and variable cost of power purchase through energy charges from consumers. The Commission agrees that such recovery across categories may not be actually happening. Keeping in mind, the Electricity Act 2003 & the Tariff Policy cross subsidy prevails in the system.
- 4.24.10 The tariff for consumers connected at 132 kV and above voltages is lower than those connected at lower voltage levels. This has been done taking into account the aspects discussed above which includes the level of losses, cost of service etc. Hence, the contention of the consumer is already taken care of by the Commission as is being considered in the present order. Regarding recovery of fuel adjustment charges (FCA) the Commission had directed UPPCL to file formula / methodology for recovery of FCA from consumers. Till date no action has been taken by UPPCL. On the contrary, they have claimed the difference as 'Power Purchase Arrears'. Thus the contention of the DISCOMS is invalid and cannot be the justification for tariff increase. As far as the final hike is concerned the same would be based on the approval of various costs of the DISCOMS and taking cognisance of the factors discussed above.
- 4.24.11 With regards to the issue of tariff hike in energy charge and demand charge the Commission would like to mention here that the approved demand charges and energy charges have been increased in consideration of the Electricity Act, 2003 & Tariff Policy. Further, the Commission has retained the existing TOD structure.
- 4.24.12 Over the years, the Commission has tried hard to bring the cross subsidy levels down and has introduced various rebates like load factor rebate, TOD rebate to effectively bring down the tariff within  $\pm 20\%$  bracket of average cost of supply for cross-subsidizing consumers. In this regard, the Commission again directs the DISCOMS to submit voltage-wise cost of service study report.



#### **4.25 RAILWAYS:**

##### **CONSUMER'S VIEWS:**

4.25.1 Railways in its submission have requested for the following:

- Reduction in tariff as higher traction tariff restricts its capability to finance developmental plans;
- At least 10% rebate owing to their contribution in reduction of Green House Gases, for being the most energy efficient transport system and for reducing dependence on imported coal;
- Reduction in tariff as their cost of supply is minimal since they avail power at 132 Kv/25 Kv, have continuous load which improves load factor of the system;
- The tariff is way too high compared to central sector generating power purchase cost (Rs. 2.09/Unit for NHPC and Rs. 2.44/Unit for NTPC);
- Have cited examples from ATE, Delhi wherein the Appellate Tribunal has stated that Railway's plea for reasonable tariff should be given a serious thought;
- Tariff to consumer categories should be linked to category wise Cost of Supply as per Tariff Policy

4.25.2 MYT framework should be implemented as per the provisions of Tariff policy.

4.25.3 Railways has also requested for rebate in tax under Article 287 of the Constitution.

4.25.4 Simultaneous integration of maximum demand be done.

4.25.5 To consider at least 2% rebate on power factor above 0.96.

4.25.6 Rebate of 2% against timely / advance payments as is the practise followed by utilities like NTPC.

4.25.7 They have requested the Commission to have separate tariff schedule in its tariff order for supply of electricity to railways for non-traction purposes incorporating features of LMV-1 & LMV-4 (A)



4.25.8 Other suggestions of Non-Traction tariff for consideration of Commission are as follows:

- Electronic energy meters should be installed at all supply points and transmission of data pertaining to energy demand and energy consumption may be made available through GPRS / GSM for integration of maximum demand and addition of energy consumption;
- Bills for energy charges should be generated electronically and payment could be made through ECS;
- A time bound schedule should be fixed for enhancement / release of new connection to railways;
- Revision of contract should be made effective from the date of application without linking it with other issues;
- Service connections for electrification of level crossing gates and railway stations to be provided within shortest possible time frame and at a reasonable cost.

**RESPONSE OF DISCOMS:**

4.25.9 The DISCOMS have submitted that they are trying to rationalize the tariff and keep it within the range of  $\pm 20\%$  of cost of service as per the tariff policy. The proposed average cost of service for FY 2009-10 is approx. Rs.5.35/unit and the proposed railway tariff is still well below the COS. All the tariff design principles have been kept in view in order to establish true linkage of tariff with the cost of service.

4.25.10 The DISCOMS have responded that they are waiting for guidelines to be issued by the Commission to file future petitions under MYT.

4.25.11 The DISCOMS have submitted that Article 287 of the constitution prohibits imposition of tax on sale of electricity to railways. This law is being complied with and there is no ambiguity about it. They have further submitted that the interpretation of the referred law by Railways is misleading. No tax has been proposed by the DISCOMS.

4.25.12 The DISCOMS have submitted that as per CEA guidelines summation meters shall be used to record the energy as well as peak load supplied from the same grid station. Further, UPPCL on behalf of DISCOMS have requested for simultaneous integration of maximum demand for Railways as per their agreements with all the DISCOMS in the State.



4.25.13 The DISCOMS have offered no comments on other issues.

**COMMISSION'S VIEWS:**

4.25.14 As far as reduction of tariff is concerned, the Commission has tried to align the tariff with rising costs of power supply and paying capacity of the consumers. Moreover, after applying load factor rebate, the Commission finds tariffs reasonable and well justified.

4.25.15 The Commission is in the process of developing a Multi-Year Tariff (MYT) framework for DISCOMS in the State.

4.25.16 As submitted by the DISCOMS no tax is being levied and accordingly contention of consumer is incorrect.

4.25.17 Commission has evaluated the submission of the Railways & UPPCL that they have signed agreements wherein it has been agreed that billing should be done on the basis of total simultaneous maximum demand. In the wake of the aforesaid agreements and the DISCOMS submission, the Commission approves simultaneous metering of maximum demand.

4.25.18 In this regard, the Commission has directed Railways to install dynamic reactive compensators within two years of this order.

4.25.19 The Commission has already addressed this issue in Clause No. **4.7.8.**

4.25.20 The Commission feels that such a proposal should come from DISCOM in the ARR & tariff petition along with necessary back up data to enable the Commission to decide on the matter.

4.25.21 The other issues related to provision of supply index and performance, time bound release of new connections, replacement of defective meters etc. are clearly provided in the Supply Code and can be taken up in the appropriate forum.



#### **4.26 BULK SUPPLY TO MES:**

##### **CONSUMER'S VIEWS:**

4.26.1 The consumer has submitted that their place in LMV -1 (b) category of the tariff schedule is not justified because of the following reasons:

- MES is a service organisation which renders services to the Indian troops;
- MES is a non profit oriented establishment;
- MES draws bulk power supply at single point and distributes through its own distribution network bearing the cost of distribution whereas for most of the Govt. organisations power is supplied at low voltage by SEBs, and hence SEBs bear the cost of distribution of power supply;
- MES maintains good power factor and makes prompt payment;
- MES draws power at 33/11 KV supply and is a deemed licensee under Section 14 of Third proviso of Electricity Act , 2003;
- MES supplies electricity to the entire defence installation whether situated inside the Cantonment area or outside.

##### **RESPONSE OF DISCOMS:**

4.26.2 DISCOMs have submitted that no hike is being proposed in LMV-1 (b) tariff, where the Cantonments and Defence installations are covered. Nevertheless fixed and energy charges are much lower than other category of domestic metered consumers and life line consumers.

##### **COMMISSION'S VIEWS:**

4.26.3 The Commission has included general defence installations with predominantly domestic load under the newly formed LMV-1(3)(b) sub-category so that they can get benefits accruing due to lower cost involved in providing single point supply to them as long as the rate prescribed for this sub-category are not significantly lower than the average cost of service. The Commission has kept this point in mind while finalizing this order.



#### **4.27 OTHER ISSUES:**

##### **CONSUMER'S VIEWS:**

4.27.1 There were a number of consumers who made submissions unrelated to the categories defined and discussed earlier. The various comments are as follows:

- a) Linking WPI / CPI index prices with electric tariff is preposterous.
- b) Power given to UPPCL employees / pensioners should be metered only.
- c) Without license electricity distribution in the state and this ARR filing is nothing but fraud.
- d) Few of the Consumers requested for abolishment of system loading charges;
- e) Impact of OTS waiver is being wrongly passed on to the consumers who pay their bills on time;
- f) Incorporation of new and independent body which shall work under UPERC for release of new and additional load.

##### **RESPONSE OF DISCOMS:**

4.27.2 The DISCOMS have responded as follows:

- a) WPI / CPI rates are as per rates notified by Central Government.
- b) Electricity Charges of the departmental employees are regularly deducted from their monthly salary bill. These electricity charges are regularly revised along with the tariff of other domestic categories. During last five years the general domestic Light and Fan consumer tariff has increased by 22%, whereas the departmental category tariff has increased by 43%.
- c) Under the Electricity Act, 2003 Sec. 14(c) a distribution company owned by the Govt. does not require to obtain separate distribution license. Instead they will be treated as deemed DISCOM under this act. However to ensure independent working separate license have been applied for all distribution companies.
- d) Not related with tariff
- e) The DISCOMS have submitted that the OTS scheme is being implemented by each DISCOM from time to time to realize the blocked arrears. The schemes are being implemented in the interest of consumers and not to punish the regular and honest consumer.
- f) Not related to tariff.



### **COMMISSION'S VIEWS:**

4.27.3 The Commission has the following views on the above mentioned issues:

- a) WPI / CPI rates have been taken as norms for approving O&M expenses as per Distribution Tariff Regulations.
- b) The Commission redirects the DISCOMS to install electronic meters in the residential premises of the employees as well as in their offices.
- c) The Commission has issued separate licenses for all State owned DISCOMS on 21<sup>st</sup> January 2010.
- d) The Commission finds the response of the DISCOMS is valid. The matter concerns the Electricity Supply Code & Cost Data Book and needs to be addressed in the appropriate forum.
- e) The Commission clarifies that it has allowed the waiver of surcharge amount for those cases of unmetered consumers who have signed an unconditional undertaking to take up metered connections. Rest all OTS waivers have been borne by the DISCOMS through its own resources or through GoUP subsidy and have not been allowed. Further, no amount of surcharge waived off shall be passed onto consumers in future ARR / true-up exercises.
- f) The same is out of the purview of the Commission.

***Apart from above there were a number of suggestions / comments / objections related to matters other than tariff which haven't been discussed in this order; but, the Commission has given due cognizance to them while finalising this tariff order.***

### **4.28 LIST OF ATTENDEES:**

4.28.1 The list of individuals and organisations who have submitted their objections / suggestions / comments on the ARR & Tariff petition in writing are given in the table below and the list of persons who have attended the public hearing are given in **ANNEXURE – XVII**





**TABLE 4-1: LIST OF INDIVIDUALS AND ORGANISATION**

<b>List of Organizations / Consumers who have submitted objections in writing</b>	
<b>S. N</b>	<b>Name, Organization and Address</b>
1	M/s Reliance Industries Ltd., Manufacturing Division, Dewa Road, Somaiya Nagar, Barabanki
2	Global Smelters Ltd. Fazalganj, Kanpur
3	North Central Railway, Electric Department, Subedarganz, Allahabad
4	M/s Reliance Industries Ltd., , Manufacturing Division, Allahabad
5	Bundelkhand Chamber of Commerce & Industry
6	Rimjhim Spat Limited, Fazalganj, Kanpur
7	Upphokta Sanrakshan Kalyan Samiti, Vrandavan, Mathura
8	Bhartiya Kisan Union, Aligarh
9	Bundelkhan Chamber of commerce
10	Sh Sudhir Chandra Goyel, Khatauli Cold Storage, 231-Aryapuri, Mujaffarnagar
11	Dr. Padmesh Chandra Mudgal, Kedarshah, Anupshahr, Buladshahr
12	Sh. Dharmveer Singh, Manager/Secretary, Doyastra Lok Sewa Samiti, Chandranagar, Moradabad
13	Sh. Sudhir, Chandra Goyel, Khatauli, Cold Storage
14	Sh. Mahant Singh Tyagi, Regional Chairman, NHR, India
15	Sh. Ankur Jaiswal, Head Revenue Cycle Management Unit, Enzen Global Solutions Pvt. Ltd. Bangalore
16	Sh. Sibtain Ali Siddique, Mohan Pent House, 10/26, Nabab Usuf Road, Allahabad
17	K.K. Hospital, Nabiullah Road, River Bank Colony, Near Suraj Kunad, Lucknow
18	Sh. Awadhesh Kumar Verma, President, UPRVUP, Indiranagar, Lucknow
19	National Confederation of Dalit Organization (NACDOR)
20	Jan Mangal Sewa Samiti, Kanpur
21	Human Rights Association of India
22	Udhyog Vyapar Mandal, Pilibhit
23	Pilibhit Cold Storage
24	Cold Storage Association Aishbagh, Lucknow, Uttar Pradesh
25	Uttar Pradesh Hotel & Restaurant Association
26	Narendr Madan, Muradabad
27	Cold Storage association Uttar Pradesh, Lucknow
28	Anil, Rathi, Rathi Steel
29	Shashi Bhusan Mishra, Upphokta Sanrakshan Kalyan Parisad, Vrandavan
30	Shri Rathi Steel Ltd
31	MGR Industries Association
32	Federation of Noida Residents Welfare Association
33	Sahibabad Industries Association, Ghaziabad
34	Indian Industries Association, Lucknow
35	Arun Kumar S.E., Dilkhusa, Lucknow



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<b>List of Organizations / Consumers who have submitted objections in writing</b>	
<b>S. N</b>	<b>Name, Organization and Address</b>
36	Om Prakash Rai, Virat Khand, Gomtinagar
37	Uttar Pradesh Bunkar, Tanda
38	Rimjhim Ispat Ltd
39	Global Smelters Ltd
40	Veteran's Sahayata Samiti, Hazratganj, Lucknow
41	Avadhesh Kumar Verma, President, UP. Rajya Vidyut Upbhokta Parisad
42	Mr. Brijesh Awasthi, General Secretary, Provincial Industries Association, Kanpur
43	Mr. Ajeet Rajput, Kanpur Bijli Majdoor Sabha, Kanpur
44	Mr. Mukesh Kr. Agrawal, Managing Director, Rimjhim Ispat Limited, Kanpur
45	Mr. Rama Shanker Awasthi, General Consumer, Dalibagh, Lucknow
46	Mr. Jai Prakash, S.E., Dir E/M, MES, Bareilly
47	Mr. Anil Rathi, MD, Shri Rathi Steel Ltd
48	Mr. Arun Kumar, S.E., Dilkusha, Lucknow
49	Associated Chamber of Commerce & Industry of U.P
50	Bundel Khand Chamber of Commerce, Jhansi
51	Mr. D.K.Srivastava, Sr. Divl. Electrical Engineer {TRD}, NCR, Allahabad
52	Director General Tourism, Uttar Pradesh, Lucknow
53	Upbhokta Sanrakshan & Kalyan Samiti, Kanpur
54	Mr. Rakesh Goyal, Lucknow
55	Dr. Anil Chaudhary, M.L.A, Agra
56	Sector 20, Park-1, Avas Vikas Kalyan Samiti, Indiranagar, Lucknow
57	Gomtinagar Jankalyan Samiti, Lucknow
58	Mr. Sanjay Kumar Dubey, Advocate, Rawatpura, Kanpur
59	Human Rights Association of India, Nirala Nagar, Kanpur
60	Kanpur Bijli Majdoor Sabha, Kanpur
61	P. Road, Sishamau Vyapari Association, Kanpur
62	Provincial Industries Association, Kanpur
63	Rimjhim Ispat Ltd., Kanpur
64	Kanpur Industrial Development Co-operative Estate Ltd., Kanpur
65	Indian Industries Association, Kanpur
66	Jugilal Kamlapat Jute Mills Co. Ltd, Kanpur
67	Yaspal Singh Consultant., Vadodra
68	Trimurti Engineering Works, Muzaffarnagar
69	Federation of Muzaffarnagar Commerce & Industry
70	Indian Industries Association, Saharanpur
71	Avadhesh Kumar Verma, President, UP Rajya Vidyut Upbhokta Parisad, Lucknow
72	Mr. Anil Chaudhari, MLA, Sadabad
73	Lok Kalyan Samiti & Vidhik Saksharta Samiti, Kanpur



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<b>List of Organizations / Consumers who have submitted objections in writing</b>	
<b>S. N</b>	<b>Name, Organization and Address</b>
74	Futkar Dava Vyapar Mandal, Swaroop Nagar, Kanpur
75	Mr. Rajendra K. Jain, Secretary, Western U.P. Chamber of Commerce & Industry
76	One set of Postcards (A-1 to A-10)
77	Mr. Kailash Chandra Sinha, SE (retired) UPPCL
78	Mr. S.K.Verma, Executive Engineer, KESCo
79	Er. O.N. Mishra, 2A/244 (3B), Azad Nagar, Kanpur
80	Sri Kamlesh Singh, Senior Ward Member, Alopi Bagh, Mahanagar, Allahabad



## Chapter 5. ANALYSIS OF TRANSCO ARR FOR FY 2009-10:

### 5.1 INTRODUCTION:

5.1.1 The Commission has analysed the petition on Aggregate Revenue Requirement (ARR) submitted by the Uttar Pradesh Power Transmission Corporation Limited (UPPTCL) for approval of ARR/Tariff application for the FY 2009-10. The ARR as submitted by the UPPTCL is inclusive of State Load Despatch Centre (SLDC)'s ARR. The rationale used for both are already discussed in the **Chapter 3**. A brief overview of the ARR petition is shown in the **TABLE 5-1** below:

**TABLE 5-1: SUMMARY OF ARR PETITION FY 2009-10 ( RS. CR)**

Details	FY 2009-10
	Petition
Employee Costs (net of	235.60
A&G Costs (net of capitalization)	13.07
Repair & Maintenance Expense	76.27
Depreciation	173.55
Interest & Finance Charges	177.27
Less Other Income	19.87
Reasonable Return	43.00
Debits, Write-offs & Any other items	47.58
<b>Annual Revenue Requirement</b>	<b>746.47</b>

5.1.2 In the current chapter, the Commission has determined and approved the ARR of the UPPTCL for FY 2009-10 on the basis of petition submitted by UPPTCL and have elaborated upon the approach followed for the same in line with the Transmission Tariff Regulations. Along with that, the Commission has approved SLDC's ARR submitted by UPPTCL on behalf of SLDC in line with the UPERC (Procedure, Terms & Conditions for payment of Fee and Charges to State Load Despatch Centre and other related provisions), Regulation, 2004 (hereinafter referred as SLDC Regulations).

5.1.3 The Transmission Tariff Regulations provides that approval of the expenses has to be on the basis of the historical/audited costs and past trend during the preceding five years. The opening balances for FY 2009-10 for UPPTCL i.e. Gross Fixed Assets, Loans, Equity etc are considered as provided in the petition as the same is matching with the provisional accounts.

5.1.4 The Commission has not undertaken true-up of any of the past years as UPPTCL has not submitted audited accounts which are required for this purpose, in line



with Transmission Tariff Regulations. In absence of the same, no true-up has been considered by the Commission in this order.

## 5.2 TRANSMISSION LOSSES:

- 5.2.1 The Commission, in consultation with UPPCL, in its tariff order for FY 2001-02 had established the efficiency parameters i.e. T&D loss levels and Collection Efficiency targets for a period of 5 (five) years to encourage UPPCL to exceed the targets and thereby retain the benefits of improved performance.
- 5.2.2 The UPPTCL in the petition for FY 2007-08 & FY 2008-09 had mentioned the transmission losses to be 6.0% & 5.6% inclusive of inter-state transmission losses. However, for FY 2009-10; UPPTCL has submitted intra-state transmission losses as 4.0% and interstate transmission losses upto State's Transmission periphery as 2.06%.
- 5.2.3 Further, the Transmission Tariff Regulations clearly state that the base line for losses will have to be based on proper loss estimation studies.
- 5.2.4 In this regard, the Commission had directed the UPPTCL to submit data regarding voltage wise transmission losses for the past three years along with the estimation for the current and ensuing year. In response, the UPPTCL has submitted the loss computation for FY 2007-08 (previous year) along with the estimates & projections for the current and ensuing year respectively in Format P1 of tariff filing formats. However, in this regard, the Commission had asked UPPTCL to submit the detailed calculations resulting in the output of Format P1. However, the UPPTCL has not submitted the same till date.
- 5.2.5 The details of energy purchased by UPPTCL and the corresponding losses after delivering the same to DISCOMS as submitted in the petition are presented in the **TABLE 5-2** below:



**TABLE 5-2: TOTAL TRANSMISSION LOSSES FOR FY 2009-10 (MU)**

Details		FY 2009-10
Gross Power Purchased & Billed (MUs)	A	57,800
Net Power Purchase at UP State's Transmission Periphery (MUs)	B	56,609
Inter-state Transmission Losses	$C=1-(B/A)$	2.06%
Energy Received by Discom (Transmission-Distribution Interface) (MUs)	D	54,345
Intra-state Transmission Losses	$E=1-(D/B)$	4.00%
Total Transmission Losses (Inter + Intra State Transmission losses)	$F=1-(D/A)$	5.98%

- 5.2.6 Based on the computation done above, Commission finds that total transmission loss proposed by UPPTCL for FY 2009-10 is 5.98%.
- 5.2.7 In the last tariff order, the Commission had approved 5.0% overall transmission loss for FY 2007-08 & FY 2008-09. However, Commission feels that inter-state transmission loss is an uncontrollable factor and hence needs to be allowed on actual basis.
- 5.2.8 The Commission acknowledges the efforts taken by UPPTCL for retaining the loss at a competitive level as compared to other states and accordingly approves the intra-state transmission loss at **4.00%** for FY 2009-10. The Commission also encourages UPPTCL to undertake investments as specified in Transmission Tariff Regulations to further strengthen its transmission lines to reduce the losses. Further, the Commission directs UPPTCL to submit details of voltage-wise losses within 3 months from the date of this tariff order along with method of assessment adopted and supporting data / information.

### **5.3 COMPONENTS OF ARR AND ANALYSIS OF EACH COMPONENT:**

- 5.3.1 The Commission has analysed all the components of the Aggregate Revenue Requirement (ARR) submitted by the UPPTCL to provide suitable values for each component. As per the Transmission Tariff Regulations, the ARR includes the following components:
- Operation & Maintenance Expenses
    - Employee Expenses
    - Administration & General Expenses
    - Repairs and Maintenance Expenses
  - Interest Expenses
    - Interest on Loan Capital
    - Interest on Working Capital



- c) Depreciation Expenses
- d) Other Income (Non-tariff Income)
- e) Special Appropriations
- f) Return on Equity
- g) Tax on Income
- h) Any other relevant expenditure

5.3.2 Based on the ARR submission and Transmission Tariff Regulations; the Commission has analysed each component of the ARR and accordingly approved each of the component along with the justification for the same.

#### 5.4 ESCALATION INDEX:

5.4.1 The Commission has suggested formulation of an escalation index linked to WPI and CPI as notified by the Central Government for different years in Transmission Tariff Regulations. As per these Regulations, for determination of the O&M expenses (employee, A&G and R&M expenses) for the year under consideration, the O & M expenses of the base year shall be escalated at inflation rates notified by the Central Government for different years. The inflation rate for above purpose shall be the weighted average of Wholesale Price Index and Consumer Price Index in the ratio of 60:40. Accordingly the Commission has considered an Inflation Index of **8.74%** for approving the ARR for FY 2009-10 over the base year i.e. FY 2008-09. The working of the inflation index is given in the **TABLE 5-3** below:

**TABLE 5-3: INFLATION INDEX FOR FY 2009-10**

Month	Wholesale Price Index			Consumer Price Index		
	2007	2008	2009	2007	2008	2009
Jan	209	218	229	127	134	148
Feb	209	220	228	128	135	148
Mar	210	226	228	127	137	148
Apr	212	229	232	128	138	150
May	212	231	234	129	139	151
Jun	212	237	235	130	140	153
Jul	214	240	239	132	143	160
Aug	214	241	241	133	145	162
Sep	215	242	243	133	146	163
Oct	215	239	243	134	148	165
Nov	216	234	247	134	148	168
Dec	216	230		134	147	
<b>Average</b>	<b>213</b>	<b>232</b>	<b>236</b>	<b>131</b>	<b>142</b>	<b>156</b>
<b>Inflation of Nov. 09 over Nov. 08</b>			<b>5.55%</b>			<b>13.51%</b>
<b>Weighted Average of Inflation (60% *WPI+40%*CPI)</b>						<b>8.74%</b>



## 5.5 O&M EXPENSES:

5.5.1 Operation and Maintenance (O&M) expenses comprise Employee related costs, Administrative and General (A&G) Expenses, and Repair and Maintenance (R&M) expenditure.

5.5.2 The regulation 4.2 of the Transmission Tariff Regulations issued by the Commission stipulates:

“1. *The O&M expenses for the base year shall be calculated on the basis of historical/audited costs and past trend during the preceding five years. However, any abnormal variation during the preceding five years shall be excluded. O&M expenses so calculated for the base year shall then be escalated on the basis of prevailing rates of inflation for the year as notified by the Central Government and shall be considered as a weighted average of Wholesale Price Index and Consumer Price Index in the ratio of 60:40. Base year, for these regulations means, the first year of tariff determination under these regulations.*

2. *Where such data for the preceding five years is not available the Commission may fix O&M expenses for the base year as certain percentage of the capital cost.*

3. *Incremental O&M expenses for the ensuing financial year shall be 2.5% of capital addition during the current year. O&M charges for the ensuing financial year shall be sum of incremental O&M expenses so worked out and O&M charges of current year escalated on the basis of predetermined indices as indicated in regulation 4.2.1 above.”*

5.5.3 Transmission Tariff Regulations also provides for bringing the O&M expenses of the utilities to an efficient level. The regulation also provides for the Commission to fix up norms based on circuit kilometres of transmission lines, transformation capacity at the sub-stations, number of bays in substation etc. and such other parameters, as may be determined by the Commission from time to time.

5.5.4 However, the Commission would like to reiterate its opinion that a suitable norm for allowance of O&M expenses could be adopted only after undertaking a thorough study of the O&M expenditure based on the past performances, and the cost drivers of the same, through a separate process.

Till any such norm for O&M expenditure is determined, the Commission has to consider the individual elements of O&M expenditure based on the past trends with Inflation Index. However for employee expenses, the Commission has taken





a different view on account of Sixth Pay Commission impact which is discussed in the subsequent section.

In addition to the approval of the cost based on inflationary indices based escalation, additional O&M expenses @ 2.5% of the additions to GFA during the previous year are being considered for approval for FY 2009-10.

#### 5.5.5 O&M EXPENSES ON ADDITIONS TO ASSETS DURING THE YEAR:

5.5.5.1 The Transmission Tariff Regulations provide for additional O&M expenses on additions to assets during the year.

5.5.5.2 Based on the above, the approved incremental O&M expenses for FY 2009-10 are Rs. **10.52** cr. The same are allocated across the individual elements of the O&M expenses on the basis of the contribution of each element in the gross O&M expenses (excluding the additional O&M charges) which is being approved in subsequent paragraphs.

**TABLE 5-4: APPROVED INCREMENTAL O&M EXPENSES FOR FY 2009-10 ( Rs. Cr)**

<b>Incremental O&amp;M Expenses @ 2.5% of capital additions during the year FY 2008-09</b>	<b>Approved for FY 2009-10</b>
Capitalized Assets during FY 2008-09	420.84
Incremental O&M Expenses Approved @ 2.5%	10.52
a) Employee Costs	7.99
b) A&G Expenses	0.46
c) R &M Expenses	2.07

#### 5.5.6 EMPLOYEE EXPENSES:

5.5.6.1 As discussed in the preceding section **5.5.4**, the Commission is treating employee expenses for the year under consideration in a different manner on account of Sixth Pay Commission impact.

5.5.6.2 The Employee Expenses for the FY 2009-10 have been projected by the UPPTCL based on un-audited data of FY 2007-08 and data available for FY 2008-09 till the date of ARR filing. UPPTCL has also taken impact of increase in basic salary due to implementation of Sixth Pay Commission. The assumptions & methodology used by UPPTCL for projecting the employee expenses for FY 2009-10 are detailed out as under:



- Basic Salaries for FY 2009-10 will increase by over 60% from FY 2008-09 costs due to implementation of Sixth Pay Commission recommendations & due to time bound increments and annual increase in pay;
- Dearness Allowance (DA) has been projected at 25% of Basic Salary for FY 2009-10;
- Other allowance has been forecasted to be 8% of the Basic Salary;
- Likewise, medical expenses have been forecasted to increase by inflation index per year from FY 2006-07, taking 3% as contingency;
- Pension and Gratuity have been calculated at 16.7% and 2.38% (i.e., 19.08%) of Basic Salary and Dearness Allowance;
- Leave Travel Assistance & Compensation is assumed to be 0.01% & 0.2% of Basic Pay respectively;
- Staff welfare expenses are assumed to in same ratio as actually incurred in FY 2008-09;

5.5.6.3 In absence of any audited accounts for past years, the Commission has allowed the impact of 6<sup>th</sup> Pay Commission on the basic salary to the extent of **40%** only (2/3<sup>rd</sup> of **60%**) over FY 2008-09. However any actual expenditure incurred by UPPTCL would be allowed as pass through subject to prudence check by the Commission during the true-up process.

5.5.6.4 The other employee cost elements such as dearness allowance, other allowances, LTA, compensation to employees, pension & gratuity etc are approved as mentioned above in accordance with their linkages to basic salary and dearness allowance as applicable.

5.5.6.5 Further, the Commission has also approved Bonus, Medical expenses, Earned Leave encashment & Staff Welfare expenses for FY 2009-10 by applying an escalation of **8.74%** (inflation index) over the provisional figures of FY 2008-09.

5.5.6.6 The Commission thus approves the gross employee cost of Rs. **293.88** cr for FY 2009-10 including share of the additional O&M expenditure allocated to employee cost. As mentioned in section **5.5.4**, the Commission has allowed an incremental O&M expenses @ 2.5% of the additions to the assets during the previous year. The allocation of the same to Employee expenses is Rs. **7.99** cr for FY 2009-10 and is included in gross employee expenses mentioned above.

5.5.6.7 With regards to the impact of the 6<sup>th</sup> Pay Revision arrears of employee expenses, UPPCL/UPPTCL has mentioned that the same are to be paid in October of each year starting from October 2010. Based on the same the



Commission would consider the impact of such arrears on pay revision components at the time of true-up exercise for the relevant financial year.

5.5.6.8 UPPTCL has capitalized employee expenses @ 29% of the total employee expenses in their petition for FY 2009-10. Further the Commission has found that capitalisation percentage for FY 2007-08 & FY 2008-09 was 35% and 36% respectively. In this regard, the Commission would also like to mention that the same is very high and needs to be backed by proper study and a clear cut policy. In this context, the Commission would like to reiterate that UPPTCL needs to have a clear policy of capitalization of salaries & wages and re-directs UPPTCL to suggest an appropriate policy on capitalization of salaries & wages within 3 months of the issue of this order.

5.5.6.9 However, for the purposes of this tariff order, capitalization @29% of the total employee expenses has been accepted by the Commission. The approved net employee expense (after capitalization) accordingly is Rs. **208.66** cr for FY 2009-10.

**TABLE 5-5: APPROVED EMPLOYEE EXPENSE FOR FY 2009-10 ( Rs. Cr)**

Details	FY 2008-09 (Provisional)	FY 2009-10 (Petition)	FY 2009-10 (Approved)
Basic Salaries	124.72	199.74	174.73
Dearness Allowance	62.01	43.94	38.44
Other allowances	8.34	15.98	13.98
Bonus / Ex-gratia	3.22	4.06	3.50
Medical expenses reimbursement	5.45	6.04	5.92
Leave travel assistance	-	0.02	0.02
Other terminal benefits & Expenses on trust	1.87	-	-
Earned leave encashment	7.02	14.21	7.64
Compensation to Employees	0.11	0.40	0.35
Staff welfare expenses	0.59	0.94	0.64
Pension & Gratuity	31.61	46.49	40.67
Additional Exepenses allowed owing to 2.5% of Capitalised Assets during FY 2008-09	-	-	7.99
<b>Gross Employee Costs</b>	<b>244.94</b>	<b>331.82</b>	<b>293.88</b>
Less: expenses capitalized @ 29%	87.70	96.23	85.23
<b>Net Employee Costs</b>	<b>157.24</b>	<b>235.59</b>	<b>208.66</b>

5.5.6.10 The Commission re-directs UPPTCL to undertake an actuarial valuation study for revalidation of estimates on employers' contribution towards pension and gratuity and submit the study report within three months from the date of this tariff order.



### 5.5.7 ADMINISTRATION AND GENERAL EXPENSES:

5.5.7.1 UPPTCL has mentioned that A&G expenses are for meeting the day-to-day expenses relating to the administration of its offices, insurance, communication, professional charges, audit fees, advertisement expenses, freight etc and are directly linked with inflation indices. The UPPTCL has cited lower A&G expenses owing to variation in actual capital investments made in past years.

5.5.7.2 As discussed in the preceding section **5.5.4**, the Commission has approved the A&G expenses for FY 2009-10 based on the escalation factor of **8.74%** (inflation index) over provisional figures of Rs. **15.22** cr. for FY 2008-09. Thus the gross A&G cost computes to Rs. **17.01** cr. as against Rs. **16.13** cr. projected by the UPPTCL for FY 2009-10. Further, as referred in section **5.5.4**, the Commission has allowed incremental O&M expenses @ 2.5% of the additions to the assets during the previous year. The allocation of the same to A&G cost is Rs. **0.46** cr. for FY 2009-10 and is included in gross A&G cost mentioned above. However, the Commission appreciates UPPTCL's commitment to keep costs under control and accordingly approves gross A&G expenses for FY 2009-10 at Rs. **16.13** cr..

5.5.7.3 For the purposes of this tariff order, capitalization @19% of the total A&G expenses as proposed by UPPTCL has been accepted by the Commission. However, the Commission directs that UPPTCL should capitalise the expenditure based on the actual expenses incurred / projected, at the time of next ARR filing. Further, UPPTCL should have proper accounting system to capture the expenses related to capital schemes rather than assuming a standard capitalisation %age.

5.5.7.4 The Commission thus approves the net A&G expenses (after capitalization) of Rs. **13.07** cr. for FY 2009-10.



**TABLE 5-6: APPROVED A&G EXPENSE FOR FY 2009-10 ( Rs. Cr)**

Details	Petition	Approved	
Rent, Rates & Taxes	0.62	15.67	
Insurance	0.06		
Telephone, Postage & Telegrams & Telex	1.91		
Legal charges	1.07		
Audit fees	0.36		
Consultancy charges	0.33		
Technical fees and professional charges	0.11		
Conveyance and traveling	4.36		
Regulatory expenses	-		
Electricity Charges	1.95		
Other expenses	5.36		
Additional Expenses allowed owing to 2.5% of Capitalised Assets during FY 2008-09	-		0.46
<b>Total A&amp;G Expenses</b>	<b>16.13</b>		<b>16.13</b>
Less : expenses Capitalized @ 19%	3.07	3.07	
<b>Net A&amp;G Expenses</b>	<b>13.06</b>	<b>13.07</b>	

#### 5.5.8 REPAIRS AND MAINTENANCE (R&M) EXPENSES:

5.5.8.1 UPPTCL has submitted in the petition that it has estimated the R&M expenses for FY 2009-10 considering gross fixed assets for transmission assets in the corresponding year.

5.5.8.2 As discussed in the preceding section **5.5.4**, the Commission has approved the R&M expenses for FY 2009-10 based on the escalation factor of **8.74%** (inflation index) over provisional figures of Rs.**68.10** cr. for FY 2008-09. The Commission thus approves the Gross R&M cost of Rs. **76.12** cr. as against Rs.76.27 cr. projected by the UPPTCL for FY 2009-10. The Commission has also allowed an increment in O&M expenses @ 2.5% of the additions to the assets during the previous year. The allocation of the same to R&M expenses is Rs. **2.07** cr. for FY 2009-10 and is included in gross R&M expenses mentioned above.

5.5.8.3 The Commission considers R&M expenses as a critical element in the operational activities. This approval is provisional in nature. The approval of the actual expenses would be undertaken at the time of true-up exercise, subject to prudence check with regards to the spending in R&M works over the year.



#### 5.5.9 SUMMARY OF THE O&M EXPENSES FOR THE TRANSCO:

5.5.9.1 The Commission in the earlier section has mentioned that due to 6<sup>th</sup> Pay Commission impact, different approach has been adopted for allowing employee expenses for FY 2009-10. Hence, considering FY 2009-10 as an exceptional year, the net O&M expenses are approved for FY 2009-10 at Rs. **297.84** cr. that includes incremental O&M expenses of Rs. **10.52** cr. However, UPPTCL is directed to compute O&M expenditure for next ARR filing as provided under Transmission Tariff Regulations. Moreover, the Commission expects UPPTCL to improve its performance considering the repetitive nature of O&M works undertaken and new technologies being adopted. The Commission shall review the base year cost in the future, based on availability of audited accounts at the time of true-up exercise.

#### 5.6 GFA BALANCES AND CAPITAL FORMATION ASSUMPTIONS:

5.6.1 The Commission in its last tariff order for the FY 2007-08 & FY 2008-09 had approved the closing gross fixed assets (GFA) of Rs. 5620.12 cr and Rs. 6783.65 cr respectively. The Commission has considered the opening balance of GFA at Rs. **5,340.01** cr as filed under petition for the purpose of this order. However, the same would be subject to review at the time of true-up for the year.

5.6.2 The Commission has scrutinized the investment plan and assets capitalization plan as submitted by UPPTCL. In the Investment Plan they have provided details of projects to be undertaken amounting to Rs. 676.66 cr excluding deposit works. The total amount of Investment Plan projected by UPPTCL, including deposit works of Rs. 116.67 cr, is Rs.793.32 cr for FY 2009-10. The UPPTCL has submitted information of each scheme to be undertaken with details such as Name of Substation / Line & Bay and their capacity / length and proposed expenditure for the FY 2009-10.

5.6.3 UPPTCL has also submitted that actual capital investment during the FY 2007-08 and FY 2008-09 was Rs. 729.27 cr and Rs. 850.94 cr respectively as against the envisaged capital investment plan of Rs. 1016 cr and Rs. 1192 cr respectively. This variation from the envisaged capital investment occurred due to certain policy issues as well as non-availability of government guarantee for drawl of financial institutional loans. This adversely affected the creation of assets due to which the depreciation and interest and finance charges had lower incidence than the approved levels. Here, the Commission would like to reiterate that it shall be undertaking true-up exercise for approved figures and the actual expenses incurred for the various years once audited accounts are finalized for past periods.



- 5.6.4 The Commission would further like to refer to the order on approval of capital investment plan for UPPTCL issued on 15<sup>th</sup> June, 2009 wherein specific directions were given to UPPTCL for compliance of capital investment approvals as per provisions of Electricity Act 2003, Transmission Tariff Regulations and UP Electricity Grid Code, 2007 (UPEGC).
- 5.6.5 The Commission has undertaken data validation exercise for estimating the actual investments made by UPPTCL. From its provisional balance sheet for FY 2008-09 it was observed that actual achievement with respect to last year investment plan and approved investments were in the range of 50% - 75%. Hence the Commission has approved all other investments (Transmission works, System improvement and others proposed to be funded through various funding agencies) to the extent of 70% for FY 2009-10. However, if the UPPTCL actually incurs expenditure in excess of the approval, the Commission may approve the same subject to prudence check and if found in consonance with the provisions of Transmission Tariff Regulations at the time of true up.
- 5.6.6 The investments proposed to be carried out under Deposit works for FY 2009-10 amounting to Rs. 116.67 cr are allowed by the Commission. The details of investment plan submitted and investments approved along with the funding are given in **TABLE 5-7** below:

**TABLE 5-7: APPROVED INVESTMENTS FOR FY 2009-10 (Rs. Cr)**

Particulars	FY 2009-10
<b>Investment Schemes submitted by UPPTCL</b>	<b>793.33</b>
a) Schemes funded through Equity/Loan	676.66
b) Deposit Works	116.67
<b>Investments Approved by the Commission</b>	<b>590.33</b>
a) Schemes funded through Equity/Loan approved at 70%	473.66
b) Deposit Works	116.67

- 5.6.7 The Commission has thus approved investments of Rs. **590.33** cr (including deposit works amount of Rs. **116.67** cr) for FY 2009-10. However, the Commission has not considered the investments from deposit / grants work for the purpose of capitalisation.
- 5.6.8 UPPTCL has considered capitalization of investments as 30% of the sum of opening WIP, approved investments made during the year, Employee expenses capitalized, A&G Expenses capitalized and interest capitalized. The Commission



has validated the provisional accounts submitted by UPPTCL and it was established that the same is **27%**. The Commission has considered **27%** of total expenses for capitalisation purpose and thus total capitalization of Rs. **538.90** cr for FY 2009-10 is approved.

5.6.9 The details of approved Capitalisation and Work-in-progress for FY 2009-10 are provided in the **TABLE 5-8** below:

**TABLE 5-8: APPROVED CAPITALISATION & WIP OF INVESTMENTS FOR FY 2009-10 ( Rs. Cr)**

Particulars	FY 2009-10
	Approved
Opening WIP	1,385.54
Investment ( exclusive of deposit works)	473.66
Employee Expenses Capitalised	85.23
A&G Expenses Capitalised	3.07
Interest Capitalised	49.39
<b>Total</b>	<b>1,996.88</b>
Less: Capitalisation @ 27%	538.90
<b>Closing WIP</b>	<b>1,457.98</b>

5.6.10 Considering the total capitalization approved by the Commission for FY 2009-10 as above, the closing GFA for UPPTCL is Rs. **5,878.91** cr. The details of opening and closing GFA are provided in subsequent section on depreciation.

## **5.7 DEPRECIATION EXPENSE:**

5.7.1 The Commission in its Transmission Tariff Regulations has specified the methodology for the computation of depreciation. The regulation also specifies the rates to be used for the purpose of computation of the depreciation charged during the year.

5.7.2 On account of lack of details of fixed assets register, the Commission has assessed depreciation on the basis of weighted average depreciation rates as against specific depreciation rates for each class of asset.

5.7.3 As per the petition, the depreciation rate on opening GFA and additions for FY 2009-10 works out to be **3.08%**.

5.7.4 UPPTCL as well as the Commission has been computing the depreciation to be charged during the year on the basis of the Opening GFA for the year. The Transmission Tariff Regulations provide for charging depreciation on a pro-rata basis on assets capitalised during the year.





5.7.5 The Commission has allowed depreciation to be charged during the year in accordance with the above provision. The depreciation is charged for the entire year on the opening GFA and pro-rata basis for the assets capitalised during the year. As mentioned earlier in clause 5.6.1, the opening GFA considered for FY 2009-10 is based on the projections under petition for FY 2009-10. Based on the above specified weighted average depreciation rate of **3.08%**, the Commission approves depreciation expense of Rs. **172.87** cr for FY 2009-10. The details of the same are provided in the **TABLE 5-9** below:

**TABLE 5-9: APPROVED GFA FOR FY 2009-10 ( Rs. Cr)**

Particulars	FY 2009-10
	Approved
Opening Balance GFA	5,340.01
Additions	538.90
Adjustments	-
<b>Closing GFA</b>	<b>5,878.91</b>
<b>Rate of Depreciation</b>	<b>3.08%</b>
Opening Accumulated Depreciation	2,141.29
<b>Depreciation during the year</b>	<b>172.87</b>
<b>Closing Accumulated Depreciation</b>	<b>2,314.16</b>

5.7.6 The Commission had directed UPPTCL to ensure that proper and detailed Fixed Assets Registers are maintained at the field offices. The UPPTCL in response has intimated that necessary instructions have been issued to the field offices with regards to maintaining the Fixed Assets Register. However, no progress report was submitted with regards to the same and the methodology adopted for maintaining the same.

5.7.7 Hence, in this regard the Commission reiterates its direction to the UPPTCL to ensure that they maintain proper and detailed fixed assets registers to work out the depreciation expense as specified in the Transmission Tariff Regulations and directs the UPPTCL to submit a report to the Commission citing clearly as to how they are maintaining fixed assets registers for the various assets within one month from the date of issue of this tariff order.

## **5.8 INTEREST AND FINANCE CHARGES:**

### **5.8.1 INTEREST ON LONG TERM LOAN:**

5.8.1.1 The Commission has computed the interest and finance charges for FY 2009-10 based on the approved investment plan for UPPTCL. This has already been discussed in the section 5.6 on GFA balances and capital formation. A debt-equity ratio of 70:30 has been considered by UPPTCL on proposed investments as per Transmission Tariff Regulations.



- 5.8.1.2 The UPPTCL in its investment plan for FY 2009-10 have only submitted information of source-wise debt funding under major heads (Power Finance Corporation and Rural Electrification Corporation) only. The project wise details for fresh loans as mandated in the Transmission Tariff Regulations have not been provided by the UPPTCL.
- 5.8.1.3 In absence of these details, the Commission has considered the opening balance for FY 2009-10 as per the petition and have also retained the interest rates for the existing loans as submitted by the UPPTCL for FY 2009-10 in the petition.
- 5.8.1.4 Based on above assumptions, Commission approves Rs. **214.74** cr for FY 2009-10 as interest on long term debt (including interest on new loans amounting to Rs. **16.87** cr) as shown in the **TABLE 5-10** below:

**TABLE 5-10: APPROVED INTEREST ON LONG TERM LOANS FOR FY 2009-10 ( Rs. Cr)**

Interest on Long term Debt	FY 2009-10
	Approved
<b>Old Loans</b>	<b>197.87</b>
GoUP	14.96
N C R	2.87
P.F.C.	106.50
REC Loans	58.08
HUDCO	15.46
<b>New Loans</b>	<b>16.87</b>
PFC - System Improvement	7.61
REC - System Improvement	5.18
GoUP - Transmission works	4.09
<b>Total</b>	<b>214.74</b>

## 5.8.2 INTEREST ON WORKING CAPITAL:

- 5.8.2.1 The Transmission Tariff Regulations provides for normative interest on working capital based on the methodology outlined in the regulations. The UPPTCL in its petition has mentioned that no working capital loan has been taken and hence no interest on working capital is being claimed in the ARR. It is submitted that UPPTCL is eligible for interest on working capital as per the provisions of Transmission Tariff Regulations.
- 5.8.2.2 The Transmission Tariff Regulations 4.5 (2) provides rate of interest on working capital as bank rate specified by RBI for the relevant year plus a margin decided by the Commission. Accordingly, the Commission approve 5.75% as the margin for FY 2009-10. Thus, the rate on interest on working capital is approved at



**11.75%** per annum (RBI rate 6% + Margin 5.75%) which is also equivalent to the prevailing SBI Prime Lending Rate.

5.8.2.3 The Commission, based on the same, approves an interest on Working Capital of Rs. **18.14** cr for FY 2009-10.

5.8.2.4 The computation of interest on working capital at consolidated level for FY 2009-10 is given in the **TABLE 5-11** below:

**TABLE 5-11: APPROVED INTEREST ON WORKING CAPITAL FOR FY 2009-10 ( Rs. Cr)**

S.N	Item	FY 2009-10
		Approved
1	One month's O&M Expenses	24.82
2	One-twelfth of the sum of the book value of materials in stores at the end of each month of such financial year.	17.68
3	Receivables equivalent to 60 days average billing on consumers	111.87
	<b>Gross Total</b>	<b>154.37</b>
Less:		
4	Less:Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	-
<b>5</b>	<b>Net Working Capital</b>	<b>154.37</b>
6	Rate of Interest for Working Capital	11.75%
<b>7</b>	<b>Interest on Working Capital</b>	<b>18.14</b>

### 5.8.3 FINANCE AND OTHER CHARGES:

5.8.3.1 In addition to the interest on long term loans, the UPPTCL has also projected Finance Charges amounting to Rs. 20.21 cr (Bank Charges – Rs. 5.92 cr and Finance Charges / Guarantee Fees – Rs. 14.29 cr). In this context, the Commission has approved cost of raising finance as 1% of the loan drawals for the year. Accordingly the Commission approves Rs. **3.32** cr as finance charges for FY 2009-10.

### 5.8.4 SUMMARY OF TOTAL INTEREST & FINANCE CHARGES:

5.8.4.1 The total approved interest charges on long term loans have been capitalized at the rate of 23%. The Commission directs UPPTCL to develop a system whereby the actual interest accrued / incurred till the capital scheme is completed and put to use gets captured in a separate account typically termed as 'Interest During Construction' (IDC) rather than assuming a standard capitalisation %age. The same needs to be ensured in next ARR filing. Accordingly, interest and



financing charges (net of capitalization) inclusive of Interest on working capital and other approved interest and finance costs approved by the Commission for FY 2009-10 is Rs. **186.81** cr. as given in **Table 5-12** below:

**TABLE 5-12: TOTAL APPROVED INTEREST & FINANCE CHARGES FY 2009-10 (Rs. Cr)**

Particulars	FY 2009-10
	Approved by Commission
<b>Interest on Long term Loans</b>	
a) Interest on Existing Loans	197.87
b) Interest on New Loans	16.87
<b>Sub-total</b>	<b>214.74</b>
Interest on Working Capital Loans	18.14
Other Interest & Finance Charges	3.32
<b>Gross Interest &amp; Finance Charges</b>	<b>236.20</b>
Less: Capitalization @ 23% on Interest on long term loans	49.39
<b>Net Interest &amp; Finance Charges</b>	<b>186.81</b>

#### 5.9 OTHER INCOME:

5.9.1 As per the UPPTCL, 'other income' includes non-tariff income from interest on loans and advances to employees and income from fixed rate investment deposits and any other income. Accordingly, UPPTCL has projected a non-tariff income of Rs. **19.87** cr for FY 2009-10.

5.9.2 The Commission has accepted Other Income of Rs. **19.87** cr for FY 2009-10 as projected by UPPTCL in its submission.

#### 5.10 RETURN ON EQUITY:

5.10.1 UPPTCL in its petition has submitted that in view of the huge gap in the recovery of cost of supply at the DISCOMS level it is of the view that return on equity would only result in accumulation of receivables. As such during discussions with the GoUP at various levels it has been deliberated that UPPTCL should not seek any return on equity for the FY 2007-08 and FY 2008-09. Keeping this in mind, UPPTCL has charged return on equity @ 2% only for the FY 2009-10 which works out to Rs.43 Cr.

5.10.2 The Commission while undertaking analysis for allowance of return on equity has considered opening level of equity for FY 2009-10 based on the information submitted by UPPTCL in the petition.



5.10.3 In absence of any substantial and verifiable information, the Commission has allowed RoE @ 2% for FY 2009-10.

**TABLE 5-13 APPROVED RETURN ON EQUITY FOR FY 2009-10 ( Rs. Cr)**

Particulars	FY 2009-10	
	Petition	Commission
Regulatory Equity at the beginning of the year	2,062.30	2,062.30
Capitalised Assets during the year	583.33	538.90
Equity portion of expenditure on Capitalised Assets @ 30%	175.00	161.67
<b>Regulatory Equity at the end of the year</b>	<b>2,237.30</b>	<b>2,223.97</b>
<b>Return Computation</b>		
Return on Regulatory Equity at the beginning of the year @ 2%	41.25	41.25
Return on Equity portion of capital expenditure on Capitalised Assets @ 2% for six months	1.75	1.62
<b>Total Return on Regulatory Equity</b>	<b>43.00</b>	<b>42.86</b>

**5.11 OTHER DEBITS (INCLUDING PROVISION FOR DOUBTFUL DEBTS):**

5.11.1 UPPTCL has claimed an amount of Rs. **47.58** cr for other debts, write-offs, provision for doubtful debts etc without any detailed breakup. However, the Commission, after referring to the unaudited / provisional accounts for FY 2007-08 and FY 2008-09 has failed to understand how there can be bad-debts for a transmission company. Hence the Commission has disallowed the same for FY 2009-10.

**5.12 SUMMARY OF AGGREGATE REVENUE REQUIREMENT FOR TRANSCO:**

5.12.1 In the preceding sections, the Commission has detailed the expenses under various heads submitted by UPPTCL in the petition and those which are now approved. The summary of the expenses under different heads as approved by the Commission for FY 2009-10 is given in **TABLE 5-14** below:



**TABLE 5-14 APPROVED ARR TRANSCO FOR FY 2009-10 ( Rs. Cr)**

Details	FY 2009-10	
	Petition	Commission
Employee Costs (net of capitalization)	235.60	208.66
A&G Costs (net of capitalization)	13.07	13.07
Repair & Maintenance Expense	76.27	76.12
Depreciation	173.55	172.87
Interest & Finance Charges (net of capitalization)	177.27	168.67
Interest on working Capital	-	18.14
Less: Other Income	19.87	19.87
Add: Reasonable Return	43.00	42.86
Add: Other debits including provision for doubtful debts	47.58	-
<b>Annual Revenue Requirement</b>	<b>746.46</b>	<b>680.51</b>

### 5.13 SLDC CHARGES:

5.13.1 Load Despatch Centres have been termed as apex bodies in the electricity industry. They need true independence not only in financial terms but also in decision making. The Ministry of Power, Government of India had also constituted a Committee on “Manpower Certification and Incentives for System Operation and Ring Fencing Load Despatch Centres” to ensure functional autonomy for Load Despatch Centres. The Committee in its report dated 11<sup>th</sup> August, 2008 observed that functional autonomy would mean taking decisions without being adversely influenced by extraneous issues originating from the Company Management or any of the market players, which can be ensured through:

- Independent governance structure;
- Separate accounting;
- Adequate number of skilled manpower having high ethical standards and driven by altruistic values;
- Adequate logistics / infrastructure.

5.13.2 For implementation of the above recommendations, the Commission has decided to determine the SLDC Charges which shall be payable by UPPTCL and which will be recovered through transmission tariff as per the Clause 8 (2) of the SLDC Regulations.

5.13.3 UPPTCL has also provided separate cost estimates for its SLDC Charges in the filings for FY 2009-10.



5.13.4 However, these costs are already embedded in the transmission ARR submitted by the TRANSCO. The Commission hereby redirects the TRANSCO / SLDC, that the ARR and budget for SLDC should be submitted separately along with the ARR submission of TRANSCO at time of next filing. The costs have to be separately identified and not embedded in the TRANSCO ARR.

5.13.5 The estimated costs of running UPPTCL central load despatch centre in Lucknow and four regional load despatch centres at Panki, Sahupuri, Modipuram and Moradabad which are owned and operated by UPPTCL are provided in **Table 5-15** below along with the Commission's approved values for FY 2009-10. The Commission has decided to approve all the expenses as given in the SLDC's ARR except Debits, write-offs & other items as per the stand taken in section 5.11. Since SLDC is yet to be separated from UPPTCL there is no basis to actually determine the SLDC's ARR. However, any difference between actual and approved figures could be adjusted at the time of true-up of the given financial year.

**TABLE 5-15: APPROVED SLDC CHARGES FOR FY 2009-10 ( Rs. Cr)**

Details	FY 2009-10	
	Petition	Commission
Employee Costs	7.52	7.52
A&G Costs	0.22	0.22
Repair & Maintenance Expense	0.29	0.29
Depreciation	4.29	4.29
Interest & Finance Charges	4.38	4.38
Return on Equity	1.06	1.06
Debits, Write-offs & Other items	1.18	0.00
<i>Less : Other Income</i>	0.49	0.49
<b>Total SLDC ARR</b>	<b>18.45</b>	<b>17.27</b>

5.13.6 These approved values have been already included in Approved UPPTCL ARR as shown in **TABLE 5-14**. Thus, the values approved herein shall stand to reduce the Approved UPPTCL ARR as illustrated below in the **TABLE 5-16**.



**TABLE 5-16: APPROVED TRANSCO & SLDC ARR FOR FY 2009-10 (Rs. Cr)**

Details	FY 2009-10		
	Transco without SLDC	SLDC	Total
Employee Costs (net of capitalization)	201.14	7.52	208.66
A&G Costs (net of capitalization)	12.85	0.22	13.07
Repair & Maintenance Expense	75.83	0.29	76.12
Depreciation	168.58	4.29	172.87
Interest & Finance Charges (net of capitalization)	182.43	4.38	168.67
Interest on working Capital			18.14
Less: Other Income	19.38	0.49	19.87
Add: Reasonable Return	41.80	1.06	42.86
Add: Other debits including provision for doubtful debts	-	-	-
<b>Annual Revenue Requirement</b>	<b>663.24</b>	<b>17.27</b>	<b>680.51</b>

5.13.7 Based on the above ARR and as per the Clause 9 (2) of the SLDC Regulations, the monthly SLDC charges payable by UPPTCL is given in **Table 5-17** below:

**TABLE 5-17: APPROVED SLDC CHARGES PAYABLE BY UPPTCL FOR FY 2009-10 (Rs. Cr)**

Details	FY 2009-10	
Approved ARR for SLDC	A	17.27
Monthly Charges to be paid by UPPTCL	B= A /12	1.44

5.13.8 These charges shall be paid by the UPPTCL to the SLDC on monthly basis.

#### 5.14 TRANSMISSION CHARGES:

5.14.1 The Transmission Tariff Regulations provide for capacity (MW) based transmission charges. But there are still numerous issues involved in the determination of the MW based transmission tariff like allocation of transmission capacity to the existing long term transmission system users, allocation of the existing PPA's, etc.

5.14.2 Thus, the Transmission Charges payable by all the distribution licensees in the state are as given in the **TABLE 5-18** below:

**TABLE 5-18 APPROVED TRANSMISSION CHARGES FOR FY 2009-10 (Rs./kWh)**

Particulars	FY 2009-10
Transco ARR (Rs.Crs)	680.51
Energy Delivered to Discoms (MUs)	54183
Transmission Charges inclusive of SLDC Charges (Rs./unit)	<b>0.126</b>





- 5.14.3 The Commission thus approves a transmission tariff of Rs. **0.126/kWh** for FY 2009-10. The transmission tariff approved by the Commission for FY 2008-09 was Rs.0.222/unit. Thus, the transmission tariff for FY 2009-10 represents a decrease of around 45% over the approved transmission tariff of FY 2008-09.
- 5.14.4 The transmission charges as determined are payable by all distribution licensees of the State.
- 5.14.5 Further, the Commission had directed UPPTCL to submit for approval a detailed procedure for billing of the transmission charges to the DISCOMS, in line with the provisions of the UPERC Open Access Regulations, 2004. In this regard UPPTCL has mentioned that action has already been taken and billing is being done as per the directives of the Commission. However no report / procedure or details have been submitted to Commission. The Commission therefore directs UPPTCL to submit the same for approval within 1 month of the date of issue of this Tariff Order.



## Chapter 6. ANALYSIS OF DISCOMS ARR FOR FY 2009-10:

### 6.1 INTRODUCTION:

6.1.1 The Commission has analysed the Aggregate Revenue Requirement (ARR) petitions submitted by the DISCOMS for approval of ARR / Tariff determination of Wheeling and Retail Supply Tariffs for FY 2009-10. The ARR as submitted by the DISCOMS and the rationale used for the same are already discussed in **Chapter 3**. A brief consolidated overview of the ARR petitions is shown in the **TABLE 6-1** below:

**TABLE 6-1: SUMMARY OF ARR PETITIONS FY 2009-10 –DISCOMS ( Rs. Cr)**

Particulars	FY 2009-10
	Petition
Power Purchase Expenses (incl. PGCIL Charges)	15,795
Other Costs (Net O&M, Net Int & Fin Charges, Depreciation, OTS waiver etc)	6,377
<b>Gross Expenditure</b>	<b>22,172</b>
Add: Return on Equity	-
Less: Non Tariff Income	173
<b>Annual Revenue Requirement (ARR)</b>	<b>21,999</b>
Less: GoUP Subsidy	1,832
<b>Net Annual Revenue Requirement</b>	<b>20,167</b>
Revenue from Existing Tariffs	12,271
<b>Revenue Gap</b>	<b>7,895</b>

6.1.2 As per the requirement of the Distribution Tariff Regulations, the ARR of the distribution licensee has to be segregated into Wheeling and Retail Supply Business. However, as complete segregation of accounts between Wheeling and Retail Supply Business is still pending, thus, the DISCOMS have submitted the ARR proposals for wheeling and retail supply business based on an allocation statement used by the Commission in Clause 5.23 Tariff Order for FY 2007-08 & FY 2008-09. The DISCOMS have made the following allocations for the FY 2009-10 as shown in **TABLE 6-2** below:



**TABLE 6-2: WHEELING AND RETAIL ARR PETITIONS FY 2009-10-DISCOMS ( Rs. Cr)**

Particulars	Wheeling Business	Supply Business
	FY 2009-10	
Power Purchase Expenses (incl PGCIL charges)	-	15,795
Transmission Charges - Intra state	-	746
O & M Expenses	1,178	549
Interest charges	1,166	130
Depreciation	964	107
Provision for Bad & Doubtful debts	-	149
Return on Equity	-	-
Other Expenses	-	1,387
<b>Annual Revenue Requirement (ARR)</b>	<b>3,309</b>	<b>18,863</b>
Less: Non Tariff Income	-	173
<b>Net Annual Revenue Requirement (ARR)</b>	<b>3,309</b>	<b>18,690</b>

6.1.3 The Commission has undertaken the process of approval of the Annual Revenue Requirements & Tariff determination of the DISCOMS for FY 2009-10 in line with the provisions of the Distribution Tariff Regulations.

The DISCOMS have provided the audited data for FY 2005-06 and the actual unaudited data from FY 2006-07 to FY 2008-09 in the tariff filing formats.

6.1.4 The Commission has not undertaken true-up of any of the past years as the annual audited accounts of the DISCOMS is yet to be submitted.

## **6.2 SALES, NUMBER OF CONSUMERS & CONNECTED LOAD PROJECTIONS:**

### **6.2.1 SALES:**

6.2.1.1 The methodology adopted by Commission for computing Energy Balance is in line with the provisions of the Distribution Tariff Regulations. The Commission has arrived at the quantum for power purchase required for each DISCOM by first determining the category wise sales for each DISCOM and then grossing the same by the distribution and transmission losses.

6.2.1.2 The Commission has estimated sales for FY 2009-10 as per the following methodology:

- Computed Compounded Annual Growth Rate (CAGR) for last 5 years (FY 2004-05 to FY 2008-09) for each category and each DISCOM
- Ignoring Negative CAGR
- Normalising Abnormal CAGR



- d) Considering actual unaudited sales data for first six months of FY 2009-10 made available by the DISCOMS to verify the reasonability of the projections.

DISCOMS had projected an overall growth of **4.9%** for FY 2009-10 over FY 2008-09. The overall CAGR computed for past 5 years is **7.91%**. However the approved growth for FY 2009-10 over FY 2008-09 is **5.97%** based on the above mentioned methodology. DISCOMS had not provided data with regards to Private Advertisement (LMV-2) and HV-1 (Non Industrial Bulk Loads) in the petition, but in subsequent submissions they mentioned that though these categories were created in the last tariff order the actual data assimilation for these categories took place only from April 2009. The Commission took note of actual six months data while finalizing the annual sales of FY 2009-10 for Private Advertisement (LMV-2) and HV-1 categories.

- 6.2.1.3 The summary of the sales projected by the licensees and that approved by the Commission for FY 2009-10 is shown in the **TABLE 6-3** below:

**TABLE 6-3: DISCOM-WISE APPROVED SALES FOR FY 2009-10**

Discoms	Sales FY 2008-09 (Actual- Unaudited) Mus	Sales FY 2009-10 (Petition) - Mus	Growth of FY 2009-10 over FY 2008-09 (Petition)	5 yr CAGR (FY 2008-09-FY 2004-05)	Growth Approved for FY 2009-10 (%)	Approved Sales - FY 2009-10 (MUs)
a	b	c	d= (c-b)/b	e	f	g
Agra	11,387	12,336	8.3%	7.9%	5.8%	12,049
Meerut	12,834	13,228	3.1%	8.7%	6.6%	13,682
Lucknow	7,025	7,361	4.8%	-4.8%	6.6%	7,489
Varanasi	9,011	9,289	3.1%	6.8%	4.8%	9,441
<b>Total</b>	<b>40,258</b>	<b>42,214</b>	<b>4.9%</b>	<b>7.91%</b>	<b>5.97%</b>	<b>42,661</b>

- 6.2.1.4 Based on the above approved sales on a consolidated basis, the DISCOM wise and category wise approved sales for FY 2009-10 is given in **TABLE 6-4** below:



**TABLE 6-4: CATEGORY-WISE APPROVED SALES FOR FY 2009-10**

Categories	Sales (Approved) - (MU)				
	Meerut	Agra	Lucknow	Varanasi	Total
LMV 1: Domestic Light, Fan and Power	4,522	3,372	3,308	3,882	<b>15,084</b>
LMV 2: Non-Domestic Light, Fan and Power	700	629	633	856	<b>2,819</b>
LMV 3: Public Lamps	129	84	228	82	<b>523</b>
LMV 4: Public/Private Institutions	193	310	390	457	<b>1,351</b>
LMV 5: Private Tubewells	1,724	1,515	524	713	<b>4,477</b>
LMV 6-A: Powerloom	114	157	117	171	<b>559</b>
LMV 6-B: Small and Medium Power	631	464	268	249	<b>1,612</b>
LMV 7: Public Water Works	193	182	203	242	<b>820</b>
LMV 8: State Tubewells	206	377	441	562	<b>1,586</b>
LMV 9: Temporary Supply	19	13	10	1	<b>43</b>
LMV 10: Department Employees/Pensioners	90	128	109	52	<b>380</b>
HV-1: Non Industrial Bulk Loads	568	185	214	227	<b>1,194</b>
HV 2: Large and Heavy Power	4,227	1,579	931	1,082	<b>7,819</b>
HV 3: Railway Traction	0	198	29	399	<b>625</b>
HV 4: Lift Irrigation Works	0	83	61	466	<b>610</b>
Extra Supply	0	10	21	0	<b>31</b>
Bulk Sales	366	2,764	0	0	<b>3,130</b>
<b>Total</b>	<b>13,682</b>	<b>12,049</b>	<b>7,489</b>	<b>9,441</b>	<b>42,661</b>

## 6.2.2 NUMBER OF CONSUMERS:

6.2.2.1 The approved number of consumers for FY 2009-10 is based on the approved sales for FY 2009-10 after considering the existing number of consumers and sales of FY 2008-09 provided by the DISCOMS. The DISCOM wise and category wise number of consumers approved for FY 2009-10 are provided in **ANNEXURE – IX**.

## 6.2.3 CONNECTED LOAD PROJECTIONS:

6.2.3.1 The Commission has approved the connected load for FY 2009-10 after considering the approved number of consumers for FY 2009-10 and the connected load per consumer of FY 2008-09. The DISCOM wise and category wise connected load approved for FY 2009-10 are provided in **ANNEXURE – IX**.

## 6.3 DISTRIBUTION LOSSES AND ENERGY BALANCE:

6.3.1 The DISCOMS have projected a distribution loss of 22.32% for FY 2009-10. The intra-state & inter-state transmission losses estimated by the licensees for FY 2009-10 are 4.0% and 2.06% respectively. The aggregate losses (T&D) as estimated by the licensees works out to 26.97% for FY 2009-10. These levels of losses are higher than the 26.02% T&D loss level approved by the Commission for FY 2007-08 & FY 2008-09.



6.3.2 The DISCOMS in the FY 2006-07 ARR petition submitted that due to various constraints during transitional period of reform, the T&D loss targets seem to be unrealistic and cannot be achieved.

6.3.3 The licensee had proposed a target of 32% for T&D losses in FY 2006-07. However, the Commission did not find any substance in the justification provided by the licensee to depart from the loss reduction targets set earlier in consultation with the licensees themselves. The observations of the Commission from the FY 2006-07 Tariff Order in this regard are as given below:

*“7.18 The Commission however, does not find any justification to depart from the loss reduction targets prescribed for Consolidated UPPCL in tariff order for FY 2001-02, which were specified in consultation with the licensees. However, since the T&D loss trajectory, as specified by the Commission, has expired in the financial year, 2005-06 with the loss level of year 2005-06 never applied in absence of a tariff order for the year due to reasons attributable to the licensee, and the Commission has to specify a new trajectory for loss reduction under the new UPERC (Terms and Conditions for determination of distribution tariff) Regulation 2006 (under notification) after a proper loss study is being carried out in the State, the Commission therefore, for the year under consideration, retains the loss level of financial year 2004-05 i.e. 27.4% for the purposes of this tariff order also. **Thus, T&D losses in this Tariff Order have been considered as 27.4% for Consolidated DISCOMS.**”*

6.3.4 Further, the Distribution Tariff Regulations clearly state that the base line for losses will have to be based on proper loss estimation studies to be carried out by the licensee.

6.3.5 In view of the above, the Commission redirects the licensees to carry out the energy audit / estimation study with voltage wise break up of distribution losses into technical loss and commercial loss within 6 months from the date of the issue of this tariff order. However, the DISCOMS should intimate the Commission within 2 months from the date of issue of this Tariff Order regarding the study to be undertaken, scope of work, methodology being adopted etc. They shall also apprise the Commission whether the study is being undertaken departmentally or assistance of experts in the field is being availed. This would ensure that the requirements of the Commission and the direction in which the licensees are proceeding converge. Further, on completion of the loss estimation study, the DISCOMS should submit the report for perusal of the Commission.



- 6.3.6 The Commission would like to reiterate that in the future distribution loss proposal of the licensees is liable to be rejected unless and until the same are based on correct energy audit data. Obviously, to comply with such requirement DISCOMS will have to install meters at all the interface points as well as the distribution transformers and feeders. The Commission directs the DISCOMS to report the status of the metering at the above mentioned interfaces along with the proposed plan to undertake the metering for the remaining points within one month from the date of issue of this Tariff Order. The DISCOMS shall also report the status of the progress on this front to the Commission on a monthly basis along with reasons for deviation from the plan, if any.
- 6.3.7 In the absence of any study having been undertaken and also due to non-availability of reliable base line information, the Commission has set the loss targets for the years in consideration on interim basis. The Distribution Tariff Regulations also provides for such an interim measure.
- 6.3.8 Further the Commission is of the view that UPPCL and the DISCOMS should only present distribution loss in its next ARR filing, as transmission loss is approved separately for UPPTCL. Accordingly, the Commission approves the distribution losses for each DISCOM in cognisance of the information provided in the petition.
- 6.3.9 Keeping in view the loss reduction measures being implemented, the Commission approves the distribution losses for FY 2009-10 as **2.19%** of the target reduction approved for FY 2008-09. This is **1.05%** over the projection made for FY 2009-10. The details of the DISCOM wise distribution losses projected and approved are as given in **TABLE 6-5** below:

**TABLE 6-5: APPROVED T & D LOSSES FOR FY 2009-10**

Distribution Loss					
Discoms	FY 2008-09 Dist Loss (Approved)	FY 2008-09 Dist Loss (Actual)	FY 2009-10 Dist Loss (Petition)	FY 2009-10 Dist Loss (Approved)	Target Reduction (%)
a	b	c	d	e	f = d - e
Meerut *	25.41%	25.97%	24.31%	24.00%	0.31%
Agra *	25.35%	25.66%	24.70%	24.00%	0.70%
Lucknow	18.36%	21.57%	20.02%	18.00%	2.02%
Varanasi	22.79%	26.12%	24.49%	22.50%	1.99%
<b>Total</b>	<b>23.45%</b>	<b>23.72%</b>	<b>22.32%</b>	<b>21.27%</b>	<b>1.05%</b>

\* The losses are excluding bulk supply sales



6.3.10 The Commission has noted that the performance of Meerut and Agra is better than that of the other two DISCOMS on comparison of the approved distribution losses for FY 2008-09. Further, the Commission feels there is still room for further reduction in distribution losses. Keeping this in mind, the overall Distribution loss approved is **21.27%**.

6.3.11 The DISCOM wise energy balance approved for FY 2009-10 is presented in the **TABLE 6-6** below:

**TABLE 6-6: APPROVED ENERGY BALANCE FOR FY 2009-10**

Particulars	FY 2009-10 Petition	FY 2009-10 Approved
<b>Consumer Sales (Mus)</b>		
Agra	9,570	9,285
Lucknow	7,361	7,489
Meerut	12,879	13,317
Varanasi	9,289	9,441
Bulk	3,115	3,130
<b>Sub-Total</b>	<b>42,214</b>	<b>42,661</b>
<b>Distribution Loss (%)</b>		
Agra	24.70%	24.00%
Lucknow	20.02%	18.00%
Meerut	24.31%	24.00%
Varanasi	24.49%	22.50%
<b>Sub-Total</b>	<b>22.32%</b>	<b>21.27%</b>
<b>Input into Discoms at T&lt;D Interface (MU)</b>		
Agra	12,709	12,217
Lucknow	9,203	9,133
Meerut	17,016	17,522
Varanasi	12,301	12,182
Bulk	3,115	3,130
<b>Sub-Total</b>	<b>54,345</b>	<b>54,183</b>
<b>Transmission Loss (%)</b>		
Intra-state Transmission Loss	4.00%	<b>4.00%</b>
<b>Purchases Required (MU) at G&lt;T Interface</b>		
Agra	13,238	12,726
Lucknow	9,587	9,513
Meerut	17,725	18,252
Varanasi	12,814	12,689
Bulk	3,245	3,260
<b>Sub-Total</b>	<b>56,609</b>	<b>56,441</b>

6.3.12 The Commission while computing above energy balance has excluded the inter-state transmission losses as the same would be allowed on actual basis. Further the Commission while approving power purchase costs for central sector generating stations has grossed up the variable cost by inter-state transmission loss of 4.35% as proposed by UPPCL to compensate for the inter-state transmission losses.





6.3.13 Accordingly the DISCOM-wise power purchase requirement and approved sales are as given in the **TABLE 6-7** below:

**TABLE 6-7: APPROVED ENERGY REQUIREMENT FOR FY 2009-10 ( MUS)**

Particulars	Meerut	Agra	Lucknow	Varanasi	Bulk	Total
Energy Sales (Excl. Bulk Supply)	13,317	9,285	7,489	9,441		<b>39,531</b>
Distribution Loss	24.00%	24.00%	18.00%	22.50%		21.3%
Energy Input to Discom (Incl. Bulk Supply)	17,522	12,217	9,133	12,182	3,130	<b>54,183</b>
Transmission Loss	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
<b>Power Purchase at UP State Periphery</b>	<b>18,252</b>	<b>12,726</b>	<b>9,513</b>	<b>12,689</b>	<b>3,260</b>	<b>56,441</b>

#### 6.4 ENERGY AVAILABILITY:

6.4.1 Clause 3.4 of the Distribution Tariff Regulations states that the estimation of the power requirement for the distribution licensee for sale to its consumers shall be estimated based on the approved sales, approved transmission losses and proposed distribution losses for the tariff year.

6.4.2 The DISCOMS have proposed power procurement through State generating stations, Central generating stations based on the allocation to the State, obligatory purchases from state Co-generation facilities, other sources based on bilateral contracts and other emergency purchases.

6.4.3 Subject to the assumptions considered, the licensees have drawn a merit order schedule for procuring 57,800 MUs of power for FY 2009-10.

6.4.4 The Commission has also run the merit order schedule for power purchase for the FY 2009-10 after considering the availability of power and monthly sales trend given by the DISCOMS. The final merit order approved by Commission for FY 2009-10 is given in **ANNEXURE – X** for procuring **56,441** MUs

6.4.5 Since, the power purchase expense is the single largest component in the ARR of a DISCOM, it becomes imperative that this element of cost is estimated with utmost care based on the most efficient way of power procurement from the generating stations through long term / short term power purchase arrangements or through bilateral power purchase agreements.



## 6.5 POWER PROCUREMENT FROM STATE GENERATING STATIONS:

6.5.1 The State of Uttar Pradesh has got both thermal as well as hydro generating stations. Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL) owns all the thermal generating stations within the State and the Hydro Stations are owned by Uttar Pradesh Jal Vidyut Nigam Limited (UPJVNL). The total power available to the State from the State Thermal Generating Stations is **4,022 MW** and that from State Hydro Stations is **457 MW** for FY 2009-10.

6.5.2 The last tariff order issued by the Commission for UPRVUNL and UPJVNL for their respective power stations for FY 2008-09 form the basis for determining the costs for FY 2009 – 10 as detailed below .

6.5.3 The Commission has approved parameters such as O&M, RoE etc in line with the norms specified in the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions of Generation Tariff) Regulations, 2009 (hereinafter referred to as UPERC Generation Regulations, 2009).

6.5.4 The assumptions considered by Commission while approving the power purchase from the State owned thermal generating stations are given in **TABLE 6-8** below:

**TABLE 6-8: ASSUMPTIONS FOR POWER PURCHASE FROM UPRVUNL - FY 2009-10**

S.N	Particulars	Assumption
1	<b>Power Purchase Quantum</b>	1. Net Power Purchase Quantum is considered as provided in ARR/ Tariff petition of UPPCL for FY 2009-10. 2. Thereafter, Merit Order Despatch is run for approval of quantum.
2	<b>Variable Charges</b>	
a	Operational norms - SHR, Auxiliary Consumption, Specific Oil Consumption	As per UPERC's Tariff Order dated 06.03.2009 for UPRVUNL for FY 2008-09.
b	Fuel Cost, GCV & PLF	As provided in ARR / Tarif petition by UPPCL for FY 2009-10
3	<b>Fixed Charges</b>	
a	Other Fixed Cost (Additional O&M - Finance chgs & Statutory payments)	As per UPERC's Tariff Order dated 06.03.2009 for UPRVUNL for FY 2008-09.
b	Fixed Costs	O&M as per UPERC's Generation Regulations, 2009 RoE as per UPERC's Generation Regulations, 2009 - 15.5% grossed up by Minimum Alternate Tax rate of 16.995% i.e. $15.5\% / (1 - 16.995\%) = 18.67\%$ Interest on loan, Depreciation and Interest on Working Capital have been assumed as per UPERC's Tariff Order dated 06.03.2009 for UPRVUNL for FY 2008-09.



6.5.5 Based on above approach, the summary of approved costs of UPRVNL Thermal generating stations is given in **TABLE 6-9** below:

**TABLE 6-9: APPROVED COST OF POWER PURCHASE FROM UPRVNL STATIONS FY 2009-10**

Source of Power	MW Available	MU Procurement	Fixed Cost	Variable Cost	Variable Cost	Total Cost
			(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. Cr.)
Anpara A	630	4026	223.01	0.99	397.49	620.51
Anpara B	1000	6402	646.77	0.95	610.21	1,256.98
Harduagunj	220	796	91.22	2.98	237.00	328.22
Obra A	322	1417	101.36	1.60	226.98	328.33
Obra B	1000	3766	319.46	1.34	505.97	825.44
Panki	210	823	99.54	2.29	188.06	287.60
Parichha	220	805	95.51	2.38	191.64	287.14
Parichha Extn.	420	2526	345.33	1.92	484.15	829.47
<b>Total</b>	<b>4022</b>	<b>20561</b>	<b>1,922.19</b>	<b>1.38</b>	<b>2,841.51</b>	<b>4,763.70</b>

6.5.6 The assumptions considered by Commission while approving the power purchase from the State owned Hydro generating stations is given in **TABLE 6-10** below:

**TABLE 6-10: ASSUMPTIONS FOR POWER PURCHASE FROM UPJVNL - FY 2009-10**

S.N	Particulars	Assumption
1	<b>Power Purchase Quantum</b>	1. As provided in ARR / Tariff petition by UPPCL for FY 2009-10. 2. Hydro Stations are considered Must -run in Merit Order Despatch
2	<b>Variable Charges</b>	As provided in ARR / Tariff petition by UPPCL for FY 2009-10 and escalated by 6% p.a.
3	<b>Fixed Charges</b>	
a	Fixed Costs	O&M as per UPERC Generation Regulations, 2009 - Approved O&M cost of FY 2008-09 escalated by 10% p.a. RoE as per UPERC's Generation Regulations, 2009 - 15.5% grossed up by Minimum Alternate Tax rate of 16.995% i.e. $15.5\% / (1 - 16.995\%) = 18.67\%$ Interest on loan, Depreciation and Interest on Working Capital have been assumed as per UPERC's Tariff Order for UPJVNL for FY 2008-09 dated 22.4.2009



6.5.7 Based on above approach, the summary of approved costs of UPJVNL Hydro generating stations is given in **TABLE 6-11** below:

**TABLE 6-11: APPROVED COST OF POWER PURCHASE FROM UPJVNL STATIONS FY 2009-10**

Source of Power	MW Available	MU Procurement	Fixed Cost	Variable Cost	Variable Cost	Total Cost
			(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. Cr.)
Khara	58	208	35.10	0.00	0.00	35.10
Matatila	20	67	3.54	0.00	0.00	3.54
Obra (Hydel)	99	175	11.11	0.00	0.00	11.11
Rihand	255	417	20.77	0.00	0.00	20.77
UGC & EYC Power Stations	22	25	5.67	0.00	0.00	5.67
Belka & Babail	0	11	-	2.39	2.62	2.62
Sheetla	4	10	-	3.59	3.43	3.43
<b>Total</b>	<b>457</b>	<b>912</b>	<b>76.20</b>		<b>6.05</b>	<b>82.24</b>

6.5.8 Thus the total approved costs for power purchase from State owned generating stations including thermal and hydro stations for FY 2009-10 is Rs. **4,845.94** cr.

## 6.6 CAPACITY ALLOCATION FROM CENTRAL GENERATING STATIONS & OTHER STATIONS:

6.6.1 The power procurement from Central Generating Stations (CGS) includes power from NTPC, NHPC, NPC, Eastern Region and other Joint Ventures / IPPs. The allocated share to UP State from various Central Sector Plants for FY 2009-10 is as per NRPC allocation w.e.f. 08.01.09 (Revision No-13/2008-09) issued vide letter no. NRPC/SE(O)/Allocations/2008-09. The share of UP State in these Central Generating Stations based on allocation quota for FY 2009-10 is given in the subsequent sections.

## 6.7 POWER PURCHASE FROM NTPC STATIONS:

6.7.1 The Commission has approved some parameters as shown in the table below on the basis of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as CERC Tariff Regulations, 2009) for Central Sector Plants.



The assumptions considered by Commission while approving the power purchase from the NTPC generating stations i.e. Central Sector stations is given in **TABLE 6-12** below:

**TABLE 6-12: ASSUMPTIONS FOR POWER PURCHASE FROM NTPC - FY 2009-10**

S.N	Particulars	Assumption
1	<b>Power Purchase Quantum</b>	As provided in ARR/ Tariff petition by UPPCL for FY 2009-10 except for Dadri-Extension which has not been considered as it is yet to be commissioned.  Further quantum approval as per Merit order despatch principles
2	<b>Variable Charges</b>	As provided in ARR / Tariff petition by UPPCL for FY 2009-10 and grossed up by 4.35% PGCIL losses of inter-state transmission losses
3	<b>Fixed Charges</b>	
a	Other Fixed Costs	Other Fixed costs such as incentives and water cess are approved as provided in petition by UPPCL for FY 2009-10
b	Fixed Costs	O&M as per CERC's Tariff Regulations, 2009 - Approved O&M cost of FY 2008-09 escalated by 5.72% p.a. RoE as per CERC's Tariff Regulations, 2009 - 15.5% grossed up by corporate tax rate of 33.99% = $15.5\% / (1 - 33.99\%) = 23.481\%$ Interest on loan, Depreciation, Advance against Depreciation and Interest on Working Capital have been assumed as provided in petition by UPPCL for FY 2009-10 which are considered by UPPCL from respective orders issued by CERC for the period from FY 2004-05 to FY 2008-09



6.7.2 Based on above approach, the summary of approved costs of NTPC generating stations is given in **TABLE 6-13** below:

**TABLE 6-13: APPROVED COST OF POWER PURCHASE FROM NTPC STATIONS FY 2009-10**

Source of Power	MW Available	MU Procurement	Fixed Cost	Variable Cost	Variable Cost	Total Cost
			(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. Cr.)
Anta	104	728	28.54	2.52	183.40	211.94
Auriya	226	1530	59.88	2.75	420.78	480.65
Dadri Thermal	84	642	40.44	2.84	182.24	222.69
Dadri Gas	257	1782	71.74	3.03	540.72	612.46
Dadri St-II *					-	-
Rihand-I	356	2771	174.42	1.36	377.24	551.66
Rihand II	326	2367	212.53	1.42	336.26	548.79
Singrauli	814	5533	186.80	1.03	569.00	755.80
Tanda	440	2644	201.51	3.14	831.46	1,032.97
Unchahar I	254	1951	119.51	1.53	297.50	417.01
Unchahar II	141	1032	79.86	1.63	168.42	248.29
Unchahar III	69	479	59.86	1.62	77.38	137.24
Farakka	44	342	18.86	2.01	68.72	87.58
Kahalgaon	95	724	48.37	1.95	141.33	189.70
Talchar	12	83	2.75	1.30	10.85	13.60
Kahalgaon St.II Ph.I	172	1127	0.88	1.85	209.04	209.92
<b>Total</b>	<b>3394</b>	<b>23735</b>	<b>1,305.96</b>		<b>4,414.35</b>	<b>5,720.32</b>

\* Not considered as plant is yet to be commissioned



## 6.8 POWER PURCHASE FROM NHPC STATIONS (CENTRAL SECTOR):

6.8.1 The assumptions considered by Commission while approving the power purchase from the NHPC generating stations i.e. Central Sector stations is given in **TABLE 6-14** below:

**TABLE 6-14: ASSUMPTIONS FOR POWER PURCHASE FROM NHPC - FY 2009-10**

S.N	Particulars	Assumption
1	<b>Power Purchase Quantum</b>	As provided in ARR / Tariff petition by UPPCL for FY 2009-10 and are considered must-run in Merit Order Despatch  Sewa-II has not been considered as it is yet to be commissioned
2	<b>Variable Charges</b>	As provided in ARR / Tariff petition by UPPCL for FY 2009-10
3	<b>Fixed Charges</b>	
a	Other Fixed Costs	Other Fixed costs such as Incentives and Income Tax are approved as provided in ARR / Tariff petition by UPPCL for FY 2009-10
b	Fixed Costs	O&M as per CERC Tariff Regulations, 2009 - Average of Approved O&M for last 4 years and further escalated by 5.72% p.a. RoE as per CERC's Tariff Regulations, 2009 - 15.5% grossed up by corporate tax rate of 33.99% = $15.5\% / (1 - 33.99\%) = 23.481\%$ Interest on loan, Depreciation and Interest on Working Capital have been assumed as provided in ARR / Tariff petition by UPPCL for FY 2009-10 which are considered by UPPCL from respective orders issued by CERC for the period from FY 2004-05 to FY 2008-09

6.8.2 Based on above approach, the summary of approved costs of NHPC generating stations is given in **TABLE 6-15** below:

**TABLE 6-15: APPROVED COST OF POWER PURCHASE FROM NHPC STATIONS FY 2009-10**

Source of Power	MW Available	MU Procurement	Fixed Cost	Variable Cost	Variable Cost	Total Cost
			(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. Cr.)
Chamera	109	452	56.11	0.00	0.00	56.11
Chamera-II	73	370	88.10	0.92	34.08	122.18
Dhauliganga	64	284	52.80	0.92	26.13	78.93
Salal I&II	48	240	16.66	0.00	0.00	16.66
Tanakpur	21	104	10.71	0.92	9.57	20.28
Uri	96	534	80.48	0.00	0.00	80.48
Dulhasti	97	466	132.28	0.00	0.00	132.28
Sewa-II	16	0	-	2.92	-	-
<b>Total</b>	<b>525</b>	<b>2450</b>	<b>437.14</b>		<b>69.78</b>	<b>506.92</b>



## 6.9 POWER PURCHASE FROM NPCIL NUCLEAR PLANTS:

6.9.1 The assumptions on power purchase quantum and cost approval are indicated in **TABLE 6-16** below:

**TABLE 6-16: ASSUMPTIONS FOR POWER PURCHASES FROM NPCIL - FY 2009-10**

S.N	Particulars	Assumption
1	<b>Power Purchase Quantum</b>	As provided in ARR / Tariff petition by UPPCL for FY 2009-10 and are considered as must-run in Merit Order Despatch
2	<b>Tariff (Single part &amp; Two part)</b>	As provided in ARR / Tariff petition by UPPCL for FY 2009-10

6.9.2 Based on above approach, the summary of approved costs of NPCIL generating stations is given in **TABLE 6-17** below:

**TABLE 6-17: APPROVED COST OF POWER PURCHASE FROM NPCIL STATIONS FY 2009-10**

Source of Power	MW Available	MU Procurement	Fixed Cost	Variable Cost	Variable Cost	Total Cost
			(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. Cr.)
NAPP	151	300	-	1.92	57.46	57.46
RAPP	74	223	-	2.91	64.98	64.98
RAPP #5 & #6	86	254	-	2.91	73.84	73.84
<b>Total</b>	<b>310</b>	<b>777</b>	-		<b>196.27</b>	<b>196.27</b>

## 6.10 POWER PURCHASE FROM IPPs / JOINT VENTURES (JVs)

6.10.1 The assumptions on power purchase quantum and cost approval for IPPs / JVs (except for Rosa Thermal power plant which is approved as per merit order principles) as considered by the Commission is depicted in the **TABLE 6-18** below:

**TABLE 6-18: APPROVED COST OF POWER PURCHASE FROM IPPs/ JV - FY 2009-10**

S.N	Particulars	Assumption
1	<b>Power Purchase Quantum</b>	
	IPPs (Nathpa-Jhakri, Tehri, Tala and Vishnuprayag) and Rosa	As provided in ARR / Tariff petition by UPPCL for FY 2009-10 and are considered as must-run in Merit Order Despatch  Rosa Thermal Plant considered as per Merit order principles
2	<b>Tariff (Single part &amp; Two part)</b>	
	IPPs (Nathpa-Jhakri, Tehri, Tala and Vishnuprayag) and Rosa	As provided in ARR / Tariff petition by UPPCL for FY 2009-10





6.10.2 The summary of approved costs for IPPs / Joint Venture projects is given in **TABLE 6-19** below:

**TABLE 6-19: APPROVED COST OF POWER PURCHASE FROM IPPS / JVs FY 2009-10**

Source of Power	MW Available	MU Procurement	Fixed Cost	Variable Cost	Variable Cost	Total Cost
			(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. Cr.)
Nathpa Jhakri	251	1244	277.18	0.92	114.59	391.77
VishnuPrayag	352	1774	289.67	1.00	177.05	466.72
Tala Power	45	184	-	1.92	35.40	35.40
Tehri Hydro	394	1241	288.66	2.61	324.36	613.02
Rosa Thermal Project	300	613	-	3.00	183.81	183.81
<b>Total</b>	<b>1341</b>	<b>5057</b>	<b>855.51</b>		<b>835.21</b>	<b>1,690.72</b>

### 6.11 POWER PURCHASE FROM CO-GENERATION:

6.11.1 In an effort to encourage renewable generation the Commission has mandated that the distribution licensees shall, based on availability, procure power to the extent of 8.0 % of their total power purchase requirement from the co-generating stations available in the State.

6.11.2 Based on availability of such power, UPPCL have projected procurement of **1,678** MUs for FY 2009-10 which is approved by Commission.

6.11.3 The percentage of this power to the total power procurement is **2.97%** which is very less as compared to the level specified by the Commission. The DISCOMS should make all efforts to procure more power from Co-generation and renewable sources and may also resort to competitive bidding process to promote renewable generation. The Commission has accepted Rs. **547.16** cr as the total cost of such power for FY 2009-10 @ Rs. **3.26** /kWh. This is as provided by the DISCOMS and is subject to change at the time of true-up exercise.

**TABLE 6-20: APPROVED POWER PURCHASE FROM STATE CO-GENERATION FACILITIES**

Source	MU Procurement	Fixed Cost	Variable Cost	Variable Cost	Total Cost
		(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. Cr.)
Co-generation	1678	-	3.26	547.16	<b>547.16</b>



## 6.12 POWER PURCHASE FROM OTHER SOURCES (EMERGENCY PURCHASES):

6.12.1 The DISCOMS have projected the energy procurement from bilateral and other sources to the tune of 1100 MUs and 642 MUs respectively for FY 2009-10. The power purchase cost for bilateral and other sources is projected as Rs. 7.70/kWh and Rs. 6.35/kWh respectively. The total power purchase cost for such purchases is projected as Rs. 1255 Cr at a weighted average cost of Rs. 7.20/kWh.

6.12.2 The Commission has run merit order despatch considering all possible sources and accordingly approves power purchase from other sources (emergency purchases) at **1,271** MUs. The Commission has analysed the power purchases (Bilateral + UI) undertaken by the DISCOMS upto September 2009 in the FY 2009-10 the average cost of which works out to Rs. 4.98/kWh. Based on the same, the Commission has reassessed the rate for Power purchase from other/emergency sources as Rs. **5.00** / kWh for FY 2009-10.

6.12.3 The Commission would also like to mention that the quantum of power allowed to be purchased under emergency / other sources should be procured only through bilateral sources / power exchanges or through competitive bidding route to the extent possible.

6.12.4 The Commission in its Distribution Tariff Regulations, Clause 4.2 (11) has provided that in the regime of Availability Based Tariff (ABT), the cost of power purchase through UI shall be allowed to be passed through in tariff of the subsequent year subject to the following conditions:

*“a) The average rate for power purchased through UI should not exceed the maximum rate for power purchased under the Merit Order of the licensee as approved by the Commission.*

*b) The total cost of electricity units purchased through UI shall be restricted to 10% of total power purchase cost approved by the Commission.*

*Provided that where the average rate for power purchased under UI exceeds the maximum specified rate of power purchase under the Merit Order of the licensee, the cost of such power purchase shall be allowed to be passed through in tariffs of the subsequent year at the maximum rate for power purchase under the Merit Order of the licensee as approved by the Commission whether the ceiling limit of 10% as stated in 11 (b) above has reached or not.”*

6.12.5 Commission understands that the UI mechanism is meant for the purpose of disciplining the grid operations and is not to be treated as a regular source for



power purchase. Hence the Commission reiterates that DISCOMS should take due care while overdrawing power from the grid; especially when the UI rates are high. The Commission would also like to caution the DISCOMS here that this issue would be dealt with at the time of true-up and at that time any power purchases undertaken in contravention to the provisions of the Distribution Tariff Regulations would be disallowed and the DISCOMS would have to bear the cost for the same.

6.12.6 CERC has also issued a Press Release dated 23rd July 2009 in this regard, wherein Forum of Regulators (FOR) has agreed that additional Unscheduled-Interchange (UI) charges imposed on distribution utilities for excessive overdrawl during the period when grid frequency is below 49.2 Hz. should not be permitted in the ARR of distribution utilities w.e.f. 1st August, 2009. This will ensure that consumers are not burdened for inefficiency or incompetence of that particular distribution utility. Accordingly, the Commission directs the DISCOMS to submit the details of power procured below 49.2 Hz between 1st August 2009 to 31st March 2010 along with costs during the submission of next ARR/ Tariff petition.

6.12.7 Further, the Commission would like to reiterate that the DISCOMS should assess the demand supply position in the state in advance and make its best endeavour to enter into bilateral contracts with generators / traders for meeting the envisaged demand supply gap. This would enable them to optimise on the power purchase expenses.

6.12.8 The Commission also redirects the DISCOMS to adopt a transparent procedure based on competitive bidding for procuring power on short term basis.

### **6.13 OTHER ADJUSTMENTS IN POWER PURCHASE:**

6.13.1 In tariff order for FY 2003-04, the Commission had approved fixed cost of Rs.53.20 cr for UPJVNL power stations. However, UPJVNL had sent a proposal of Rs.88.61 cr based on its revised transfer scheme to UPPCL for incorporation in the ARR for FY 2003-04. The tariff based on the generation norms was re-worked out at Rs.83.04 cr and therefore UPJVNL was deprived of Rs.29.84 cr for FY 2003-04 during the tariff approval. The Commission disposed off the petition filed by UPJVNL (Petition No. 548 / 2008) vide its order dated 29.9.2008 stating that the cost difference of Rs. 29.84 cr be recovered from UPPCL in 36 equal instalments from October 2008 without any interest or incidence of taxes etc. Further the Commission has provided recovery of such adjustments in power purchase cost for UPPCL in the ARR of relevant year. Accordingly, the



Commission approves the claim of Rs. **9.95** cr (Rs.29.84 cr / 36 months x 12 months) made by UPPCL for power purchase costs in FY 2009-10.

6.13.2 Further, UPPCL has submitted that Income Tax Department has given refund of Income Tax to NTPC for the assessment years 1999-2000 (FY 1998-99), 2001-02 (FY 2000-01) and 2002-03 (FY 2001-02). Out of this refund, UPPCL's share is Rs.3,21,35,34,265/-. Also an amount of Rs. 31208/- as UPPCL's share has also been refunded for the assessment year 2003-04 (FY 2002-03). Thus the total refunded amount pertaining to UPPCL is Rs.321,35,65,473/- (Rupees three hundred twenty one crore thirty five lacs sixty five thousand four hundred seventy three only). NTPC vide its letter no. 032/NRHQ/4000/113 dated 9<sup>th</sup> June 2009 has agreed to adjust above credit amount against the bill raised in May 2009. UPPCL has also submitted the copy of the invoices for the month of May 2009 wherein such amount has been adjusted. Accordingly, the Commission has adjusted this refund amount of Rs. **321.36** cr from total power purchase cost for FY 2009-10 which was not anticipated by UPPCL during the time of filing the petition.

#### **6.14 SUMMARY OF POWER PURCHASE:**

6.14.1 The total power purchase quantum available in MW terms from State owned generating stations, CGS and other sources along with the quantum and cost approval for FY 2009-10 is presented in **TABLE 6-21** below:



Order on ARR and Tariff Petition for Transco and Discoms for FY 2009-10

**TABLE 6-21: SUMMARY OF APPROVED POWER PURCHASE COST FY 2009-10**

Source of Power	Total Capacity (MW)	Capacity available to UP (MW)	MU Procurement	Fixed Cost	Variable Cost	Variable Cost	Total Cost
				(Rs. Cr.)	(Rs. / kWh)	(Rs. Cr.)	(Rs. Cr.)
<b>Procurement of power from State Sector Generating Stations</b>							
<b>Thermal Stations</b>							
Anpara A	630	630	4026	223	0.99	397	621
Anpara B	1000	1000	6402	647	0.95	610	1257
Harduagunj	440	220	796	91	2.98	237	328
Obra A	550	322	1417	101	1.60	227	328
Obra B	1000	1000	3766	319	1.34	506	825
Panki	220	210	823	100	2.29	188	288
Parichha	220	220	805	96	2.38	192	287
Parichha Extn.	420	420	2526	345	1.92	484	829
<b>Sub total - Thermal</b>	<b>4480</b>	<b>4022</b>	<b>20561</b>	<b>1922</b>	<b>1.38</b>	<b>2842</b>	<b>4764</b>
<b>Per unit Avg Rate of Thermal Generation</b>							<b>2.32</b>
<b>Hydro Stations</b>							
Khara	72	58	208	35	0.00	0	35
Matatila	30	20	67	4	0.00	0	4
Obra (Hydel)	99	99	175	11	0.00	0	11
Rihand	300	255	417	21	0.00	0	21
U.G.C. & E.Y.C. Power station	22	22	25	6	0.00	0	6
Belka & Babail	0	0	11	0	2.39	3	3
Sheetla	4	4	10	0	3.59	3	3
<b>Sub total - Hydro</b>	<b>526</b>	<b>457</b>	<b>912</b>	<b>76</b>		<b>6</b>	<b>82</b>
<b>Per unit Avg Rate from hydro generating stations</b>							<b>0.90</b>
<b>Sub-Total Own generation</b>	<b>5006</b>	<b>4479</b>	<b>21473</b>	<b>1998</b>		<b>2848</b>	<b>4846</b>
<b>Procurement of power from Central Sector Generating Stations</b>							
Chamera	540	109	452	56	0.00	0	56
Chamera-II	300	73	370	88	0.92	34	122
Dhauliganga	280	64	284	53	0.92	26	79
Salal I&II	690	48	240	17	0.00	0	17
Tanakpur	94	21	104	11	0.92	10	20
Uri	480	96	534	80	0.00	0	80
Dulhasti	390	97	466	132	0.00	0	132
Sewa-II (yet to be commissioned)	80	16	0	-	2.92	0	0
<b>Sub-total NHPC</b>	<b>2854</b>	<b>525</b>	<b>2450</b>	<b>437</b>		<b>70</b>	<b>507</b>
Anta	419	104	728	29	2.52	183	212
Auriya	663	226	1530	60	2.75	421	481
Dadri Thermal	840	84	642	40	2.84	182	223
Dadri Gas	830	257	1782	72	3.03	541	612
Dadri Ext (yet to be commissioned)							
Rihand-I	1000	356	2771	174	1.36	377	552
Rihand II	1000	326	2367	213	1.42	336	549
Singrauli	2000	814	5533	187	1.03	569	756
Tanda	440	440	2644	202	3.14	831	1033
Unchahar I	420	254	1951	120	1.53	298	417
Unchahar II	420	141	1032	80	1.63	168	248
Unchahar III	210	69	479	60	1.62	77	137
Farakka	1600	44	342	19	2.01	69	88
Kahalgaon	840	95	724	48	1.95	141	190
Talchar	1000	12	83	3	1.30	11	14
Kahalgaon St.II Ph.I	1000	172	1127	1	1.85	209	210
<b>Sub-Total NTPC</b>	<b>12683</b>	<b>3394</b>	<b>23735</b>	<b>1306</b>	<b>1.86</b>	<b>4414</b>	<b>5720</b>
NAPP	440	151	300	-	1.92	57	57
RAPP	400	74	223	-	2.91	65	65
RAPP #5 & #6	440	86	254	-	2.91	74	74
<b>Sub-Total NPCIL</b>	<b>1280</b>	<b>310</b>	<b>777</b>	<b>-</b>		<b>196</b>	<b>196</b>
Nathpa Jhakri	1500	251	1244	277	0.92	115	392
VishnuPrayag	400	352	1774	290	1.00	177	467
Tala Power	1020	45	184	-	1.92	35	35
Tehri Hydro	1000	394	1241	289	2.61	324	613
Rosa Power	300	300	613	-	3.00	184	184
<b>Sub-Total IPP/JV</b>	<b>4220</b>	<b>1341</b>	<b>5057</b>	<b>856</b>		<b>835</b>	<b>1691</b>
Co-Generation	0	0	1678	-	3.26	547	547
Other Sources	0	0	1271	-	5.00	635	635
<b>Sub-Total : Co-Generation &amp; Other Sources</b>	<b>-</b>	<b>-</b>	<b>2,949</b>	<b>-</b>		<b>1,182</b>	<b>1,182</b>
<b>Other Adjustments (NTPC Refund)</b>							<b>(321)</b>
<b>UPJVNL Fixed cost Adj - order dt 29.9.08</b>							<b>10</b>
<b>Grand Total of Power Purchase</b>	<b>26043</b>	<b>10049</b>	<b>56441</b>	<b>4597</b>	<b>1.64</b>	<b>9234</b>	<b>13831</b>



6.14.2 The total power purchase cost (excluding PGCIL Charges) approved by the Commission is Rs. **13,831** cr for FY 2009-10.

### 6.15 ANNUAL REVENUE REQUIREMENT FOR FY 2009-10 FOR DISCOMS:

6.15.1 The Commission has analysed all the components of the Aggregate Revenue Requirement (ARR) submitted by the DISCOMS to arrive at suitable values. As per the Distribution Tariff Regulations, the ARR includes the following components:

- a) Power Purchase cost
- b) Transmission Charge
- c) SLDC Charge
- d) Operation and Maintenance Expense
  - Employee Expenses
  - Administration & General Expenses
  - Repairs and Maintenance Expenses
- e) Depreciation
- f) Interest and Financing Costs
- g) Bad and Doubtful Debts
- h) Return on Equity
- i) Taxes on Income
- j) Other Expense
- k) Contribution to Contingency Reserve

The detailed analysis of each and every element identified above is presented in the subsequent sections. For approving the O&M expenses for the ensuing year, the Distribution Tariff Regulations provides for a formula of escalation index to be applied to the base year. This is detailed below.

### 6.16 ESCALATION INDEX:

6.16.1 The Commission has suggested formulation of an escalation index linked to WPI and CPI as notified by the Central Government for different years in Distribution Tariff Regulations. As per these Regulations, for determination of the O&M expenses (which includes employee, A&G and R&M expenses) for the year under consideration, the O&M expenses of the base year shall be escalated at inflation rates notified by the Central Government for different years. The inflation rate for above purpose shall be the weighted average of Wholesale Price Index and Consumer Price Index in the ratio of 60:40. Accordingly the Commission has considered an Inflation Index of **8.74%** for approving the ARR for FY 2009-10 over the base year i.e. FY 2008-09. The working of the inflation index is given in the **TABLE 6-22** below:



**TABLE 6-22: INFLATION INDEX FOR FY2009-10**

Month	Wholesale Price Index			Consumer Price Index		
	2007	2008	2009	2007	2008	2009
Jan	209	218	229	127	134	148
Feb	209	220	228	128	135	148
Mar	210	226	228	127	137	148
Apr	212	229	232	128	138	150
May	212	231	234	129	139	151
Jun	212	237	235	130	140	153
Jul	214	240	239	132	143	160
Aug	214	241	241	133	145	162
Sep	215	242	243	133	146	163
Oct	215	239	243	134	148	165
Nov	216	234	247	134	148	168
Dec	216	230		134	147	
<b>Average</b>	<b>213</b>	<b>232</b>	<b>236</b>	<b>131</b>	<b>142</b>	<b>156</b>
<b>Inflation of Nov. 09 over Nov. 08</b>			<b>5.55%</b>			<b>13.51%</b>
<b>Weighted Average of Inflation (60% *WPI+40%*CPI)</b>						<b>8.74%</b>

#### 6.17 POWER PURCHASE:

6.17.1 The power purchase quantum as well as costs approved by the Commission for FY 2009-10 has already been discussed under section 6.14. The Commission has approved Rs. **13,831** cr for FY 2009-10 excluding PGCIL charges.

#### 6.18 TRANSMISSION & SLDC CHARGES:

##### 6.18.1 INTER STATE TRANSMISSION CHARGES:

6.18.1.1 The inter-state transmission charges payable by the DISCOMS to PGCIL as projected by the licensees for FY 2009-10 is Rs. 604 cr for 27448 MUs @ Rs.0.22 /kWh.

6.18.1.2 The Commission has analysed the charges for northern region and found that they are lower as compared to the projections of the licensee. Moreover the licensee has projected charges as 12 paise per unit, 18 paise per unit and 22 paise per unit for FY 2007-08, FY 2008-09 & FY 2009-10 respectively. In absence of audited accounts for past years the Commission feels that it won't be prudent to pass on the additional burden on account of such projected charges to the consumers. Therefore, the Commission has decided to approve PGCIL charges @ 18 Paise per unit as submitted by the DISCOMs for FY 2008-09 for the wheeling quantum of NTPC (except Tanda & Unchahar), NHPC, RAPP, Nathpa-Jhakri, Tehri, Tala and Vishnuprayag as given in the petition by



DISCOMS. The transmission charges payable to PGCIL for FY 2009-10 are Rs. **450** cr. The details of computation is given in **TABLE 6-23** below:

**TABLE 6-23: PGCIL CHARGES FOR FY2009-10**

PGCIL Charges		
Quantum (MUs)	A	25,001
Rate (Rs/kWh)	B	0.18
Total (Rs.Crs)	C= A*B/10	450

6.18.1.3 However the actual transmission charges for FY 2009-10 would be allowed as pass through during true-up process subject to prudence check by the Commission.

**6.18.2 INTRA STATE TRANSMISSION CHARGES:**

6.18.2.1 The intra-state transmission charges (inclusive of SLDC charges) approved as part of the approved ARR & Tariff for UPPTCL (in section 5.14) by the Commission is Rs. **0.126/kWh** for FY 2009-10. Based on the same, the estimated transmission charges payable by the DISCOMS for power purchase for sale to retail consumers (excluding Bulk Sales) is Rs. **641** cr. The computation of above charges is given in the **TABLE 6-24** below:

**TABLE 6-24: INTRA-STATE TRANSMISSION CHARGES FOR FY 2009-10**

Discoms	Units Input into Discoms (MUs)	Transmission Charges (Rs.Crs)
	FY 09-10	FY 09-10
Lucknow	9,133	115
Meerut	17,522	220
Varanasi	12,182	153
Agra	12,217	153
<b>Total Retail Sales</b>	<b>51,054</b>	<b>641</b>

6.18.2.2 Based on the monthly billing by UPPTCL all DISCOMS shall pay the transmission charges to UPPTCL at@ **0.126/kWh**.





## 6.19 O&M EXPENSES:

6.19.1 Operation and Maintenance (O&M) expenses comprise of Employee related costs, Administrative and General (A&G) Expenses, and Repair and Maintenance (R&M) expenditure.

6.19.2 The regulation 4.3 of the Distribution Tariff Regulations stipulates:

- “1. The O&M expenses comprise of employee cost, repairs & maintenance (R&M) cost and administrative & general (A&G) cost. The O&M expenses for the base year shall be calculated on the basis of historical/audited costs and past trend during the preceding five years. However, any abnormal variation during the preceding five years shall be excluded. For determination of the O&M expenses of the year under consideration, the O & M expenses of the base year shall be escalated at inflation rates notified by the Central Government for different years. The inflation rate for above purpose shall be the weighted average of Wholesale Price Index and Consumer Price Index in the ratio of 60:40. Base year, for these regulations means, the first year of tariff determination under these regulations
2. Where such data for the preceding five years is not available the Commission may fix O&M expenses for the base year as certain percentage of the capital cost.
3. Incremental O&M expenses for the ensuing financial year shall be 2.5% of capital addition during the current year. O&M charges for the ensuing financial year shall be sum of incremental O&M expenses so worked out and O&M charges of current year escalated on the basis of predetermined indices as indicated in regulation 4.3 (1)..”

6.19.3 The Distribution Tariff Regulations provides for bringing the O&M expenses of the utilities to an optimal level. The regulation also provides for fixing norms based on circuit kilometres of distribution lines and number of bays in substation and such other parameters as may be determined by the Commission in due course of time.

6.19.4 The Commission has summarised Gross O&M expenditure for past five years based on the actual / unaudited / provisional figures submitted by the licensee and as approved by the Commission in past tariff orders. The details of O&M expenses is given in **TABLE 6-25 & TABLE 6-26** below:



**TABLE 6-25: O&M TREND – GROSS APPROVED FIGURES (Rs. Cr)**

Discoms	Gross Approved O&M Expenses			
	FY2004-05	FY 2006-07	FY 2007-08	FY 2008-09
Lucknow	266	299	311	333
Meerut	275	291	311	330
Varanasi	313	317	312	334
Agra	206	227	238	255
<b>Total</b>	<b>1,060</b>	<b>1,133</b>	<b>1,171</b>	<b>1,252</b>

**TABLE 6-26: O&M TREND – GROSS ACTUAL / UNAUDITED / PROVISIONAL FIGURES (Rs. Cr)**

Discoms	Gross Actual/Unaudited/Provisional O&M Expenses				
	FY2004-05	FY2005-06	FY 2006-07	FY 2007-08	FY 2008-09
Lucknow	275	280	289	253	370
Meerut	295	256	259	296	402
Varanasi	328	246	342	399	393
Agra	200	201	230	272	300
<b>Total</b>	<b>1,098</b>	<b>983</b>	<b>1,121</b>	<b>1,220</b>	<b>1,465</b>

6.19.5 However, the Commission would like to reiterate that a suitable norm for allowance of O&M expenses could be adopted only after undertaking a thorough study of the O&M expenditure based on the past performances, and the cost drivers of the same, through a separate process.

Till any such norm for O&M expenditure is determined, the Commission has considered the individual elements of O&M expenditure based on the past trends escalated by an Inflation Index. However for employee expenses, the Commission has taken a different view on account of Sixth Pay Commission salary revision impact which is discussed in the following section.

**6.19.6 O&M EXPENSES ON ADDITIONS TO ASSETS DURING THE YEAR:**

6.19.7 In addition to the employee, A&G and R&M expenses approved by the Commission in preceding paragraphs, the regulations provide for incremental O&M expenses on additions to assets during the year.

6.19.8 Based on the above, the incremental O&M expenses for FY 2009-10 work out to Rs. **50.44** cr as shown in the **TABLE 6-27** below. The same are allocated across the individual elements of the O&M expenses on the basis of the contribution of each element in the gross O&M expenses excluding the incremental O&M charges.



**TABLE 6-27: ALLOCATION OF INCREMENTAL O&M EXPENSES FOR FY 2009-10 (Rs. Cr)**

Incremental O&M Expenses @ 2.5% of capital additions during the year FY 2008-09	FY 2009-10 Approved				
	Meerut	Agra	Lucknow	Varanasi	Total
Capitalized Assets during FY 2008-09	587.53	425.00	640.90	364.14	<b>2,017.57</b>
<b>Incremental O&amp;M Expenses Approved @ 2.5%</b>	<b>14.69</b>	<b>10.63</b>	<b>16.02</b>	<b>9.10</b>	<b>50.44</b>
a) Employee Costs	8.48	6.26	11.46	6.16	<b>32.37</b>
b) A&G Expenses	0.97	1.09	0.95	0.69	<b>3.70</b>
c) R &M Expenses	5.23	3.27	3.61	2.25	<b>14.37</b>

#### 6.19.9 EMPLOYEE EXPENSES:

6.19.9.1 As discussed in the preceding section **6.19.5**, the Commission is treating employee expenses for the year under consideration in a different manner on account of Sixth Pay Commission impact.

6.19.9.2 The Employee Expenses for the FY 2009-10 have been forecast by the DISCOMS based on un-audited data of FY 2007-08 and data available till the date of ARR filing for FY2008-09. The DISCOMS have also considered the impact of increase in basic salary due to implementation of Sixth Pay Commission. The assumptions and methodology used by the licensees for forecasting the employee expenses for FY 2009-10 are detailed out as under:

- Basic Salaries for FY 2009-10 will increase by over 69% from FY 2008-09 costs due to implementation of Sixth Pay Commission recommendations & due to time bound increments and annual increase in pay;
- Dearness Allowance (DA) has been projected at 25% of Basic Salary for FY 2009-10;
- Other allowance has been forecasted to be 8% of the Basic Salary;
- Likewise, medical expenses have been forecasted to increase by inflation index per year from FY 2006-07, taking 3% as contingency;
- Pension and Gratuity have been calculated at 16.7% and 2.38% (i.e., 19.08%) of Basic Salary and Dearness Allowance;
- Leave Travel Assistance & Compensation is assumed to be 0.01% & 0.2% of Basic Pay respectively;
- Staff welfare expenses are assumed to in same ratio as actually incurred in FY 2008-09;

6.19.9.3 The projected employee expenses for FY 2008-09 at Rs.902 cr is higher by around 5% when compared to the employee expenses of Rs.867 cr approved by the Commission for FY 2008-09. In absence of audited accounts for past years, the Commission has taken into consideration the employee expenses of FY 2008-09 for projections for FY 2009-10.



Further in absence of any documentary proof to support the claims made by the DISCOMS for FY 2009-10, the Commission has allowed **46%** hike over approved employee expenses for FY 2008-09 on account of 6<sup>th</sup> pay revision. This is 2/3<sup>rd</sup> of the **69%** hike sought by the licensee. The actual employee expenses for FY 2009-10 on account of the same would be considered by the Commission for approval at the time of true-up process subject to prudence check.

6.19.9.4 The other employee cost elements such as dearness allowance, other allowance, LTA, compensation, pension & gratuity etc are approved as mentioned above in accordance with their linkages to basic salary and dearness allowance as applicable.

6.19.9.5 Further, the Commission has also approved Bonus, Medical expenses, Earned Leave encashment and Staff Welfare expenses for FY 2009-10 by applying an escalation factor of **8.74%** (inflation index) over the provisional figures of FY 2008-09.

6.19.9.6 The Commission thus approves the gross employee, cost including additional employee cost, as Rs. **1,119.01** cr for FY 2009-10. As mentioned in section **6.19.6**, the Commission has allowed an increment in O&M expenses @ 2.5% of the additions to the assets during the previous year. The allocation of the same to Employee expenses is Rs. **32.37** cr for FY 2009-10 as given in **TABLE 6-27** above and is included in gross employee expenses mentioned above.

6.19.9.7 With regards to the impact of the 6<sup>th</sup> Pay Revision arrears of employee expenses, DISCOMS have mentioned that the same are to be paid in October of each year starting from October 2010. Based on the same the Commission would consider the impact of such arrears or pay revision components at the time of true up exercise for the relevant financial year.

6.19.9.8 DISCOMS have capitalized employee expenses @ 15% of the total employee expenses. The Commission allows capitalization @ **15%** of the total employee expenses in consistency with the approach adopted in its previous tariff orders. In this regard, the Commission directs DISCOMS to suggest an appropriate policy on capitalization of salaries and wages within 3 months of the issue of this order. The approved net employee expense after capitalization is Rs. **951.15** cr for FY 2009-10 as given in **TABLE 6-28** below.



**TABLE 6-28: APPROVED EMPLOYEE EXPENSES FOR FY 2009-10 (Rs. Cr)**

Particulars	Employee Expenses - FY 2009-10		
	FY 2008-09 (Provisional)	FY 2009-10 (Petition)	FY 2009-10 (Approved)
<b>Agra Discom</b>			
Gross Employee Expenses	168.41	235.58	209.40
Employee Expenses Capitalized	25.26	35.34	31.41
Net Employee Expenses	143.14	200.25	177.99
<b>Lucknow Discom</b>			
Gross Employee Expenses	255.69	358.28	319.62
Employee Expenses Capitalized	38.35	53.74	47.94
Net Employee Expenses	217.34	304.54	271.67
<b>Meerut Discom</b>			
Gross Employee Expenses	221.79	308.92	275.34
Employee Expenses Capitalized	33.27	46.34	41.30
Net Employee Expenses	188.52	262.58	234.04
<b>Varanasi Discom</b>			
Gross Employee Expenses	255.75	357.68	314.65
Employee Expenses Capitalized	38.36	53.65	47.20
Net Employee Expenses	217.38	304.03	267.45
<b>Consolidated</b>			
Gross Employee Expenses	<b>901.63</b>	<b>1,260.47</b>	<b>1,119.01</b>
Employee Expenses Capitalized	<b>135.24</b>	<b>189.07</b>	<b>167.85</b>
Net Employee Expenses	<b>766.39</b>	<b>1,071.40</b>	<b>951.15</b>

6.19.9.9 Further, the Commission in its previous tariff orders for FY 2006-07, FY 2007-08 & FY 2008-09 had directed the DISCOMS to undertake a fresh study for employee expenses. This study is required for the purposes of re-estimating as the previous study being adopted currently is outdated and require revalidation. The Commission redirects the DISCOMS to submit a report on study on actuarial valuation for employers' contribution towards pension and gratuity within three months from the date of issue of this Tariff Order.

**6.19.10 ADMINISTRATION AND GENERAL EXPENSES (A & G EXPENSES):**

6.19.10.1 The DISCOMS have submitted that A&G expenses are forecasted to increase by only inflation index per year to offset the effect of inflation. Further the DISCOMS have submitted that there is outsourcing of billing works like use of hand held machines, consumer indexing & GIS mapping of consumers. Moreover, licensees have claimed Rs.1.25 Cr per DISCOM to utilize various



information technology (IT) initiatives such as implementation of software solution, networking (both local area network & wide area network), retail billing solution, energy billing system, energy accounting system etc, to drive operational efficiency improvement.

6.19.10.2 As discussed in the preceding section **6.19.5**, the Commission has approved the A&G expenses for FY 2009-10 based on the escalation factor of **8.74%** over the provisional figures for FY 2008-09 submitted by DISCOMS. Thus, the same computes to Rs. **135.38** cr for FY 2009-10 including additional A&G cost allocation. As mentioned in Clause **6.19.6**, the Commission allows incremental O&M expenses @ 2.5% of the additions to the assets during the FY 2009-10. The allocation of the same to A&G expenses on consolidated basis is Rs. **3.70** cr for FY 2009-10 (**TABLE 6-27**) and is included in gross A&G expenses mentioned above. However, the Commission appreciates the commitment of the DISCOMS to keep costs under control and accordingly approves gross A&G expenses for FY 2009-10 as projected at the level of Rs. **129.83** cr including allocation of additional A&G expenses.

6.19.10.3 For the purposes of this tariff order, capitalization @15% of the total A&G expenses as proposed by the DISCOMS is approved by the Commission. However the Commission directs that DISCOMS should capitalise the expenditure based on the actual expenses incurred / projected and based on the past audited accounts in next ARR filing. Further DISCOMS should have proper accounting system to capture the expenses related to capital schemes rather than assuming a standard %age.

6.19.10.4 The Commission thus approves the net A&G expenses after capitalisation at Rs. **110.36** cr as projected by the licensees for FY 2009-10. The DISCOM wise approved cost for FY 2009-10 is provided in the **TABLE 6-29** below:



**TABLE 6-29: APPROVED A&G EXPENSES FOR FY 2009-10 ( Rs. Cr)**

Particulars	A&G Expenses - FY 2009-10		
	FY 2008-09 (Provisional)	FY 2009-10 (Petition)	FY 2009-10 (Approved)
<b>Agra Discom</b>			
Gross A&G Expenses	34.05	36.51	36.51
A&G Expenses Capitalized	5.11	5.48	5.48
Net A&G Expenses	28.94	31.03	31.03
<b>Lucknow Discom</b>			
Gross A&G Expenses	24.79	26.58	26.58
A&G Expenses Capitalized	3.72	3.99	3.99
Net A&G Expenses	21.07	22.59	22.59
<b>Meerut Discom</b>			
Gross A&G Expenses	29.32	31.47	31.47
A&G Expenses Capitalized	4.40	4.72	4.72
Net A&G Expenses	24.92	26.75	26.75
<b>Varanasi Discom</b>			
Gross A&G Expenses	32.94	35.27	35.27
A&G Expenses Capitalized	4.94	5.29	5.29
Net A&G Expenses	28.00	29.98	29.98
<b>Consolidated</b>			
Gross A&G Expenses	<b>121.10</b>	<b>129.83</b>	<b>129.83</b>
A&G Expenses Capitalized	<b>18.17</b>	<b>19.47</b>	<b>19.47</b>
Net A&G Expenses	<b>102.94</b>	<b>110.36</b>	<b>110.36</b>

**6.19.11 REPAIRS AND MAINTENANCE (R&M) EXPENSES:**

6.19.11.1 DISCOMS have estimated the R&M expenses for FY 2009-10 as 4.50% of opening gross fixed assets for distribution assets in the corresponding year.

6.19.11.2 The R&M expenses for FY 2009-10 have been estimated by applying an escalation factor of 8.74% (inflation index) over the provisional figures for FY 2008-09 in line with the provisions of the Distribution Tariff Regulations. The Commission thus approves the R&M cost of Rs. 495.07 cr as against Rs. 545.75 cr projected by the DISCOMS for FY 2009-10. As mentioned in Clause 6.19.6, the Commission has allowed an incremental O&M expenses @ 2.5% of the additions to the assets during the previous year i.e. FY 2008-09. The allocation of the same to R&M expenses is Rs. **14.37** cr for FY 2009-10 as shown in **TABLE 6-27** and is included in gross R&M expenses approved above.



**TABLE 6-30: APPROVED R&M EXPENSE FOR FY 2009-10 (Rs. Cr)**

Discoms	FY 2008-09 (Provisional)	FY 2009-10 (Petition)	FY 2009-10 (Approved)
Agra	97.69	120.49	109.50
Lucknow	89.18	118.02	100.58
Meerut	151.37	174.71	169.83
Varanasi	103.83	132.53	115.16
<b>Total</b>	<b>442.08</b>	<b>545.75</b>	<b>495.07</b>

6.19.11.3 The Commission considers Repairs & Maintenance expenses as critical to operational activities. The approval for these expenses is provisional in nature. The approval of the actual expenses would be undertaken at the time of true-up exercise, subject to prudence check with regards to the spending in R&M works over the year.

**6.19.12 SUMMARY OF THE O&M EXPENSES FOR THE DISCOMS:**

6.19.12.1 The Commission has mentioned earlier that due to 6<sup>th</sup> Pay Commission impact, different approach has been adopted for allowing employee expenses for FY 2009-10. The Commission would like to state that if the O&M expenses were approved as per Inflation indices only over FY 2008-09 and incremental O&M expenses were allowed, the net O&M expenses for FY 2009-10 after capitalisation under respective heads would compute to Rs. **1,534.43** cr. The **TABLE 6-31** below provides the computation of net O&M expenses including additional O&M expenses as per above methodology and also as approved by the Commission.

**TABLE 6-31: SUMMARY OF NET O&M EXPENSES FOR FY 2009-10 (Rs. Cr)**

Discoms	FY 2009-10 (FY 2008-09 + Inflation)	FY 2009-10 (Approved)
Gross O&M Expenses	1,592.78	1,693.47
Add: Incremental O&M expenses	50.44	50.44
Less: Expenses Capitalisation	108.78	187.33
<b>Total</b>	<b>1,534.43</b>	<b>1,556.58</b>

6.19.12.2 However as an exceptional year, due to 6<sup>th</sup>. Pay Revision, the net O&M expenses approved for FY 2009-10 is Rs. **1,556.58** cr inclusive of the allocation for incremental O&M expenses of Rs. **50.44** cr as detailed in above table.





6.19.12.3 The DISCOMS should make efforts to bring down the O&M expenses to an optimal level. The Commission expects the DISCOMS to improve its performance considering the repetitive nature of O&M works and introduction of new technologies. The Commission may review the costs in the future, based on availability of audited information and justifications for taking up the expenses.

## 6.20 GFA BALANCES AND CAPITAL FORMATION ASSUMPTIONS:

6.20.1 The Commission in its last tariff order for the FY 2007-08 & FY 2008-09 had approved the gross fixed assets (GFA) of Rs. 14442.94 cr as on 31st March 2009 for all the DISCOMS taken together. The opening balance as per petition for FY 2009-10 is Rs. **12,128** cr. However, as per the provisional accounts for FY 2008-09 the closing GFA is Rs. **10,638** cr. As the figure for gross fixed assets flows from the previous years, the Commission has adopted the quantum of GFA from the provisional accounts. Further, the same would be subject to revision at the time of true-up for the year.

6.20.2 The Commission would like to state that since the figures are based on the DISCOM specific actual unaudited balance sheets, the variation in GFA between the Commission approved figures and the actual figures for FY 2008-09 will be subject to true-up once audited accounts are finalized.

6.20.3 The Commission has scrutinized the investment plan and assets capitalization as submitted by the DISCOMS. The DISCOMS have considered investments of Rs. **4,274** cr in FY 2009-10 which includes works under various schemes like RGGVY, APDRP, Distribution works etc.

6.20.4 The investments proposed to be carried out under Deposit works for FY 2009-10 amounting to Rs. **350** cr is approved by the Commission. However the Commission has not considered investments from deposit / grants work for the purpose of capitalisation.

6.20.5 The DISCOMS have proposed investments under RGGVY for FY 2009-10 amounting to Rs. **1,000** cr to be funded through equity. UPPCL has submitted letter from GoUP wherein the equity amount of Rs.1000 cr is provided for carrying out such works. The DISCOMS have not provided any information about the activities to be undertaken under these schemes. Further, these schemes are eligible to get 90% capital subsidy from the Central Government. In view of the same the Commission has taken a view and approved only 10% of the investment proposed by the DISCOMS under the said schemes to be funded



through equity for capitalisation purpose and the rest is assumed to be funded through Central Government Subsidy. Though Commission has considered only Rs. 100 Cr in this tariff order, the balance Rs. 900 Cr is also approved for the purpose of Investments as funded through grants.

6.20.6 Similarly DISCOMS have also proposed investment of Rs. 2924 cr under other works for FY 2009-10 to be carried out through Rs.2522 cr of equity funding & rest through loans. The Commission has carried out analysis of past investments made by DISCOMS from provisional accounts of FY 2007-08 and FY 2008-09 wherein the investments for FY 2007-08 are approximately Rs. 2000 cr against the investment plan of Rs. 2925 cr as claimed in the last tariff filing. Similarly the investments for FY 2008-09 are approximately Rs.2200 cr against the capital investment plan of Rs.4796 cr as claimed in the last tariff filing. Hence it is noticed that the actual investments as provided in the provisional accounts are 68% for FY 2007-08 and 46% for FY 2008-09 when compared to planned investments. In this regard, the Commission approves **50%** of the investments proposed as interim measure with normative debt-equity ratio instead of debt-equity funding proposed by the DISCOMS for respective schemes. The prudence check with regards to actual amount spent under the said head / schemes will be undertaken at the time of true-up.

6.20.7 Accordingly, the Commission approves investments of Rs. **1,562** cr for FY 2009-10 as shown in the **TABLE 6-32** below:

**TABLE 6-32: APPROVED INVESTMENTS FOR FY 2009-10 (Rs. Cr)**

Particulars	Petition	Approved
<b>Investments considered in Tariff Order</b>		
RGVY Investments	1,000	100
Other Investments	2,924	1,462
<b>Sub-Total (A)</b>	<b>3,924</b>	<b>1,562</b>
<b>Investments approved but not considered in Tariff Order</b>		
Deposit works	350	350
RGVY Investments (90%) - not considered for capitalisation purpose	-	900
<b>Sub-Total (B)</b>	<b>350</b>	<b>1,250</b>
<b>Total</b>	<b>4,274</b>	<b>2,812</b>

6.20.8 The DISCOMS have considered capitalization of investments for GFA purpose at 40% of the sum of opening WIP, investments made during the year, employee expenses capitalized, A&G Expenses capitalized and interest capitalized (40% of total investments). The same capitalisation %age has been accepted by the



Commission and is illustrated in **TABLE 6-33** below. The total capitalization of Rs. **1,682** cr has been approved for DISCOMS FY 2009-10. The prudence check with regards to actual amount will be undertaken at the time of true-up.

**TABLE 6-33: APPROVED CAPITALISATION & WIP OF INVESTMENTS FOR FY 2009-10 (Rs. Cr)**

Particulars		Meerut	Agra	Lucknow	Varanasi	Total
Opening WIP as on 01.04.2009	A	543	430	630	779	<b>2,383</b>
Investments	B	467	401	326	369	<b>1,562</b>
Employee Expenses Capitalisation @ 15%	C	41	31	48	47	<b>168</b>
A&G Expenses Capitalisation @ 23%	D	5	5	4	5	<b>19</b>
Interest Capitalisation @ 23% on Interest on long term loans	E	21	18	17	17	<b>73</b>
<b>Total Investments</b>	F= A+B+C+D+E	<b>1,077</b>	<b>886</b>	<b>1,024</b>	<b>1,217</b>	<b>4,205</b>
<b>Transferred to GFA (Total Capitalisation)</b>	G= F*40%	431	354	410	487	<b>1,682</b>
<b>Closing WIP</b>	H= F-G	<b>646</b>	<b>532</b>	<b>615</b>	<b>730</b>	<b>2,523</b>

6.20.9 Considering the total capitalization approved by the Commission for FY 2009-10 as above, the capital formation for the DISCOMS is given in **TABLE 6-34** below:

**TABLE 6-34: APPROVED GROSS FIXED ASSETS FOR FY 2009-10 ( Rs. Cr)**

Particulars		Meerut	Agra	Lucknow	Varanasi	Total
Opening GFA as on 01.04.09	A	3,610	2,406	2,216	2,405	<b>10,638</b>
Addition to GFA during the year	B	431	354	410	487	<b>1,682</b>
Closing GFA as on 31.3.2010	C = A + B	4,041	2,761	2,626	2,892	<b>12,320</b>

## 6.21 DEPRECIATION EXPENSE:

6.21.1 The Commission in its Distribution Tariff Regulations has specified the methodology for the computation of depreciation. The regulation also specifies the rates to be used for the purpose of computation of the depreciation charged during the year.

6.21.2 The Commission has assessed depreciation on the basis of average depreciation rates as against specific depreciation rates for each class of asset. As per the Distribution Tariff Regulations; major assets come under depreciation rate bracket of 7.84%. Accordingly the same has been considered.



6.21.3 The Commission in line with the provisions of Distribution Tariff Regulations has allowed the depreciation to be charged during the year for the entire year on the opening GFA and pro-rata basis for the assets capitalised during the year.

6.21.4 As mentioned earlier, the opening GFA considered for FY 2009-10 is as per the provisional accounts of FY 2008-09. Hence based on the same and using the above specified weighted average depreciation rate of **7.84%**, the Commission approves depreciation expense of Rs. **900 cr** for FY 2009-10 for the DISCOMS. The DISCOM-wise detailed calculations of depreciation for FY 2009-10 is given in **TABLE 6-35** below:

**TABLE 6-35: APPROVED DEPRECIATION FOR FY 2009-10 (Rs. Cr)**

Particulars		Meerut	Agra	Lucknow	Varanasi	Total
Depreciation Rate	A	7.84%	7.84%	7.84%	7.84%	7.84%
Opening GFA as on 01.04.09	B	3,610	2,406	2,216	2,405	<b>10,638</b>
Addition to GFA during the year	C	431	354	410	487	<b>1,682</b>
<b>Depreciation on Opening GFA + Addition during the year</b>	<b>D= (A*B)+(C*A/2)</b>	300	203	190	208	<b>900</b>

\* As per the Distribution Tariff Regulations; major assets come under depreciation bracket of 7.84%. Approach considered due to lack of Fixed Asset registers.

6.21.5 The Commission had directed the DISCOMS to ensure that proper and detailed Fixed Assets Register are maintained at the field offices. The DISCOMS in response have intimated that necessary instructions have been issued to the field offices with regards to this. However, no report has been submitted with regards to the methodology adopted for maintaining the same.

6.21.6 Hence, the Commission reiterates its direction to the DISCOMS to ensure that they maintain proper and detailed Fixed Assets Registers to work out the depreciation expense as specified in the Distribution Tariff Regulations and submit within two months from the date of issue of this Tariff Order a report to the Commission citing clearly as to how they are maintaining fixed assets registers for the various assets.



## **6.22 INTEREST AND FINANCING COST:**

### **6.22.1 INTEREST ON LONG TERM LOANS:**

6.22.1.1 In addition to the interest on long term loans, the DISCOMS have also projected other interest expenses under the following heads:

- Interest on working capital / short term loans;
- Allocation of Working Capital Interest charges and finance charges of UPPCL, which arises due to market borrowing to meet out revenue gap of DISCOMS
- Other interest charges;
- Discount to consumers;
- Interest on consumer security deposits.

6.22.1.2 The Commission has computed the interest and finance charges for FY 2009-10 based on the approved investment plan of DISCOMS. The Commission has considered debt:equity ratio of 70:30 in case of schemes proposed under "Distribution works" and "Other schemes". However, the approved investment under the RGVY schemes has been considered under equity funding as proposed by the DISCOMS.

6.22.1.3 The DISCOMS in its investment plan for FY 2009-10 have only submitted information of source-wise debt funding for major schemes to be undertaken. The project wise details for fresh loans as mandated in the Distribution Tariff Regulations has not been provided by the licensees.

6.22.1.4 In absence of these details, the Commission has considered the projected opening balances for FY 2009-10 as per DISCOMS submission. The interest rates for the existing loans are also retained as submitted by the DISCOMS for FY 2009-10.

6.22.1.5 The Commission has not considered any short term loans, including Bank Loans through UPPCL, while vetting and approving interest on long term loans. Further UPPCL has mentioned that it is not claiming interest of Rs.917.38 cr payable by DISCOMS to UPPCL for FY 2008-09. UPPCL has charged such cost to the account of the DISCOMS as the working capital borrowings were made to pay the power purchase bills of DISCOMS. Such expenses have not been charged to the consumers and it is only an internal adjustment between the DISCOMS and UPPCL.

6.22.1.6 As far as new loans drawn / to be drawn, based on the approved investment plans, are concerned the DISCOMS have not provided details regarding the



terms of funding. In absence of the same, the repayments for the new loans are considered based on the tenure of 10 years period. Further, the rate of interest considered at **11.50%** which is slightly lower than SBI PLR of **11.75%** (prevailing during the period from June 09 onwards) is approved by the Commission for FY 2009-10.

6.22.1.7 Considering the above assumptions, the Commission approves Rs. **317.07** cr for FY 2009-10 as interest on long term debt. Out of the approved interest on long term debt for FY 2009-10, Rs. **278.67** cr is interest on account of existing debt and Rs. **38.40** cr on account of new loans as shown in the **TABLE 6-36** below:

**TABLE 6-36: APPROVED INTEREST ON LONG TERM LOAN FOR FY 2009-10 (Rs. Cr)**

Loan Term Loan Sources	FY 2009-10 Approved				
	Meerut	Agra	Lucknow	Varanasi	Total
<b>Long Term</b>					-
GoUP Loan	0.56	0.38	0.75	0.56	<b>2.25</b>
GoUP-APDRP	6.38	6.86	3.62	3.86	<b>20.71</b>
World Bank Loan	11.55	5.44	15.30	3.50	<b>35.79</b>
N C R	0.11	0.10	0.33	0.31	<b>0.86</b>
PFC Loan (Transfer Scheme)	1.16	0.92	1.08	1.15	<b>4.31</b>
PFC Loan (Post Transfer Scheme)	0.22	0.24	0.17	0.22	<b>0.86</b>
P.F.C. - APDRP	22.56	13.05	6.69	19.61	<b>61.91</b>
PFC Loan (As per Plan Capex)	-	-	-	-	-
PFC Loan for ABC Schemes	9.06	7.60	5.98	7.60	<b>30.24</b>
PFC Loan for Bifurcation of	1.21	1.35	0.40	0.98	<b>3.94</b>
PFC NEF Loan	3.19	-	-	-	<b>3.19</b>
REC Loan (Transfer Scheme)	0.88	0.78	0.88	0.99	<b>3.54</b>
REC Loan (Post Transfer Scheme)	0.49	0.48	0.62	0.41	<b>2.01</b>
REC APDRP	0.56	13.56	7.81	1.09	<b>23.02</b>
REC Rescheduled	21.51	18.93	21.51	24.09	<b>86.05</b>
<b>Sub-Total</b>	<b>79.45</b>	<b>69.70</b>	<b>65.14</b>	<b>64.39</b>	<b>278.67</b>
<b>New Loans - Market/ FIIs</b>	<b>12.78</b>	<b>8.78</b>	<b>7.56</b>	<b>9.28</b>	<b>38.40</b>
<b>Total</b>	<b>92.23</b>	<b>78.47</b>	<b>72.70</b>	<b>73.67</b>	<b>317.07</b>

#### 6.22.2 INTEREST ON WORKING CAPITAL:

6.22.2.1 The Distribution Tariff Regulations 4.8 (2) provides rate of interest on working capital as per bank rate specified by RBI for the relevant year plus a margin decided by the Commission. The prevailing bank rate specified by RBI is 6% p.a. and the Commission has approved 5.75% as the margin for FY 2009-10. Thus, the rate of interest on working capital is approved at **11.75%** per annum (RBI rate 6% + Margin 5.75%). This is also equivalent to prevailing SBI Prime Lending Rate (PLR).



6.22.2.2 Further, other interest including interest on overdraft (O/D) facilities, on account of long term loans and working capital are not approved as the DISCOMS are entitled to normative interest on working capital to take care of their short term requirement of funds. The Commission does not see merit in UPPCL borrowing working capital loans on behalf of the DISCOMS. The said practise may have been followed by the companies for operational ease; however, the obligations for meeting the cost on account of the same must be settled amongst the DISCOMS and UPPCL through some internal mechanisms. The cost of the same cannot be recovered from the consumers as part of the ARR petition.

6.22.2.3 The DISCOMS are eligible only for interest cost on account of normative working capital. The Commission has disallowed other interest on short term loans including Overdraft as the DISCOMS have been allowed interest on normative working capital.

6.22.2.4 The computation of interest on normative working capital at consolidated level for FY 2009-10 is given in **TABLE 6-37** below:

**TABLE 6-37: APPROVED INTEREST ON WORKING CAPITAL FY 2009-10 (Rs. Cr)**

S.N	Item	FY 2009-10 Approved				
		Meerut	Agra	Lucknow	Varanasi	Total
1	One month's O&M Expenses	35.89	26.54	32.90	34.38	<b>129.72</b>
2	One-twelfth of the sum of the book value of materials in stores at the end of each month of such financial year.	7.42	5.90	7.47	8.88	<b>29.68</b>
3	Receivables equivalent to 60 days average billing on consumers	891.60	666.73	480.36	542.68	<b>2,581.38</b>
	<b>Gross Total</b>	<b>934.91</b>	<b>699.18</b>	<b>520.74</b>	<b>585.94</b>	<b>2,740.77</b>
	<b>Less:</b>					
4	Less: Total Security Deposits by the Consumers reduced by Security Deposits under section 47(1)(b) of the Electricity Act 2003	440.17	162.53	125.88	301.60	<b>1,030.19</b>
5	<b>Net Working Capital</b>	<b>494.74</b>	<b>536.65</b>	<b>394.86</b>	<b>284.34</b>	<b>1,710.59</b>
6	Rate of Interest for Working Capital	11.75%	11.75%	11.75%	11.75%	<b>11.75%</b>
7	<b>Interest on Working Capital</b>	<b>58.13</b>	<b>63.06</b>	<b>46.40</b>	<b>33.41</b>	<b>200.99</b>



### DISCOUNT TO CONSUMERS:

6.22.2.5 The Licensee has claimed an expenditure on account of the discount offered to consumers to the tune of Rs. **14.87** cr in FY 2009-10. These rebate are given to consumers under different heads like load factor rebate, power factor rebate, etc. As these rebates offered to consumers are part of the tariff approved by the Commission, the same are approved by the Commission to be recovered through the ARR as proposed by the DISCOMS.

### 6.22.3 INTEREST ON CONSUMER SECURITY DEPOSITS:

6.22.3.1 Interest to consumer on security deposits has been computed on the Opening Balance of the Security Deposits at the beginning of the year at the prevailing bank rate of 6% as notified by Reserve Bank of India. The opening balances have been considered as per closing figures of provisional accounts for FY 2008-09 and additions during the year for FY 2009-10 have been considered from the petition for FY 2009-10. The Computation of the same is given **TABLE 6-38** below:

**TABLE 6-38: INTEREST ON SECURITY DEPOSITS FY 2009-10 (Rs. Cr)**

S. N	Item	FY 2009-10	
		Petition	Approved
1	Opening Balance for Security Deposit	1,244.95	996.22
2	Additions During the Year	67.94	67.94
<b>3</b>	<b>Closing Balance for Security Deposit</b>	<b>1,312.88</b>	<b>1,064.16</b>
4	Rate of Interest	6.00%	6.00%
<b>5</b>	<b>Interest on Security Deposit</b>	<b>74.31</b>	<b>59.77</b>

6.22.3.2 Accordingly the Commission has approved interest on security deposits for FY 2009-10 at Rs. **59.77** cr.

### 6.22.4 FINANCE CHARGES:

6.22.4.1 In the context of other interest and finance charges, the Commission has approved cost of raising finance as 1% of the loan draws for the year. Accordingly the Commission has approved Rs. **10.38** cr as finance charges for FY 2009-10. Further the Commission has also allowed bank charges as claimed by the DISCOMS to the extent of Rs. **0.47** cr.





## SUMMARY OF INTEREST AND FINANCE CHARGES:

6.22.4.2 The approved interest charges on long term loans have been capitalized at the rate of **23%**. The Commission directs DISCOMS to develop a system whereby the actual interest accrued / incurred till the capital scheme is completed and put to use gets captured in a separate account typically termed as 'Interest During Construction' (IDC) rather than assuming a standard %age. Accordingly, interest and financing charges (net of capitalization) inclusive of Interest on working capital, interest on consumer security deposits, discount to consumers and other approved interest and finance costs approved by the Commission for FY 2009-10 is Rs. **530.64** cr. The DISCOM-wise interest and finance charges allowed for FY 2009-10 is given in **TABLE 6-39** below:

**TABLE 6-39: APPROVED INTEREST & FINANCE CHARGES FY 2009-10 ( Rs. Cr)**

Particulars	FY 2009-10- Approved				
	Meerut	Agra	Lucknow	Varanasi	Total
<b>Interest on Long term Loans</b>	<b>92.23</b>	<b>78.47</b>	<b>72.70</b>	<b>73.67</b>	<b>317.07</b>
a) Interest on Existing Loans	79.45	69.70	65.14	64.39	278.67
b) Interest on New Loans	12.78	8.78	7.56	9.28	38.40
<b>Interest on Working Capital Loans</b>	<b>58.13</b>	<b>63.06</b>	<b>46.40</b>	<b>33.41</b>	<b>200.99</b>
<b>Discount to Consumers</b>	<b>2.91</b>	<b>0.25</b>	<b>6.04</b>	<b>5.67</b>	<b>14.87</b>
<b>Interest on Consumer Security Deposits</b>	<b>25.50</b>	<b>9.34</b>	<b>7.20</b>	<b>17.73</b>	<b>59.77</b>
<b>Finance Charges</b>	<b>3.28</b>	<b>2.50</b>	<b>2.01</b>	<b>2.60</b>	<b>10.38</b>
<b>Bank Charges</b>	<b>0.11</b>	<b>0.15</b>	<b>0.04</b>	<b>0.17</b>	<b>0.47</b>
<b>Gross Total Interest &amp; Finance Charges</b>	<b>182.16</b>	<b>153.77</b>	<b>134.40</b>	<b>133.24</b>	<b>603.56</b>
Less: Capitalization @ 23% on Long term Loans	21.21	18.05	16.72	16.94	72.93
<b>Net Interest &amp; Finance Charges</b>	<b>160.94</b>	<b>135.72</b>	<b>117.68</b>	<b>116.30</b>	<b>530.63</b>

6.22.4.3 The Commission would like to mention here that the approved interest and finance charges are much lower than projections due to the fact that the major component of interest on account of working capital borrowings for power purchase bills between UPPCL and DISCOMS claimed as internal adjustment is not considered by the Commission.

## 6.23 PROVISION FOR BAD AND DOUBTFUL DEBTS:

6.23.1 The Distribution Tariff Regulations provide for expenses under Bad & Doubtful Debts to the extent of 2 % of the revenue receivables. However the DISCOMS have to actually identify and write-off the bad debts as per a transparent policy approved by the Commission.

6.23.2 In the ARR for FY 2009-10, the DISCOMS have proposed Bad and Doubtful debts @2% of revenue receivables to the tune of Rs. 149.37 cr.

6.23.3 The Commission in its previous tariff orders have stated that it is not averse to allowing some provision for bad and doubtful debts in the course of normal



operations of the DISCOMS. However such provisioning needs to be backed up with processes to identify consumers who are not paying and then making adequate attempts to collect from such consumers. Accordingly, the Commission had directed the DISCOMS to form a clear cut 'Bad Debt' policy as defined in Distribution Tariff Regulations.

6.23.4 Thus, in view of these submissions, Commission opines that it is inappropriate to approve the Bad & Doubtful debts without a proper policy in place and redirects the DISCOMS to submit DISCOM-wise ten such sample cases of LT & HT consumers where orders have been issued for writing off bad debts clearly depicting the procedure adopted for writing off bad debts alongwith a policy framework for Commission's approval within a month of issue of this order.

#### **6.24 OTHER INCOME:**

6.24.1 As per the DISCOMS Other Income includes other miscellaneous income from retail sources, non-tariff income and revenue support from the GoUP. The 'other income from retail sources' includes miscellaneous revenues from consumers, but excludes Delayed Payment Surcharges, and is assumed to grow in line with the increase in sales revenue.

6.24.2 Accordingly, other income from retail sources has been projected by the DISCOMS at Rs. 173.45 cr for FY 2009-10. Non-tariff income also includes interest on loans and advances to employees and income from fixed rate investment deposits and interest on loans and advances to licensees. The DISCOMS have projected a non-tariff income of Rs. 37.51 cr for FY 2009-10.

6.24.3 The Commission has approved the total other Income as projected by the DISCOMS at Rs. **173.45** cr.

#### **6.25 RETURN ON EQUITY:**

6.25.1 The DISCOMS have not asked for any return on equity for the year under review. The DISCOMS have stated that they did not want to burden the consumers by proposing return on equity as it will further increase the gap. Moreover, DISCOMS have submitted that to bridge revenue shortfall it would have to ask for more GoUP subsidy and resort to short term loans from market apart from other measures to be initiated for productivity improvement. Hence the Commission has not approved return on equity for FY 2009-10.



## 6.26 CONTRIBUTION TO CONTINGENCY RESERVE:

6.26.1 The Distribution Tariff Regulations provides for contribution to the contingency reserves upto 0.5% of opening GFA to be included in the ARR of licensees. The contingency reserve so created shall be utilized to meet cost of replacement of equipment damaged due to force majeure situations. The Licensee shall invest Contingency Reserve as allowed by the Commission in Government securities. However, the use of such reserve is only with the prior permission of the Commission.

6.26.2 Further, the DISCOMS have submitted that as there is a substantial revenue gap between ARR and revenue forecast any claim of this component, will only go to enhance the already large gap and create extra burden on the consumers. In view of the same, the DISCOMS have not claimed any amount under the said component in the present ARR filing.

6.26.3 Commission accepts the views of the DISCOMS. The estimated amount on account of Contribution to Contingency Reserve for representation purpose only is given in **TABLE 6-40** below for reference:

**TABLE 6-40: ESTIMATED AMOUNT FOR CONTRIBUTION TO CONTINGENCY RESERVE ( Rs. Cr)**

Particulars	FY 2009-10 Approved				
	Meerut	Agra	Lucknow	Varanasi	Total
Opening Balance of GFA	3,610.3	2,406.1	2,216.3	2,404.9	10,637.6
Contribution (%)	0.50%	0.50%	0.50%	0.50%	0.50%
Contribution to Contingency Reserve	18.05	12.03	11.08	12.02	53.19

## 6.27 ONE TIME SETTLEMENT (OTS) WAIVER SCHEMES:

6.27.1 As per clause 12 the General Provisions of the Tariff Order for FY 2006-07 & clause 10 of the General Provisions of Tariff Order FY 2008-09; the DISCOMS were allowed to launch two surcharge waiver scheme (One Time Settlement Scheme) for recovery of blocked arrear and impact of such waiver were allowed to pass through in ARR for ensuing year with conditions as laid down, therein.

6.27.2 DISCOMS have claimed Rs.54.46 cr as waiver amount passed onto the Consumers for FY 2007-08 & FY 2008-09.

6.27.3 In view of the DISCOMS submission, the Commission allows waiver amount. But, this amount shall be subject to true-up when the audited accounts are finalized for respective years.



6.27.4 Moreover, the Commission on 5<sup>th</sup> of February, 2010 issued an order on OTS schemes for FY 2009-10. In this order, it is stated that the surcharge waiver will not be a pass through in any future tariff / true-up exercise.

## 6.28 POWER PURCHASE ARREARS:

6.28.1 UPPCL have claimed power purchase arrears as per clause 6.9 of the Distribution Tariff Regulations which provides for recovery of changes in fuel cost through tariff as per the formula specified in the UPERC (Conduct of Business) Regulation, 2004 which is as below:

**“142.**

*(1) Unless otherwise agreed or prescribed by the Commission, Fuel Surcharge adjustment formula shall be in the following form:*

$$A_i = PPC_{i-1} - OF_{i-1} - EPRI_{i-1} + B_i$$

*Where,  $A_i$  is the amount by which the licensee's revenues under the relevant tariff are to be increased or decreased during adjustment period  $i$  (a negative number representing a reduction and a positive number representing an increase in revenues).*

*$PPC_{i-1}$  is the licensee's purchased power cost for the actual level of sales and the allowed level of loss in the most recent adjustment period ending before adjustment period  $i$ , calculated as,*

$$P_{i-1} * QACT_{i-1} * (1 + L)$$

*Where,  $P_{i-1}$  is the actual average cost of purchased power incurred by the licensee in the most recent adjustment period ending before adjustment period  $i$ ,  $QACT_{i-1}$  is the actual quantity of sales experienced by the licensee in the most recent adjustment period ending before adjustment period  $i$ ,*

*$L$  is the average level of energy losses allowed by the Commission in the cost of service and reflected in the licensee's tariffs,*

*$OF_{i-1}$  are any purchased power costs actually incurred by the licensee in the most recent adjustment period ending before adjustment period  $i$  that are disallowed by the Commission as having been incurred in breach of its economic purchasing obligation.*

*$EPRI_{i-1}$  is the aggregate amount of the charges that the licensee is deemed to have recovered from its tariffs in the adjustment period before adjustment period  $i$ , which is given by the formula,*

$$EPI_{i-1} * Qi_{i-1} * (1 + L)$$



Where,  $E_{P_i-1}$  is the average charge for purchased power as determined by the Commission in the licensee's tariffs for the most recent adjustment period ending before adjustment period  $i$ ,

$Q_{i-1}$  is the quantity of power deemed to have been sold by the licensee in the most recent adjustment period ending before adjustment period  $i$ , as determined by the Commission in the licensee's tariffs,

$B_i$  is a balancing factor reflecting the extent to which the licensee has under-adjusted or over-adjusted its tariffs through previous fuel surcharge adjustments and is calculated as follows,

$$B_i = B_{i-1} + A_{i-1} - R_{i-1}$$

Where,  $R_{i-1}$  is the total amount of fuel surcharges accruing due to the licensee from its sales to consumers in the adjustment period immediately preceding adjustment period  $i$

(2) The licensee shall allocate the Fuel Surcharge Adjustment Formula to each class of customers or consumers using the energy cost allocation factors for each class contained in the currently approved tariff or as may be otherwise directed by the Commission.

(3) The licensee shall provide the Commission with its calculation of each fuel surcharge adjustment required to be made pursuant to its tariff before it is implemented and shall provide the Commission with such documentation and other information as it may require for the purpose of verifying the correctness of the adjustment."

6.28.2 UPPCL has submitted that in FY 2008-09 it had purchased power from various sources at an average rate of Rs.2.58/unit against Rs. 2.35/unit approved by the Commission. In FY 2008-09 it has purchased 56375 MUs at a cost of Rs. 14560 cr. Whereas, for FY 2008-09, the Commission had approved power purchase of 58328 MUs at the cost of Rs. 13686.11 cr. Therefore on account of increase in per unit average power purchase cost, the UPPCL had incurred an extra expenditure of Rs. 1332.14 cr which needs to be recovered in this ARR as this extra cost is totally beyond its control. This amount was later revised to Rs. 1469.92 cr.

6.28.3 The Commission does understand that provision of Fuel Adjustment Charge is a prudent regulatory practice followed by most regulators to protect the utility from financial implications of external uncontrollable eventualities so that not only their cash flow improves but also the consumers are not burdened with the accumulated financial burden at the end of the year in subsequent tariff filings.



- 6.28.4 In this regard, the Commission in the commercial interest of the DISCOMS had directed them in the last tariff order to submit for approval a methodology / formula for automatic quarterly adjustment of fuel cost failing which the licensees were to be debarred from claiming any variation of fuel cost from the approved costs during the true-up exercise.
- 6.28.5 This order is meant to help the DISCOMS in recovering the legitimate costs automatically through a set system and also helps in improving the cash flow of the licensees. However, the DISCOMS have failed to avail the benefits of this directive.
- 6.28.6 The Commission may at its discretion consider recovery of this expenditure at the time of true-up for the expenses for FY 2008-09 subject to prudence check. In view of the same, the Commission has not approved the said expenditure.
- 6.28.7 The DISCOMS are re-directed to submit for approval the methodology and formula for automatic recovery of the Fuel Cost changes within two months from the date of issue of the order.
- 6.28.8 Non-compliance of this directive may debar the DISCOMS from claiming any variation of fuel cost from the approved costs during the true-up exercise for the given year.

#### **6.29 GOVERNMENT SUBSIDY:**

- 6.29.1 The DISCOMS in their ARR petitions for FY 2009-10 have submitted that the GoUP has agreed to provide a subsidy of Rs. 1832 cr towards subsidized Tariffs for Rural Domestic and PTW categories. The Commission had directed the DISCOMS to submit commitment letter from GoUP in this regard.
- 6.29.2 Further, in the reply to the data deficiency note seeking information regarding the subsidy commitment from GoUP, UPPCL has provided letters of GoUP for various subsidy components such as revenue subsidy and adjustment of Electricity Duty for FY 2009-10.
- 6.29.3 The Commission has accepted the claim of the DISCOMS for the purpose of the tariff order. Hence, the Commission approves the subsidy support towards subsidized Tariffs for Rural Domestic and PTW categories to an extent of Rs. **1,832** cr for FY 2009-10 as submitted by the DISCOMS. However, the allocation of subsidy amongst the DISCOMS shall be done on the basis of actual number of



consumers prevailing at the end of the FY 2009-10. The DISCOMS shall submit the information on subsidy allocation for FY 2009-10 in the next ARR filing.

### 6.30 APPROVED ARR SUMMARY – DISCOMS:

6.30.1 In the preceding sections, the Commission has detailed out expenses under various heads as per the petition of the DISCOMS as well as those approved by the Commission. Based on the same, the approved ARR for consolidated DISCOMS is Rs. **17,791** cr for FY 2009-10 as given in **TABLE 6-41** below.

The details of ARR for each of the DISCOMS are provided at **ANNEXURE – XI**.

**TABLE 6-41: APPROVED ARR SUMMARY FOR FY 2009-10 (Rs. Cr)**

S.N	Item	FY 2009-10		
		Petition	Approved	% of ARR
1	Power Purchase Expenses (incl PGCIL charges)	15,795	14,281	80.3%
2	Transmission Charges - Intra state (incl SLDC Charges)	746	641	3.6%
3	Employee cost	1,260	1,119	6.3%
4	A&G expenses	130	130	0.7%
5	R&M expenses	546	495	2.8%
6	Interest & Finance charges	1,386	604	3.4%
7	Depreciation	1,071	900	5.1%
<b>8</b>	<b>Gross Expenditure</b>	<b>20,935</b>	<b>18,170</b>	<b>102%</b>
<b>Less</b>	<b>Expense capitalization</b>			
9	Employee cost capitalized	189	168	0.9%
10	Interest capitalized	90	73	0.4%
11	A&G expenses capitalized	19	19	0.1%
<b>12</b>	<b>Net Expenditure</b>	<b>20,636</b>	<b>17,910</b>	<b>1.5%</b>
<b>Add</b>	<b>Special Appropriations</b>			
13	Provision for Bad & Doubtful debts	149	-	0.0%
14	Provision for Contingency Reserve	-	-	0.0%
15	Prior Period Adjustments/Power Purchase Arrears	1,332	-	0.0%
16	OTS Waivers	54	54	0.3%
<b>17</b>	<b>Total net expenditure with provisions</b>	<b>22,172</b>	<b>17,964</b>	<b>0.3%</b>
18	Add: Return on Equity	-	-	0.0%
19	Less: Non Tariff Income	173	173	1.0%
		-	-	
<b>20</b>	<b>Annual Revenue Requirement (ARR)</b>	<b>21,999</b>	<b>17,791</b>	<b>100%</b>

### 6.31 COST OF SUPPLY:

6.31.1 Based on the approved ARR, the average cost of supply for FY 2009-10 works out to **Rs. 4.17/kWh** (Rs 17,791 cr/ 42,661 MUs) against Rs. 5.21/kWh (Rs. 21,999 cr/ 42,214 MUs) projected by the DISCOMS.



### 6.32 WHEELING AND RETAIL SUPPLY:

6.32.1 As per Distribution Tariff Regulations, the annual expenditure of the distribution licensee shall be proportionately allocated towards both Wheeling & Retail Supply Business.

6.32.2 In absence of any separation for wheeling and retail expenses, the Commission has decided to continue with the allocation as approved in the Clause 5.23 of the last tariff order for FY 2007-08 & FY 2008-09.

6.32.3 The allocation of approved ARR into Wheeling and Retail Supply for FY 2009-10 is given in the **TABLE 6-42** below:

**TABLE 6-42: WHEELING & RETAIL SUPPLY ARR (Rs. Cr)**

Particulars	Allocation (%)		Allocation FY 2009-10		
	Wheeling	Supply	Wheeling	Supply	Total
Power Purchase Expenses (incl PGCIL charges)	0.0%	100.0%	-	14,281	<b>14,281</b>
Transmission Charges - Intra state (incl SLDC Charges)	0.0%	100.0%	-	641	<b>641</b>
Employee cost	60.0%	40.0%	671	448	<b>1,119</b>
A&G expenses	40.0%	60.0%	52	78	<b>130</b>
R&M expenses	90.0%	10.0%	446	50	<b>495</b>
Interest charges	90.0%	10.0%	543	60	<b>604</b>
Depreciation	90.0%	10.0%	810	90	<b>900</b>
<b>Gross Expenditure</b>			<b>2,522</b>	<b>15,648</b>	<b>18,170</b>
<b>Expense capitalization</b>			-	-	-
<i>Employee cost capitalized</i>	60.0%	40.0%	101	67	<b>168</b>
<i>Interest capitalized</i>	90.0%	10.0%	66	7	<b>73</b>
<i>A&amp;G expenses capitalized</i>	40.0%	60.0%	8	12	<b>19</b>
<b>Net Expenditure</b>			<b>2,348</b>	<b>15,562</b>	<b>17,910</b>
<b>Special Appropriations</b>			-	-	-
<i>Provision for Bad &amp; Doubtful debts</i>	0.0%	100.0%	-	-	-
<i>Provision for Contingency Reserve</i>	0.0%	100.0%	-	-	-
<i>Prior Period Adjustments</i>	0.0%	100.0%	-	-	-
<i>OTS Waivers</i>	0.0%	100.0%	-	54	<b>54</b>
<b>Total net expenditure with provisions</b>			<b>2,348</b>	<b>15,616</b>	<b>17,964</b>
Add: Return on Equity	90.0%	10.0%	-	-	-
Less: Non Tariff Income	0.0%	100.0%	-	173	<b>173</b>
<b>Annual Revenue Requirement (ARR)</b>			<b>2,348</b>	<b>15,443</b>	<b>17,791</b>

6.32.4 However, the Commission redirects the DISCOMS to submit the ARR expenses for next ARR & tariff filing by having a proper mechanism for separation of accounts into wheeling and supply function.





### 6.33 BULK SUPPLY TARIFF:

- 6.33.1 The Commission has computed the Bulk Supply Tariff based on Power Purchase Cost and the total sales to the DISCOMS for FY 2009-10.
- 6.33.2 The transmission charges payable by all the distribution licensees for the use of the intra-state transmission network to transmit energy has been calculated separately and would be payable directly to UPPTCL.
- 6.33.3 As discussed in the last tariff order, DISCOMS shall make payment to UPPTCL on a monthly basis for the energy supplied to them.
- 6.33.4 The bulk supply tariff computed by the Commission for FY 2009-10 is provided as in **TABLE 6-43** below:

**TABLE 6-43: APPROVED BULK SUPPLY TARIFF FOR FY 2009-10 ( Rs/kWh)**

Particulars		FY 2009-10	
		Petitioner	Commission
Power Purchase Expenses incl. PGCIL Charges (Rs Cr)	A	15,795	14,281
Sales to Discoms (MU)	B	54,345	54,183
Bulk Supply Tariff (Rs/Kwh)	$C = A*10/B$	2.91	2.64



## Chapter 7. OPEN ACCESS CHARGES:

### 7.1 BACKGROUND:

7.1.1 The Commission has issued Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2004 (in short 'UPERC Open Access Regulations') vide notification no. UPERC/Secy./Regulations/05-249 dated 7.6.05 to operationalise long term and short term open access in State network. The Regulations also provides that effective from 1st April, 2008 any consumer with demand of above 1 MW can avail open access of transmission and distribution systems.

7.1.2 State Transmission Utility (Nodal Agency for Long Term Open Access) and State Load Despatch Centre (Nodal Agency for Short Term Open Access) were directed by the said Regulations to develop certain procedures and guidelines under various provisions.

### 7.2 RECENT DEVELOPMENTS:

7.2.1 In absence of procedures and guidelines from State Transmission Utility (in short 'STU') and State Load Despatch Centre (in short 'SLDC'), the Commission, on its own motion, has made detailed procedures for long term and short term open access which covers all aspects, which the Regulations direct by way of an amendment. The "Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) (First Amendment) Regulations, 2009 dated 18.6.09", shall come into force from the date it is notified in the Gazette.

7.2.2 The said amendment, which includes procedures for Long-Term Open Access and Short-Term Open Access mainly focuses on:

- i. Operationalisation of long-term and short-term use of intra-State transmission and distribution system by generating companies including captive plants/renewable energy plants, distribution/trading licensees and open access consumers with sustained development of transmission and distribution systems in 'proper and coordinated' manner for conveyance of electricity.
- ii. Operationalisation of time-block wise accounting of the quantity of electricity transmitted through State grid and stating the responsibilities of STU for weekly metering and of SLDC for scheduling, despatch and energy accounting including UI accounting.



- iii. Requirement of Bulk Power Transmission Agreement for use of transmission network and Bulk Power Wheeling Agreement for use of distribution network for long-term open access transactions.

7.2.3 The Commission has finalized model Bulk Power Transmission Agreement (BPTA) and Supplementary BPTA for availing transmission services of UPPTCL.

7.2.4 The Commission has also finalized model Bulk Power Wheeling Agreement (BPWA) which is to be signed between a distribution licensee and long term customer to agree therein, inter alia, to make payment of wheeling charge, surcharge and additional surcharge, if any, for use of the distribution system.

### 7.3 OPEN ACCESS CHARGES - TRANSMISSION CHARGES:

7.3.1 The transmission charges as approved in section 5.14.2 for FY 2009-10 for use of UPPTCL network for transmitting power is **Rs.0.126/kWh**.

7.3.2 UPPTCL in its tariff filing format has provided voltage wise loss figures. In this regard, UPPTCL was asked to submit the details to support these figures which it did not submit. Hence, in absence of any proper study and details of voltage wise assets, the Commission has considered an interim allocation of costs (75% of the average transmission charges determined for TRANSCO for transmission of energy at voltages above 132 kV) at various voltage levels and approved the following transmission charges payable by all Open Access customers based on the voltage level at which they are connected with the grid.

7.3.3 The transmission charges for long term customers connected at 132 kV voltage level are assumed to be the same as approved in section 5.14.2 i.e. **Rs.0.126/kWh**. Further it is also assumed that the charges for customers connected above 132 kV voltage level would be **75%** of the charges specified for customers connected at 132 kV voltage level. The short term open access charges remain the same as approved in previous tariff order dated 15<sup>th</sup> April 2008. The details of the open access charges approved for FY 2009-10 are given **TABLE 7-1** below:



**TABLE 7-1: APPROVED VOLTAGE LEVEL TRANSMISSION OPEN ACCESS CHARGES- FY 2009-10 (Rs./kWh)**

Details	Units	FY 2009-10
		(Approved) Long Term
Connected at 132 kV Voltage Level	Rs/kWh	0.126
Connected above 132 kV Voltage Level	Rs/kWh	0.094

7.3.4 In addition to the payment of transmission charges, the customers also have to bear the transmission losses in kind. In absence of authenticated voltage level loss data, the Commission has ruled that the transmission losses applicable on the open access transactions would be 4% for the purpose of the present order irrespective of the voltage levels at which the customers are connected to the grid.

7.3.5 The Open Access charges and the losses to be borne by the Open Access customers may be reviewed by the Commission on submission of the relevant information by the Transmission licensee.

#### **7.4 WHEELING CHARGES:**

7.4.1 Clause 2.1 (2) & (3) of the Distribution Tariff Regulations provide that ARR/Tariff filing by the Distribution Licensee shall separately indicate Aggregate Revenue Requirement (ARR) for Wheeling function and Retail Supply function embedded in the distribution function and that till such time complete segregation of accounts between Wheeling and Retail Supply function takes place, ARR proposals for Wheeling and Retail Supply function shall be submitted on the basis of an allocation statement left to be prepared by the distribution licensee to the best of their judgment.

7.4.2 The DISCOMS have submitted the segregation of the distribution ARR into Retail Supply and Wheeling Function as per the methodology adopted by the Commission in last tariff order. The approved ARR for DISCOMS into wheeling function and retail function is Rs. **2,348** cr and Rs. **15,443** cr respectively as detailed in section 6.33.3. The retail sales approved by Commission for DISCOMS are **39,531** MUs as detailed in section 6.3.11 .

7.4.3 Based on the same, the wheeling charges for FY 2009-10 are Rs. **0.594** /kWh as detailed in **TABLE 7-2** below:



**TABLE 7-2: APPROVED WHEELING CHARGES FOR FY 2009-10 ( Rs./kWh)**

Details	Units	FY 2009-10
		Approved
Net Approved Distribution (Wheeling Function) ARR	Rs.Cr	2,347.90
Retail Sales by DISCOMs	MUs	39,531
Wheeling Charges	Rs/kWh	0.594

7.4.4 The Commission in order to encourage Open Access transactions in the State has further tried to segregate the wheeling charges payable by consumers seeking Open Access based on the voltage levels at which they are connected to the distribution network. However, in absence of voltage level wise break-up of expenses and asset details, the Commission has considered an interim allocation of costs at various voltage levels and approved the following wheeling charges payable by Open Access customers based on the voltage level at which they are connected with the distribution network.

7.4.5 The charges have been worked out on the assumption that the wheeling expenses at 11 kV voltage level shall be **80%** of the average wheeling charges determined for the Wheeling function of DISCOMs and that for wheeling at voltages above 11 kV shall be **50%** of the average wheeling charges. The wheeling charges for the short term open access customers remain the same as approved in previous tariff order dated 15<sup>th</sup> April 2008.

**TABLE 7-3: APPROVED VOLTAGE LEVEL WHEELING CHARGES FOR FY 2009-10 (Rs./kWh)**

Details	Units	FY 2009-10
		(Approved) Long Term
Connected at 11 kV Voltage Level	Rs/kWh	0.475
Connected above 11 kV Voltage Level	Rs/kWh	0.297

7.4.6 In addition to the payment of wheeling charges, the customers also have to bear the wheeling losses in kind. The Commission has been seeking voltage level loss data from the utility but the same has not been forthcoming. Further, it is also logical that the open access customers have to bear only the technical losses in the system, and should not be asked to bear any part of the commercial losses.

7.4.7 The Commission has estimated that the technical losses at 11 kV voltage level would be in the range of 8% to 9%, and the technical losses above 11 kV voltage level and upto 132 kV would be in the range of 7% to 8%. Hence, the Commission has decided that the wheeling loss applicable for Open Access transactions



entailing drawal at 11 kV voltage level shall be 8%, and that for drawal at voltages above 11 kV voltage level shall be 7%.

7.4.8 The open access charges and the losses to be borne by the Open Access customers may be reviewed by the Commission on submission of the relevant information by the Transmission licensee.

7.4.9 The wheeling charges determined above shall not be payable if the Open Access customer is availing supply directly from the state transmission network.

#### **7.5 CROSS SUBSIDY SURCHARGE:**

7.5.1 The cross-subsidy surcharge for Open Access consumers will be zero as per the computation based on the methodology prescribed by the Commission in the terms of regulations framed by the Commission for determination of tariff for transmission & distribution licensee.

7.5.2 However, the impact of migration of consumers from the network of the incumbent distribution licensee on the consumer mix and revenues of a particular distribution licensee shall be reviewed by the Commission from time to time as may be considered appropriate.

#### **7.6 ADDITIONAL SURCHARGE:**

7.6.1 For the present order, additional surcharge is determined to be **zero**.

#### **7.7 OTHER CHARGES:**

7.7.1 The Open Access Regulations, 2008 notified by CERC specifies:

*“Unless specified otherwise by the concerned State Commission, UI rate for intra-State entity shall be 105% (for over-drawals or under generation) and 95% (for under-drawals or over generation) of UI rate at the periphery of regional entity.”*

*And which further provides that:*

*“In an interconnection (integrated A.C. grid), since MW deviations from schedule of an entity are met from the entire grid, and the local utility is not solely responsible for absorbing these deviations, restrictions regarding magnitude of deviations (except on account of over-stressing of concerned transmission or distribution system), and charges other than those applicable in accordance with these regulation (such as standby charges, grid support charges, parallel*



*operation charges) shall not be imposed by the State Utilities on the customers of inter-State open access.”*

- 7.7.2 The Commission prescribes to the philosophy specified by CERC for the unscheduled interchange and also rules that the standby, grid support and parallel operations charges shall be **zero** in case of an Open Access customer.



## Chapter 8. TARIFF DESIGN:

- 8.1** Over the years, the Commission has been guided by the Electricity Act, 2003 and the National Tariff Policy while determining retail tariffs across the State of UP. The Commission has always laid emphasis on adoption of factors that encourages economy, efficiency, effective performance and improved conditions of supply. On these lines the Commission, in this order too, has applied similar principles keeping in view the ground realities.
- 8.2** Tariffs linked to cost of supply and gradual elimination of cross-subsidies in a given time frame is an important feature of the Electricity Act, 2003 and the Tariff Policy. In this regard, the Commission has been directing the DISCOMS to conduct Cost of Service studies to have a tool for alignment of costs and charges. Till such details are available, the Commission has tried to link tariff with average cost of supply.
- 8.3** The Commission does understand that though there is an urgent need for ensuring recovery of cost of service from consumers to make the sector viable. At the same time the Commission is also aware that some minimum level of support is required to make electricity affordable for household of the very poor category as electricity is a basic minimum need and an essential driver of growth in an agrarian economy of the State.
- 8.4** In this regard, to name a few examples, the Commission has retained the rates of the lifeline category of consumers at existing levels. However, if the consumers under lifeline category exceed the consumption of 150 units per month, then they will be debarred from the benefits enjoyed under the lifeline rate and they would be charged from the very first unit of consumption at the rates specified for other metered domestic consumers. Similarly, the rates for private tube well category consumers i.e. LMV-5 category has also been retained at the existing levels.
- 8.5** The Commission in its pursuit of achieving the mandate of 100% metering has consciously increased the tariff of un-metered consumers vis-a-vis metered consumers across all relevant categories. In this regard, for example, the Commission has increased the rates for un-metered category in LMV - 2 (Non Domestic Rural) by about 10% whereas tariff for metered category has been retained at existing levels.
- 8.6** The Commission has received various representations during the public hearing process to remove the additional surcharge on the use of Air Conditioners. The Commission does acknowledge that no additional surcharge should be applicable





on relevant categories as any increase in maximum demand over and above the contracted demand is taken care of by penal provisions in this regard. Therefore, the Commission has removed this additional surcharge on the use of Air Conditioners.

- 8.7** The Commission has also retained the principle of time-differentiated tariff for HV-2 consumers. In this regard, the licensees have suggested no change in TOD structure as approved by the Commission in the last tariff order. A few consumers have represented that, either the peak premium be reduced from 15% to 7.5% i.e. equivalent to the off-peak rebate level or the off-peak rebate be enhanced from 7.5% to 15.0%. In this regard, the Commission reiterates that in the tariff order of FY 2006-07, it had reworked the TOD structure and had approved a lower premium rate of 15% from the then existing rate of 20% during the peak hours whereas, the off peak TOD rates were lowered from (-)5% to (-)7.5%. As the licensees have not provided any consumption history details to assess the revenue impact of TOD application on the consumers, the Commission has decided to retain the existing provision of peak premium rate of (+) 15% and the off peak rebate as (-) 7.5%.
- 8.8** In view of representations from some large and heavy category consumers that they are being billed for their leading kVARs, although it is beneficial for the system of the licensee, the Commission in its tariff order 2006-07, provided that if the power factor of a consumer is leading and is within the range of 0.95-1.00 then for tariff application purposes the same shall be treated as unity. However, if the leading power factor was below 0.95 (lead) then the consumer was to be billed as per the kVAh reading indicated by the meter. The cut off of 0.95 (lead) was consciously adopted by the Commission because below 0.95(lead) the reactive compensation of the consumer may relax the grid slightly but at the same time it may cause localized over-voltages that may endanger the surrounding system.
- 8.9** However, the RAILWAYS were uneasy with this provision. Because of its unique load characteristic (sudden surge of load with movement of the train and thereafter mostly lightly loaded) remains mostly in the leading power factor range and therefore it was being billed heavily for its leading kVAh also. They have submitted that they should be exempted from the provision of leading kVAh, below power factor 0.95 (lead), to be billed as lagging kVAh, a view which has also been taken by few other regulatory Commissions. Further they have submitted that they are in the process of installing dynamic reactive compensators which



will take a couple of years considering the vastness of area. Accordingly, the Commission decides that the process of installing dynamic compensators within the territory of Uttar Pradesh should be completed by the RAILWAYS within two years and the aforesaid provision of treating power factor below 0.95 (lead) as the commensurate lagging power factor for the purposes of billing shall not be applicable on HV-3 category.

- 8.10** Seasonal and time differentiated tariffs are important tools in aligning revenue and cost structure. Such tariffs, when applied to consumers who can manage their load, leads to flattening of demand curves for the system and also reduces the cost for the consumers. Thus it is mutually beneficial for both the utility and its consumers. Hence, the Commission has retained the existing provision for the seasonal tariff for LMV-6 & HV-2 consumers.
- 8.11** The DISCOMS have proposed a revised Load Factor rebate structures for LMV-6, HV-2 & HV-3 categories. However, the Commission doesn't consider it right to revise the rebate structure as it has received representations from the consumers that owing to poor supply hours they are unable to take full advantage of the existing load factor rebate structure. Therefore, the Commission has decided to retain the existing load factor rebate structure.
- 8.12** During the public hearing it was suggested that the provision for imposing penalty for exceeding contracted demand should be abolished if the maximum demand exceeds the contracted demand by only 10%. The Commission does not agree with this suggestion as it would in effect mean that the contracted demand of the consumer is itself increased by 10%.
- 8.13** As far as subsidised tariff to power loom consumers is concerned, the GoUP vide its GO No. 13/24-P-3-2007 dated 1st May, 2007 has stated that subsidy shall be available to LMV-2 and LMV-6 consumers only.
- 8.14** The Commission in the subsequent sections briefly discusses the approved tariff for each category of consumer. However, the applicability, character and point of supply and other terms & conditions of different consumer categories have been defined in the Rate Schedule given in **ANNEXURE – XII**. In case of any inconformity, the Rate Schedule shall prevail over the details given in the various sections of this chapter.



## 8.15 RATE SCHEDULE LMV-1: DOMESTIC LIGHT, FAN AND POWER:

### 8.15.1 DOMESTIC RURAL CONSUMERS:

The tariff for unmetered consumers getting supply under rural schedule of LMV-1 has been revised from Rs. 110 / connection / month to Rs. 125 / connection / month; the same has also been proposed by the DISCOMS. However, for metered consumers getting supply under the rural schedule of LMV-1 the Fixed Charges & Energy Charges have been retained at the existing levels. While doing so, the Commission has ensured that the incentive for metering continues to be strong. The tariff for rural consumers has been kept lower than their urban counterparts owing to poor supply conditions and lesser hours of supply.

#### (a) CONSUMERS GETTING SUPPLY AS PER 'RURAL SCHEDULE':

Description	Existing	Proposed	Approved
<b>i) Un-metered</b>			
Fixed Charge	Rs. 110 /connection/ month	Rs. 125 /connection/ month	Rs. 125 /connection/ month
Energy Charge	Nil	Nil	Nil
<b>ii) Metered</b>			
Fixed Charge	Rs. 15 /kW/ month	Rs. 15 /kW/ month	Rs. 15 /kW/ month
Energy Charge	Rs. 1.00 / kWh	Rs. 1.00 / kWh	Rs. 1.00 / kWh

### 8.15.2 REGISTERED SOCIETIES/RESIDENTIAL COLONIES/MULTI-STORIED RESIDENTIAL COMPLEXES:

The Commission understands that costs involved in single point supply are lower and collection efficiencies are higher as compared to other domestic consumers. Keeping this in mind, the Commission has revised the Fixed Charges from Rs. 35/kW/month to Rs.40/ kW /month and Energy Charges from Rs. 2.80/kWh to Rs. 3.20/kWh for this category of consumers. This is lower than the respective charges for other domestic consumers.



**(b) SUPPLY AT SINGLE POINT FOR BULK LOADS:**

Descrip - tion	Existing	Proposed	Approved
	For Townships, Registered Societies, Residential Colonies, multi-storied residential complexes (including also lifts, water pumps and common lighting within the premises) with loads above 50 kW with the restriction that at least 70% of the total contracted load is meant exclusively for the domestic light, fan and power purposes Including lifts, water pumps and common lighting and cantonments (Mixed Loads without any load restriction) and defence installation outside cantonment with predominantly domestic load (domestic lode more than 50%)	For Townships, Registered Societies, Residential Colonies, multi-storied residential complexes (including lifts, water pumps and common lighting within the premises) with loads above 50 kW with the restriction that at least 70% of the total contracted load is meant exclusively for the domestic light, fan and power purposes and for Cantonments (Mixed Loads without any load restriction), defence installation outside the cantonment with predominantly domestic load (domestic load more than 50%)	For Townships, Registered Societies, Residential Colonies, multi-storied residential complexes (including lifts, water pumps and common lighting within the premises) with loads 50 kW and above with the restriction that at least 70% of the total contracted load is meant exclusively for the domestic light, fan and power purposes and for Cantonments (Mixed Loads without any load restriction), defence installation outside the cantonment with predominantly domestic load (domestic load more than 50%)
Fixed Charge	Rs. 35.00 / kW/ month	Rs. 35.00 / kW/ month	Rs. 40.00 / kW/ month
Energy Charge	Rs. 2.80/kWh	Rs. 2.80/kWh	Rs. 3.20/kWh



### 8.15.3 LIFE LINE CONSUMERS:

The Commission understands that lifeline consumers are one of the most disadvantaged consumers of the state and has thus decided to retain their tariff at existing levels.

Description	Existing		Proposed		Approved	
	Loads of 1 kW only and for consumption upto 100 kWh / month (0 to 100 kWh/month)	Loads of 1 kW only and for consumption above 100 kWh / month upto 150 kWh/month. (101 to 150 kWh/month)	Loads of 1 kW only and for consumption upto 100 kWh / month (0 to 100 kWh/month)	Loads of 1 kW only and for consumption above 100 kWh / month upto 150 kWh/month. (101 to 150 kWh/month)	Loads of 1 kW only and for consumption upto 100 kWh / month (0 to 100 kWh/Month)	Loads of 1 kW only and for consumption above 100 kWh / month upto 150 kWh/month (101 to 150 kWh/month)
Fixed Charge	Rs. 50.00 / kW/ month		Rs. 50.00 / kW/ month		Rs. 50.00 / kW/ month	
Energy Charge	Rs. 1.90/ kWh	Rs. 2.50/ kWh	Rs. 2.10/ kWh	Rs. 4.00/ kWh	Rs. 1.90/ kWh	Rs. 2.50/ kWh

### 8.15.4 OTHER METERED (URBAN) DOMESTIC CONSUMERS:

The Commission has decided that for Energy Charges for consumption upto 200 units per month the consumer shall be Rs. 3.45 / kWh and thereafter it shall be Rs. 3.80 / kWh. Fixed Charges have also been revised from Rs. 60 / kW / month to Rs. 65 / kW / month. While specifying these tariff rates, the Commission has tried



to balance between the charges proposed by the DISCOMs and the existing charges for this subcategory of consumer.

Description	Existing	Proposed	Approved
<b>i) Upto 200 units /month</b>			
Fixed Charge	Rs. 60.00 / kW/ month	Rs. 75.00/ kW/ month	Rs. 65.00 / kW/ month
Energy Charge	Rs. 3.00/ kWh	Rs. 4.00/kWh	Rs. 3.45/kWh
<b>ii) More than 200 units /month</b>			
Fixed Charge	Rs. 60.00 / kW/ month	Rs. 75.00 / kW/ month	Rs. 65.00 / kW/ month
Energy Charge	Rs. 3.30/ kWh	Rs. 4.75/kWh	Rs. 3.80/kWh

## 8.16 RATE SCHEDULE LMV-2: NON-DOMESTIC LIGHT, FAN AND POWER:

### 8.16.1 NON-DOMESTIC RURAL:

For rural non - domestic unmetered consumers the Fixed charges have been revised from Rs. 180/- per connection per month to Rs. 200/- per connection per month; the same has also been proposed by the DISCOMS. Further, for metered consumers, the charges have been retained at existing levels. While doing so, the Commission has ensured that incentive for metering continues to be strong.

Description	Existing	Proposed	Approved
<b>i) Unmetered:</b>			
Fixed Charge	Rs. 180 / connection / month	Rs. 200/connection / month	Rs. 200 / connection / month
Energy Charge	Nil	Nil	Nil
<b>ii) Metered:</b>			
Fixed Charge	Rs. 50 / kW / month	Rs. 50 / kW / month	Rs. 50 / kW / month
Energy Charge	Rs. 1.90 per kWh	Rs. 1.90 per kWh	Rs. 1.90 per kWh



### 8.16.2 PRIVATE ADVERTISING/SIGN POSTS/SIGN BOARDS/GLOW SIGNS/FLEX:

The Commission has decided to retain the existing levels of charges for this sub-category; the same has also been proposed by the DISCOMS. For application of these rates licensee shall ensure that such consumption is separately metered.

Description	Existing	Proposed	Approved
Fixed Charge	-	-	-
Energy Charge	Rs. 10.00/kWh	Rs. 10.00/kWh	Rs. 10.00/kWh
Minimum Charge	Rs. 1000/kW/month	Rs. 1000/kW/month	Rs. 1000/kW/month

### 8.16.3 NON-DOMESTIC URBAN:

The tariff for other metered consumers under LMV-2 has been revised upwards by about 15% as the Commission has tried to balance the existing rates and the proposed rates of the DISCOMS.

Description	Existing	Proposed	Approved
<b>For All loads</b>			
Fixed Charge	Rs. 100.00 / kW/ month	Rs. 125/kW/ month	Rs. 115/kW/ month
Energy Charge	Rs. 4.30/ kWh	Rs. 5.25/kWh	Rs. 4.95/kWh
Minimum Charge	Rs. 300/kW/month	Rs. 400 /kW/month	Rs. 345/kW/month

### 8.17 RATE SCHEDULE LMV –3: PUBLIC LAMPS:

8.17.1 The Commission has revised upwards the tariff by 20% for unmetered category in view of the rising cost of supply.

#### **UN-METERED SUPPLY:**

Description	Existing	Proposed	Approved
To be billed on the basis of total connected load calculated as the summation of individual points			
<b>a) Gram Panchayat:</b>			
Fixed Charge	Rs. 1000 per kW or part thereof per month	Rs. 1250 per kW or part thereof per month	Rs. 1200 per kW or part thereof per month



Description	Existing	Proposed	Approved
<b>b) Nagar Palika and Nagar Panchayat:</b>			
Fixed Charge	Rs. 1250 per kW or part thereof per month	Rs. 1400 per kW or part thereof per month	Rs. 1500 per kW or part thereof per month
<b>c) Nagar Nigam:</b>			
Fixed Charge	Rs. 1500 per kW or part thereof per month	Rs. 1800 per kW or part thereof per month	Rs. 1800 per kW or part thereof per month

8.17.2 With regards to the metered supply, the Commission has accepted the DISCOMS proposal regarding Energy Charges whereas for Fixed Charges it has tried to balance the existing & proposed rates.

**METERED SUPPLY:**

Description	Existing	Proposed	Approved
<b>a) Gram Panchayat:</b>			
Fixed Charge	Rs. 100 / kW / month	Rs. 125/ kW/ month	Rs. 115/ kW/ month
Energy Charge	Rs. 3.70 / kWh	Rs. 4.00/ kWh	Rs. 4.00/ kWh
<b>b) Nagar Palika and Nagar Panchayat:</b>			
Fixed Charge	Rs. 100 / kW / month	Rs.150/ kW/ month	Rs. 120/ kW/ month
Energy Charge	Rs. 3.90/ kWh	Rs. 4.50/kWh	Rs. 4.50/kWh
<b>c) Nagar Nigam:</b>			
Fixed Charge	Rs. 100 / kW / month	Rs.200/ kW/month	Rs. 125/ kW/ month
Energy Charge	Rs. 4.10 / kWh	Rs. 4.90/ kWh	Rs. 4.90/ kWh

**8.18 RATE SCHEDULE LMV- 4**

8.18.1 This category has two sub-categories, viz. LMV-4 (A)– light, fan and power for public institutions and LMV-4 (B) – light, fan and power for private institutions.





8.18.2 For private institutions, the rates are kept almost equal to the rates as applicable for the commercial category since the private institutions are commercial in nature whereas public institutions are generally non-profit seeking. The Commission has tried to balance the existing Energy Charges and the proposed Energy Charges of the DISCOMS. The Fixed Charges for public institutions has been revised from Rs. 90/KW/month to Rs.100/KW/month and for private institutions it has been revised from Rs.100/KW/month to Rs.110/KW/month and for the fixed charges; the same has been proposed by the DISCOMS.

8.18.3 The DISCOMS have also proposed minimum charges at Rs. 100/kW/month for public institutions and Rs. 110/kW/month for private institutions. In this regard the Commission reiterates that there is hardly any incentive for public institutions to show suppressed consumption. Also, with the introduction of double metering concept minimum charges for private institutions has become redundant. Hence, the proposal of minimum charges is not accepted by the Commission.

Description	Existing	Proposed	Approved
<b>(A) For Public Institutions:</b>			
Fixed Charge	Rs. 90 /kW/ month	Rs. 100 /kW/ month	Rs. 100/ kW/ month
Energy Charge	Rs. 4.00 / kWh	Rs. 5.00 / kWh	Rs. 4.60/ kWh
Minimum Charge	-	Rs. 100 /kW/ month	-
<b>(B) For Private Institutions:</b>			
Fixed Charge	Rs. 100 / kW / month	Rs. 110 /kW/ month	Rs. 110 /kW/ month
Energy Charge	Rs. 4.30 / kWh	Rs. 5.50 / kWh	Rs. 4.95/kWh
Minimum Charge	-	Rs. 110 /kW/ month	-

#### **8.19 RATE SCHEDULE LMV– 5: SMALL POWER FOR PRIVATE TUBE WELLS / PUMPING SETS FOR IRRIGATION PURPOSES:**

8.19.1 For rural un-metered PTW consumers, the rates have not been revised by the Commission as the usage of energy by this category is primarily for irrigation purposes; the same has also been proposed by the DISCOMS.



8.19.2 The Commission has also retained the differential treatment of consumers as per urban and rural schedules because of the quality of supply and hours of supply.

8.19.3 Also, lighting load under this category has been retained at 120 Watt levels.

**(A) FOR CONSUMERS GETTING SUPPLY AS PER RURAL SCHEDULE:**

**(i) UN-METERED SUPPLY:**

Description	Existing	Proposed	Approved
Fixed Charge	Rs. 75 / BHP / month	Rs. 75 / BHP / month	Rs. 75 / BHP / month
Energy Charge	Nil	Nil	Nil
Minimum Charge	Nil	Nil	Nil
	Consumer under this category will be allowed a maximum lighting load of 120 Watts.	Consumer under this category will be allowed a maximum lighting load of 30 Watts ( 2 CFL of 15W )	Consumer under this category will be allowed a maximum lighting load of 120 Watts

**(ii) METERED SUPPLY:**

Description	Existing	Proposed	Approved
Fixed Charge	Rs. 15 / BHP / month	Rs. 15 / BHP / month	Rs. 15 / BHP / month
Energy Charge	Rs. 0.75/ kWh	Rs. 0.75/ kWh	Rs. 0.75/ kWh
Minimum Charge	Rs. 65 / BHP / month	Rs. 65 / BHP / month	Rs. 65 / BHP / month

**(B) FOR CONSUMERS GETTING SUPPLY AS PER URBAN SCHEDULE:**

Description	Existing	Proposed	Approved
Fixed Charge	Rs. 30 / BHP / month	Rs. 30 / BHP / month	Rs. 30 / BHP / month
Energy Charge	Rs. 2.00 / kWh	Rs. 2.00 / kWh	Rs. 2.00 / kWh
Minimum Charge	Rs. 130 / BHP / month	Rs. 130 / BHP / month	Rs. 130 / BHP / month



## 8.20 RATE SCHEDULE LMV– 6: SMALL AND MEDIUM POWER:

8.20.1 The Commission has tried to balance the Energy Charges and the Fixed Charges in between the existing and the proposed rates of the DISCOMS. However, with regards to the Minimum charges the Commission approves the rates as proposed by the DISCOMS.

8.20.2 Seasonal and time differentiated tariffs are important tools in aligning revenue and cost structure. Such tariffs, when applied to consumers who can manage their load, leads to flattening of demand curves for the system and also reduces the cost for the consumers and is thus mutually beneficial for both the utility and its consumers. Hence, the Commission has retained the existing provision for the seasonal tariff as also has been proposed by the DISCOMS.

### (A) CONSUMERS GETTING SUPPLY OTHER THAN RURAL SCHEDULE:

Description	Existing	Proposed	Approved
Fixed Charge	Rs.100.00 / kW/ month	Rs.125 / kW/ month	Rs.115/ kW/ month
Energy Charge	Rs. 4.30/ kWh	Rs. 5.00/kWh	Rs. 4.95/kWh
Minimum Charge	Rs. 450/kW/month	Rs. 500 /kW/month	Rs. 500 /kW/month

### (B) CONSUMERS GETTING SUPPLY AS PER RURAL SCHEDULE:

8.20.3 The Consumers getting supply as per rural schedule shall be entitled to a rebate of 15% on the Fixed Charges, Energy Charges and Minimum Charges indicated above.

## 8.21 RATE SCHEDULE LMV– 7: PUBLIC WATER WORKS:

8.21.1 The Commission has decided to retain the Fixed Charges at existing levels whereas Energy Charges have been revised from Rs 4.00/kWh to Rs 4.40/kWh.

Description	Existing	Proposed	Approved
Fixed Charge	Rs. 90 per kW/month	Rs. 90 per kW/month	Rs. 90 per kW/month
Energy Charge	Rs. 4.00/kWh	Rs. 4.00/kWh	Rs. 4.40/kWh
Minimum Charge	-	-	-



8.21.2 Consumers getting supply as per rural schedule shall be eligible for rebate of 15% on the Fixed Charges and the Energy Charges indicated above.

**8.22 RATE SCHEDULE LMV – 8:**

**STATE TUBE WELLS / PANCHAYATI RAJ TUBE WELL & PUMPED CANALS:**

8.22.1 The Fixed Charges and Energy Charges for this category have been revised from Rs. 90/BHP/month and Rs. 3.70/ kWh respectively to Rs. 100/BHP/month and Rs. 4.40/kWh respectively. For un-metered consumers under this category, the Commission has decided to increase the tariff to Rs. 1000 / BHP / month from Rs. 800 / BHP / month; the same has also been proposed by the DISCOMs.

Description	Existing	Proposed	Approved
<b>i) Metered:</b>			
Fixed Charge	Rs. 90/BHP/month	Rs. 100/BHP/month	Rs. 100/BHP/month
Energy Charge	Rs. 3.70/kWh	Rs. 4.50/kWh	Rs. 4.40/kWh
<b>ii) Unmetered:</b>			
Fixed Charge	Rs. 800/BHP/month	Rs. 1000/BHP/month	Rs. 1000/BHP/month
Energy Charge	-	-	-

**8.23 RATE SCHEDULE LMV - 9: TEMPORARY SUPPLY:**

8.23.1 For un-metered consumers under this category, the Commission has revised the charges upwards with a view to encourage metering.

**A. UN-METERED:**

Description	Existing	Proposed	Approved
<b>Unmetered</b>			
i) Fixed charges for illumination/public address/ceremonies for load up to 20 kW per connection plus Rs.100 per kW per day for each additional kW.			
Fixed Charge	Rs. 1500 per day	Rs. 1500 per day	Rs. 1800 per day
(ii) Fixed charges for temporary shops set-up during festivals / melas or otherwise and having load up to 2KW			
Fixed Charge	Rs. 100 per day/shop	Rs. 150 per day/shop	Rs. 120 per day/shop

8.23.2 For metered consumers under this category, the Commission has tried to balance the existing rates & the proposed rates of the DISCOMS except in the case of Energy Charges of individual residential construction which has been approved at Rs 4.00/kWh; the same has also been proposed by the DISCOMS.



**B. Metered:**

Description	Existing	Proposed	Approved
<b>i) Individual Residential construction</b>			
Fixed Charge	-	-	-
Energy Charge	Rs. 3.50/kWh	Rs. 4.00 / kWh	Rs. 4.00 / kWh
Minimum Charge	Rs. 100/kW/week	Rs. 150/kW/week	Rs. 115/kW/week
<b>(ii) Others</b>			
Fixed Charge	-	-	-
Energy Charge	Rs. 5.00/kWh	Rs. 6.00 / kWh	Rs. 5.75 / kWh
Minimum Charge	Rs. 100/kW/week	Rs. 150/kW/week	Rs. 115/kW/week

**8.24 RATE SCHEDULE LMV– 10: DEPARTMENTAL EMPLOYEES AND PENSIONERS:**

8.24.1 The Commission has given a hike of around 20% in tariff in this category. Further, the charges payable for using Air Conditioners during the period of six months i.e. April to September has been hiked from Rs. 400 / AC / Month to Rs. 450 / AC / Month.

8.24.2 Further, the Commission directs the DISCOMs to install electronic meters in the residential premises of the employees. However, the concessional rate given for the metered category shall continue to be valid.

Description	Existing (Rs.)		Proposed (Rs.)		Approved (Rs.)	
	Fixed Charge / month	Energy Charge/ Monthly	Fixed Charge / month	Energy Charge/ Monthly	Fixed Charge / month	Energy Charge/ Monthly
Class IV employees / Operating staff	Rs. 55.00	Rs. 65.00	Rs. 60.00	Rs. 70.00	Rs. 65.00	Rs. 75.00
Class III employees	Rs. 55.00	Rs. 90.00	Rs. 60.00	Rs. 100.00	Rs. 65.00	Rs. 105.00
Junior Engineers & equivalent posts	Rs. 110.00	Rs. 180.00	Rs. 120.00	Rs. 200.00	Rs. 135.00	Rs. 220.00
Assistant Engineers & equivalent posts	Rs. 110.00	Rs. 280.00	Rs. 120.00	Rs. 300.00	Rs. 135.00	Rs. 345.00
Executive Engineers & equivalent posts	Rs. 110.00	Rs. 300.00	Rs. 120.00	Rs. 330.00	Rs. 135.00	Rs. 370.00
Superintending Engineers /Deputy General Managers & equivalent posts	Rs. 275.00	Rs. 360.00	Rs. 300.00	Rs. 400.00	Rs. 340.00	Rs. 450.00
Chief Engineers (I & II) / General Managers and above	Rs. 275.00	Rs. 440.00	Rs. 300.00	Rs. 480.00	Rs. 340.00	Rs. 550.00
Additional charge for using A.C. (April to September)	Rs. 400/- per month per Air conditioner		Rs. 400/- per month per Air conditioner		Rs. 450/- per month per Air conditioner	



## 8.25 RATE SCHEDULE HV– 1: NON INDUSTRIAL BULK LOADS:

8.25.1 The Commission has tried to balance the existing rates and the rates proposed by the DISCOMS while determining the rates for this category except for Demand Charges for supply at 33 kV and above which has been revised from Rs. 160/kVA/month to Rs. 185/kVA/month for Public Institutions.

### A) **Commercial Loads / Private Institutions / Non domestic bulk power consumer above 75 kW load getting supply at Single Point on 11 kV & above voltage levels and feeding multiple individuals:**

Description	Existing		Proposed		Approved	
	For supply at 11kV	For supply at 33 kV & above	For supply at 11kV	For supply at 33 kV & above	For supply at 11kV	For supply at 33 kV & above
Demand Charges	Rs. 170 / kVA/month	Rs. 160 /kVA/month	Rs. 200 / kVA/month	Rs. 180 / kVA/month	Rs. 195 / kVA/month	Rs. 185 / kVA/month
Energy Charges	Rs. 3.60 / kVAh	Rs. 3.50 / kVAh	Rs. 4.75 / kVAh	Rs. 4.50 / kVAh	Rs. 4.30/ kVAh	Rs. 4.20/ kVAh

### B) **Public Institutions above 75 kW load getting supply at Single Point on 11 kV & above voltage levels and feeding multiple individuals:**

Description	Existing		Proposed		Approved	
	For supply at 11kV	For supply at 33 kV & above	For supply at 11kV	For supply at 33 kV & above	For supply at 11kV	For supply at 33 kV & above
Demand Charges	Rs. 140 / kVA/month	Rs.130/ kVA/month	Rs. 180/ kVA/month	Rs. 170/ kVA/month	Rs. 165/ kVA/month	Rs. 155 / kVA/month
Energy Charges	Rs. 3.40/ kVAh	Rs. 3.30/ kVAh	Rs. 4.10/ kVAh	Rs. 4.00/ kVAh	Rs. 4.05/ kVAh	Rs. 3.95/ kVAh

## 8.26 RATE SCHEDULE HV– 2: LARGE AND HEAVY POWER:

8.26.1 The Commission has tried to balance the Energy Charges between the existing rates and rates proposed by the DISCOMS. However, the Fixed Charges have been revised upwards by about 10%.

8.26.2 Supply to Induction and Arc furnaces shall be made available only after ensuring that the loads sanctioned are corresponding to the load requirement of tonnage of furnaces. The minimum load of one-tonne furnace shall in no case be less than 500 kVA and all loads will be determined on this basis. No supply will be given on loads below this norm. Though, the licensees requested it to be increased to 600



kVA the Commission sees no reason to change its stand in this regard and restates the view taken in the Tariff Order of FY 2006-07:

*“8.30: In view of various representations made by HV-2 category consumers in last two years on the provision of kVA requirement/tonne for Arc and Induction furnaces, the Commission in the tariff order 2004-05 had directed the licensees under para 9.19 to conduct a study to exactly provide the kVA requirement / tonne for different rating / type of Arc and Induction furnaces and submit the report of the same within three months. So far no report in the matter has been submitted by the licensee. The Commission has been able to get some specifications in this regard from few of the induction furnace manufacturers. Based on these reports the Commission is revising the minimum load prescription for one tonne furnace as 500 kVA in place of 600 kVA, as specified in previous tariff order.”*

8.26.3 Seasonal and time differentiated tariffs are important tools in aligning revenue and cost structure. Such tariffs, when applied to consumers who can manage their load, leads to flattening of demand curves for the system and also reduces the cost for the consumers and are thus mutually beneficial for both the utility and its consumers. Hence, the Commission has retained the existing provision for the seasonal tariff as has also been proposed by the DISCOMS.

**(A) Urban Schedule:**

Description	Existing	Proposed	Approved
<b>i) For supply at 11kV:</b>			
Fixed Charge	Rs. 210/kVA/month	Rs. 210/kVA/month	Rs. 230/kVA/month
Energy Charge	Rs. 4.00/kVAh	Rs. 5.00/kVAh	Rs. 4.60/kVAh
Minimum Charge	---	---	---
<b>(ii) For supply at 33 &amp; 66 kV:</b>			
Fixed Charge	Rs. 200/kVA/month	Rs. 200/kVA/month	Rs. 220/kVA/month
Energy Charge	Rs. 3.35/kVAh	Rs.4.25/kVAh	Rs. 3.85/kVAh
Minimum Charge	---	---	---
<b>(iii) For supply at 132kV and above voltages:</b>			
Fixed Charge	Rs. 180/kVA/month	Rs. 180/kVA/month	Rs. 200/kVA/month
Energy Charge	Rs. 3.25/kVAh	Rs. 4.00/kVAh	Rs. 3.75/kVAh
Minimum Charge	---	---	---
<b>TOD Rate ( Common to all Voltage Levels)</b>			
2200 – 0600 hrs	(-) 7.5%	(-) 7.5%	(-) 7.5%



Description	Existing	Proposed	Approved
0600 – 1700 hrs	0	0	0
1700 – 2200 hrs	(+) 15%	(+) 15%	(+) 15%

**(B) CONSUMERS GETTING SUPPLY AS PER RURAL SCHEDULE:**

The Consumers getting supply as per rural schedule will continue to be entitled to a rebate of 15% on Fixed Charge and Energy Charges; the same has also been proposed by the DISCOMS.

**8.27 RATE SCHEDULE HV – 3:**

**A: RAILWAY TRACTION:**

8.27.1 This schedule shall apply to the Railways for Traction loads only. The DISCOMS have proposed an increase in the Energy Charges only. The Commission has tried to balance the Energy Charges at existing levels and the levels proposed by the DISCOMS, whereas Fixed Charges and Minimum Charges have been retained at existing levels.

8.27.2 In this category, the UPPCL on behalf of the DISCOMS have submitted that they have entered into an agreement with the Railways that billing would be done on the basis of total simultaneous maximum demand and to record energy drawal at different points, the existing energy meters shall be replaced by summation meters. In wake of the aforesaid agreement the Commission approves simultaneous metering of maximum demand.

Description	Existing	Proposed	Approved
<b>i) For supply at and above 132 kV:</b>			
Fixed Charge	Rs. 180 / kVA /month	Rs. 180 / kVA /month	Rs. 180 / kVA /month
Energy Charge	Rs. 3.25 / kVAh	Rs. 4.50 / kVAh	Rs. 3.75 / kVAh
Minimum Charge	Rs. 425/kVA/month	Rs. 425/kVA/month	Rs. 425/kVA/month
<b>(ii) Below 132 kV:</b>			
Fixed Charge	Rs. 200 / kVA /month	Rs. 200 / kVA /month	Rs. 200 /kVA /month
Energy Charge	Rs. 3.35 / kVAh	Rs. 4.75 /kVAh	Rs. 3.85 / kVAh
Minimum Charge	Rs. 425/kVA/month	Rs. 425/kVA/month	Rs. 425/kVA/month

**B: DELHI METRO RAIL :**

8.27.3 This schedule shall apply to the DMRC (Delhi Metro Railway Corporation). This sub-category has been introduced as Paschimanachal Vidyut Vitaran Nigam Limited (PaVVNL) has filed a petition (Petition No. 657 / 2010 dated 28.1.2010) to





incorporate a separate tariff for DMRC in NOIDA region of the State. The tariff of this category is kept lower than railway traction as railways earns greater revenue through freight charges than through passenger fare. Moreover, Delhi Metro Rail is a Greenfield project and an essential service that needs to be supported. The Commission approves Energy Charges at Rs. 3.80/ kVAh and Minimum Charge at Rs. 425/ kVA / month with a penalty of Rs. 540/ kVA if the demand load exceeds the contracted load.

Description	Existing	Proposed	Approved
Demand Charges	NA	--	--
Energy Charges	NA	Rs. 3.80/kVAh	Rs. 3.80/kVAh
Minimum Charges	NA	Rs. 425/kVA / month	Rs. 425/kVA /month
<b>Note:</b> Penalty @ Rs. 540 / kVA will be charged on excess demand, if demand load exceeds contracted load.			

#### **RATE SCHEDULE HV – 4: LIFT IRRIGATION WORKS:**

8.27.4 This Rate Schedule shall apply to medium and large pumped canals having load of more than 100 BHP (75kW). The Commission has approved the charges as proposed by the DISCOMs.

Description	Existing	Proposed	Approved
<b>i) For supply at 11 kV:</b>			
Demand Charge	Rs. 210 / kVA / month	Rs. 250 / kVA / month	Rs. 250 / kVA / month
Energy Charge	Rs. 4.00 / kVAh	Rs. 4.80 / kVAh	Rs. 4.80 / kVAh
Minimum Charge	Rs. 425/kVA/month	Rs. 500/kVA/month	Rs. 500/kVA/month
<b>(ii) For supply at 33 kV &amp; 66kV:</b>			
Demand Charge	Rs. 200 / kVA /month	Rs. 240 / kVA /month	Rs. 240 / kVA / month
Energy Charge	Rs. 3.35 / kVAh	Rs. 4.00 / kVAh	Rs. 4.00 / kVAh
Minimum Charge	Rs. 425/kVA/month	Rs. 500/kVA/month	Rs. 500/kVA/month
<b>(ii) For supply at 132 kV:</b>			
Demand Charge	Rs. 180 / kVA / month	Rs. 220 / kVA / month	Rs. 220 / kVA / month
Energy Charge	Rs. 3.25 / kVAh	Rs. 3.90/ kVAh	Rs. 3.90/ kVAh
Minimum Charge	Rs. 425/kVA/month	Rs. 500/kVA/month	Rs. 500/kVA/month



## Chapter 9. TREATMENT TO REVENUE GAP:

### 9.1 REVENUE FROM SALE OF POWER AT EXISTING TARIFF FOR FY 2009-10:

9.1.1 The approval of the DISCOM wise and category wise sales for FY 2009-10 has already been discussed in section 6.2.1.4.

9.1.2 Based on the existing tariff and the sales approved by the Commission, the revenue from sale of power is estimated to be Rs. **13,870** cr in FY 2009-10. The category-wise and DISCOM-wise revenue from sale of power at existing tariffs is given in **TABLE 9-1** below:

**TABLE 9-1: REVENUE FROM SALE OF POWER AT EXISTING TARIFF - FY 2009-10 (Rs. Cr)**

Categories	Agra	Meerut	Lucknow	Varanasi	Total
<b>Low Tension Consumers</b>					
LMV-1: Domestic Light, Fan & Power	855	1,163	924	826	3,768
LMV-2: Non Domestic Light, Fan & Power	257	318	292	298	1,164
LMV-3: Public Lamps	31	61	73	28	194
LMV-4: Insitutions	136	86	170	197	589
LMV-5: Private Tube Wells	243	212	81	100	636
LMV 6: Powerloom - 6A	74	54	137	118	383
LMV 6: Small and Medium Power - 6B	196	273	50	66	586
LMV-7: Public Water Works	75	81	84	96	336
LMV-8: S T W and Pumped Canals	108	58	112	172	449
LMV-9: Temporary Supply	5	14	6	0	25
LMV-10: Deptt. Emp. and Pensioners	9	13	12	17	52
<b>High Tension Consumers</b>					
HV-1: Non Industrial Bulk Loads	75	243	96	111	526
HV-2: Large and Heavy Power	770	2,115	477	511	3,874
HV-3: Railway Traction	83	-	12	161	256
HV-4: Lift Irrigation Works	36	0	27	190	253
<b>SUB TOTAL</b>	<b>2,952</b>	<b>4,692</b>	<b>2,554</b>	<b>2,893</b>	<b>13,091</b>
Extra State Consumers	2	-	4	0	6
Bulk Supply Other	683	90	-	-	773
<b>GRAND TOTAL</b>	<b>3,637</b>	<b>4,782</b>	<b>2,558</b>	<b>2,893</b>	<b>13,870</b>

### 9.2 REVENUE GAP FOR FY 2009-10:

9.2.1 As per the approved ARR for Rs. **17,791** cr for FY 2009 - 10 for DISCOMS, the net revenue gap after considering revenue at existing tariffs is Rs. **3,921** cr as indicated below;



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Approved ARR	:	Rs. <b>17,791</b> cr
<u>Less:</u> Revenue at existing tariff	:	Rs. <b>13,870</b> cr
Net Revenue Gap	:	Rs. <b>3,921</b> cr

The DISCOMS, in their petition have projected a revenue gap of Rs.7895 cr after accounting for Government Subsidy of Rs. 1,832 cr. This is proposed to be met by way of tariff increase of Rs. 2,549 cr and balance Rs. 5346 cr through revolving bank guarantee / additional subsidy from State Government.

- 9.2.2 The DISCOMS have submitted that Rs. **1,832** cr would be available as subsidy from GoUP to subsidise the tariff for rural domestic consumers and PTW category of consumers.
- 9.2.3 The detailed tariff proposal as submitted by DISCOMS for FY 2009-10 is provided at **ANNEXURE – VIII**.
- 9.2.4 The estimated revenue from sale of power in FY 2009-10 based on the approved tariff schedule is as given in **TABLE 9-2** below.



**TABLE 9-2: REVENUE FROM SALE OF POWER AT APPROVED TARIFF - FY 2009-10 (Rs. Cr)**

Categories	Agra	Meerut	Lucknow	Varanasi	Total	Extra Revenue from Tariff Increase
<b>Low Tension Consumers</b>						
LMV-1: Domestic Light, Fan & Power	960	1,313	1,050	935	4,258	490
LMV-2: Non Domestic Light, Fan & Power	286	361	334	331	1,312	148
LMV-3: Public Lamps	37	73	87	34	231	37
LMV-4: Insitutions	156	98	195	226	676	87
LMV-5: Private Tube Wells	243	212	81	100	636	-
LMV 6: Powerloom - 6A	84	62	157	135	438	54
LMV 6: Small and Medium Power - 6B	225	313	58	76	671	85
LMV-7: Public Water Works	82	89	92	105	367	32
LMV-8: S T W and Pumped Canals	132	72	139	215	559	109
LMV-9: Temporary Supply	5	17	7	0	29	4
LMV-10: Deptt. Emp. and Pensioners	11	15	14	20	59	8
<b>High Tension Consumers</b>						-
HV-1: Non Industrial Bulk Loads	89	289	115	132	625	99
HV-2: Large and Heavy Power	879	2,414	545	584	4,422	548
HV-3: Railway Traction	93	-	14	181	288	31
HV-4: Lift Irrigation Works	43	0	32	227	302	50
<b>SUB TOTAL</b>	<b>3,326</b>	<b>5,328</b>	<b>2,918</b>	<b>3,301</b>	<b>14,873</b>	<b>1,782</b>
Extra State Consumers	2	-	4	0	6	-
Bulk Supply Other	729	96	-	-	825	52
						-
<b>GRAND TOTAL</b>	<b>4,056</b>	<b>5,424</b>	<b>2,922</b>	<b>3,301</b>	<b>15,703</b>	<b>1,834</b>

9.2.5 Based on the approved sales, the revenue from sale of power with approved tariff is Rs. **15,703** cr as against the DISCOMS estimates of Rs **14820** cr (Rs.12271 cr + Rs.2549 cr tariff increase) for FY 2009-10 at proposed tariff. Thus, the tariff increase on account of revised approved tariff is Rs. **1,834** cr (Revenue from Approved tariff Rs. **15,703** cr less Revenue from Existing tariff i.e. Rs. **13,870** cr).

**9.2.6 APPROVED RATE SCHEDULE FOR FY 2009-10:**

The Rate Schedule approved by the Commission and to be notified by the DISCOMS is given in **ANNEXURE – XII** to this order. Unless specifically mentioned in this Order, definition of all categories of consumers and the charges applicable



to the different categories of consumers shall be as given in the approved Rate Schedule. Also the Schedule for Miscellaneous Charges is given in **ANNEXURE – XIII**, and for Power Factor Apparatus is given in **ANNEXURE – XIV**.

9.2.7 The summary of the proposed funding mechanism for bridging the revenue gap in FY 2009-10 is as given in **TABLE 9-3** below:

**TABLE 9-3: TREATMENT OF REVENUE GAP FOR FY 2009-10 (Rs. Cr)**

Particulars	FY 2009-10 (Petition)	FY 2009-10 (Approved)
Gross ARR	21,999	17,791
Revenue from Existing Tariff	12,271	13,870
<b>Net Revenue Gap</b>	<b>9,727</b>	<b>3,921</b>
<b>Funded Through:</b>		
Revenue from Approved Tariff		15,703
<i>Tariff Increase</i>	2,549	1,834
<i>Government Subsidy</i>	1,832	1,832
<i>Loan support committed by GoUP #</i>	5,347	255
<b>Net Revenue Gap Carried Forward</b>	-	-
# Additional subsidy from Government of UP/ Loan from Bank & Financial Institutions.		

9.2.8 The DISCOMS have claimed that the remaining revenue gap after taking into account GoUP subsidy and Tariff Increase shall be met through additional subsidy from GoUP / revolving bank guarantee from Bank & Financial Institutions.

9.2.9 The Commission accepts the proposal of DISCOMS for meeting the balance gap and accordingly the revenue gap of Rs. 255 cr. shall be met through additional subsidy from GoUP / revolving bank guarantee. However, the DISCOMS may pursue with the GoUP for claiming the additional subsidy as proposed in the petition as a first measure and thereafter, in case of non-availability of the same, exercise the option of revolving bank guarantee. Further it is clarified that no cost / charges on account of availing bank guarantee shall be allowed as pass through in the next ARR / true - up process.

9.2.10 Further, the Commission feels that there is substantial scope for improvement in the operations of the licensees and if suitable steps are taken by them in this direction it can result in enormous financial savings. These steps could range from;

- a) Savings in power procurement
- b) Enhancement in operational efficiencies



- c) Improvement in collection and distribution losses
- d) Effective Demand Supply Management (DSM)

9.2.11 The Commission in the next Chapter on 'Way Forward' has dealt with DSM in detail and has also mentioned that cost for implementation of such measures will be allowed as pass through in the ARR / Tariff process.

9.2.12 The Commission envisages that the revenue gap can be easily met through the above mentioned measures if effectively implemented by the licensees. In view of the same, no revenue gap for FY 2009 - 10 is envisaged. This mechanism for bridging the revenue gap proposal is based on estimates of the Commission and hence is subject to true - up at a later stage.

9.2.13 The DISCOM wise summary of the proposed funding mechanism for bridging the revenue gap is given in **ANNEXURE – XV**.



## Chapter 10. WAY FORWARD:

### 10.1 BACKGROUND:

10.1.1 The Commission is of the firm opinion that implementation of reforms in the power sector is an imperative and 'on – going' activity. This shall ensure dynamic economic growth of the country and shall never allow any sector to stagnate.

10.1.2 Notwithstanding the various reforms initiated by the Commission, the speed of implementation of these reforms by the licensees has been a worry. This could be gauged from the fact that even after eleven years have elapsed since the initiation of the reforms process;

- Autonomy in management is yet to be fully achieved;
- Emphasis on accountability is inadequate;
- Adequate development of institutional capacity is incomplete;

10.1.3 The Commission, in its endeavour to expedite implementation of the various reforms has taken proactive measures in the following areas;

- Open Access on transmission and distribution networks in the state;
- Power Trading and market development;
- Power Exchange;

### 10.2 OPEN ACCESS ON TRANSMISSION & DISTRIBUTION NETWORKS IN THE STATE:

10.2.1 Besides preparing the procedures for grant of Open Access, the Commission also finalised the Model Bulk Power Transmission Agreement (BPTA) and the Supplementary BPTA for availing transmission services of UPPTCL. These agreements mainly focus on long - term use of Intra - State transmission system by licensees, generating companies and open access consumers and on the sustained development of the transmission system in a 'proper and coordinated' manner.

10.2.2 Existing distribution licensees of the State have several long - term agreements / arrangements for purchase and / or sale of electricity from / to generating companies or licensees situated within and / or outside the State requiring transmission of electricity between specified points of injection and drawal interfaced with Intra - State transmission system. In order to cater to the growing requirements of transmission of electricity, additional transmission systems shall be required to be developed from time to time. Existing and new long - term customers who will be using these transmission systems must agree to pay for the use of such existing and upgraded transmission systems.



10.2.3 As per the UPERC Open Access Regulations, 2004, UPPTCL is expected to summarize capacity allotment / allocation of existing distribution licensees of the State. UPPTCL is directed to initiate the process of signing of BPTA with these distribution licensees who are the existing long-term customers.

10.2.4 The Commission directs the UPPTCL to submit within 3 months from the date of issue of this Tariff Order the status on execution of BPTA with all existing distribution licensees.

**10.2.5 POWER TRADING AND MARKET DEVELOPMENT:**

With the power market opening up, the development of a strong power trading mechanism is the need of the future for UPPCL. Capacity building and Institutional strengthening for short term and long term trading function (mainly for procurement of long term power) is the first step in this direction. This can be achieved with the creation of a Trading Desk for:

- Real time monitoring;
- External information and networking;
- Skill sets development & training;

The Trading Desk must ensure availability & optimum utilisation of power.

10.2.6 The Commission directs the UPPCL/ DISCOMS to submit within 2 months from the date of issue of this Tariff Order the status on development of the Trading Desk.

**10.2.7 POWER EXCHANGE:**

The Power Exchanges have vast opportunities which can be availed by the DISCOMS in the State. It could be worthwhile to tap the possibilities available for use of Power Exchanges to meet the power demand of the State. Electricity bought from a power exchange where multiple sellers are available on a common platform shall bring economy in power purchases for the UPPCL. However, to exploit the potential of the power exchanges to the fullest extent, the utilities need to nurture and develop a team with appropriate skill sets. The team participating in the power exchange on behalf of the utility would need to have adequate knowledge of the power sector, the electricity grid code provisions, open access related issues, balancing and settlement of Open Access intra - state and inter – state transactions, metering, availability based tariff regimen, unscheduled interchange mechanism, scheduling dispatch and energy accounting procedures.





### 10.3 OTHER DEVELOPMENTS – NEED FOR THE FUTURE:

The Commission would like to highlight here some of the recent developments that have taken place in the power sector which have strived to fulfil the objectives of the Electricity Act, 2003 in its true spirit. The key issues addressed here are of paramount importance and their implementation will help the power sector in up in the near future. These issues are as described below:

- Roadmap for reduction of cross subsidy
- Demand side management;
- Multi Year Tariff (MYT) framework;
- Loss Reduction Strategies;
- Energy Accounting of Open Access transactions;
- Notification of Transfer Scheme.

### 10.4 ROADMAP FOR REDUCTION OF CROSS SUBSIDY:

10.4.1 National Tariff Policy (NTP) lays stress on adopting a (+/-) 20% band across average cost of supply while determining tariffs. Clause 8.3 of the NTP mandates that SERCs need to notify a roadmap to achieve this by 2010 - 11 at the latest.

10.4.2 The Commission has decided to adopt the average cost approach in the current Tariff Order. However, to 'go forward', in the coming years the tariffs for subsidised categories of consumers will have to be increased and aligned to the average cost of supply thereby reducing the cross subsidy levels.

10.4.3 In this regard, the DISCOMS should familiarise themselves with the following issues:

- Definition of cost of supply:  
Average cost, Voltage - wise cost and / or consumer category wise cost.
- Direct Subsidy over Cross Subsidy.
- Roadmap period.

10.4.4 The DISCOMS are expected to address these issues at the time of filing their next ARR / Tariff petition.



## 10.5 DEMAND SIDE MANAGEMENT:

10.5.1 The gap between demand and supply of electricity is common knowledge. The two obvious ways to reduce it are:

- i. Increase Supply
- ii. Reduce Demand

Increase in supply suffers from following impediments:

- a) long gestation period that consumes a lot of quality time;
- b) large scale capital investment required for new / expansion projects;
- c) Scarce fossil fuels are consumed;

10.5.2 Therefore it is prudent to contain demand through Demand Side Management (DSM) measures. The distribution licensees need to make full utilisation of the available resources in this regard. They should work out strategies with Uttar Pradesh Power Corporation Limited (UPPCL), the State Designated Agency (SDA) to associate with Bureau of Energy Efficiency (BEE) which has been implementing many DSM projects.

10.5.3 Various measures are being taken by DISCOMS to reduce demand. However, to hasten the speed of implementation of these measures, all distribution licensees must create DSM cells with dedicated staff, resources and budget allocations to plan, develop, monitor and implement DSM initiatives on a sustainable basis. In this regard, every DISCOMS is expected to take up the following steps:

- Prepare DSM plans and allocate budget for implementation of the plans.
- Develop & institutionalize bidding mechanism for implementation of DSM projects aimed at savings in terms of MW of load avoided and / or kWh of energy purchase avoided in identified places such as distribution transformers, feeders, or large bulk consumers like airports, shopping malls, commercial complexes, etc.
- Verification of results of DSM programs / projects through third party or expert(s).
- Consideration of the projected feasible savings through Energy Conservation and Energy Efficiency measures in power procurement plans.
- Capacity building of staff through domestic / international visits to places and exposure to successful DSM projects that have been implemented.
- Utilities may use pre - Identified sources of funds for financing DSM activities.



10.5.4 However, DSM plans should be backed with systematic load research to provide data in terms of expected savings in energy and reductions in demand. This shall also endeavour to provide an insight in to consumer load profile and valuable inputs on cost of service and profitability analysis. This in turn would help DISCOMS in rate design, load forecasting, load control and load management.

10.5.5 Some of the common measures for DSM that can be taken up are:

- Reduction of Technical & Commercial Losses of Distribution System;
- Energy Efficient Pumps for lifting water;
- Use of CFL / LED lamps in place of Incandescent lamps;
- Energy Efficient Lighting Controls;
- Widespread use of solar water heating system for which capital and interest subsidies are also available;
- Replacement of existing Magnetic Ballasts with use of Electronic Ballasts;
- Automatic Power Factor Controllers;
- Energy Efficient Motors / Fans including water pumping;
- Energy efficient Transformers;
- Segregation of Agricultural feeders;
- Energy Audit of large Government / Commercial / Industrial Consumers;

10.5.6 DISCOMS should also give wide publicity to 'day to day' DSM measures for public awareness on benefits of conservation of electricity. These include:

- Completely switching off AC, TV, Computers and other electrical appliances when not in use;
- Using white paint for roof tops and walls to enhance reflection for energy saving;
- Defrosting of refrigerators for half an hour during peak load period;
- Encouraging replacement of the conventional electric geysers with energy efficient gas geysers.

10.5.7 The effect of Demand Side Management should reflect in lesser purchase of costly power due to effective energy conservation measures. This shall reduce the revenue requirement of the DISCOMS. The cost of such DSM projects would be offset by the savings in power purchase cost due to reduction in demand. This should be represented as a separate cost element which shall be allowed by the Commission as a part of the Annual Revenue Requirement of the DISCOMS.

10.5.8 The benefits of DSM can be summarised as below:



- Reduction in customer energy bills;
- Reduction in peak power prices for electricity.
- Reduction in need for new power plant, transmission & distribution network;
- Reduction in air pollution;
- Reduction in dependency on foreign energy sources;
- Creation of long - term jobs to cater to new innovations and technologies;
- Increasing competitiveness of local enterprises;
- Stimulating economic development;

10.5.9 Moreover, the State Government may consider financial support for DSM programs aimed at such category of consumers which receive tariff subsidy. This would be in the long - term interest of the state finances. The State Government may also consider reduction in taxes on certified energy efficient appliances.

10.5.10 The Commission directs the DISCOMS to forward within a period of two months from the date of issue of this Tariff Order the DPR of at least four or five DSM measures it intends to take up initially, for approval of the Commission.

10.5.11 Further the DISCOMS may refer to the “REPORT ON DSM & ENERGY EFFICIENCY” of the Forum of Regulators issued in September, 2008 for detailed information and guidance.

## **10.6 MULTI YEAR TARIFF FRAMEWORK:**

10.6.1 The Commission on careful evaluation of the tariff system prevalent across the country feels that annual revision of performance norms and tariff might not always be desirable. Hence there is a need for a Multi Year Tariff (MYT) framework wherein a multi - year trajectory is specified for performance parameters and ARR and Tariff is determined on an annual basis.

10.6.2 During the first control period (of five or three years), the performance norms may be specified as close as possible to the actual level of performance in accordance to the Tariff Policy even though better levels may have been specified in the past and a trajectory of improvement of norms to the desired level shall be set along with adequate incentive and disincentive mechanisms.

10.6.3 For subsequent control periods, the opening levels shall be considered at closing levels specified by the Commission for the preceding control period. Thus, in a way, the MYT framework shall allow the utilities to start afresh.



10.6.4 However, for implementation of the said framework it is to be ensured that firm data is used as a base for the first control period and therefore the licensees, in their own interest, are expected to see that their accounts are audited till the last financial year.

10.6.5 The Commission directs all distribution licensees to undertake the various benchmarking studies such as Incentive - disincentive mechanism for distribution utilities, energy audit, assessment of Cost of Supply, agricultural norms study, Load Forecasting Study, 400 / 765 kV Transmission line capital cost benchmarking, O&M expenditure study, Actuarial Valuation study for employee expenses etc. for determination of desired performance standards and submit the same to the Commission. However, before conducting the studies, the licensees have to submit within three months from the date of the issue of this Tariff Order the Terms of Reference of study for approval of the Commission.

10.6.6 The MYT regulations are also to be prepared for DISCOMS as is being done in the case of generating plants.

10.6.7 Six months prior to submission of the MYT petition, the DISCOMS shall have to submit Business Plan and Power Purchase Plan covering following aspects:

- Category-wise sales projections;
- Load growth details;
- Power procurement plan indicating long-term and short-term sources;
- Details of load shedding;
- Capital expenditure and capitalisation plans, financing pattern and impact on related expenses;
- Employee rationalisation etc.

10.6.8 Further, the DISCOMS may also refer to the "REPORT ON MULTI-YEAR TARIFF FRAMEWORK & DISTRIBUTION MARGIN" of the Forum of Regulators issued in November, 2008 for detailed information and guidance.

## **10.7 LOSS REDUCTION STRATEGIES:**

10.7.1 Loss reduction has been the top most priority of the DISCOMS. Numerous measures have been undertaken by utilities across the country to achieve loss reduction.



- 10.7.2 However, over the years it has been observed that losses of utilities fluctuate a lot and it appears that actual loss reduction is at variance with whatever is observed. Then there has always been the issue related to the methodology adopted for loss estimation.
- 10.7.3 Therefore, firmed up figures are needed for evaluation of the losses. Compilation of baseline data should be the starting point for energy accounting and audit. Energy audit has to start from DTs to 11kV feeders to 33/11kV substations of the entire area selected for auditing. Numerous measures that utilities may consider are as follows:
- Sub-Station wise monthly energy balance be examined for loss estimation;
  - Feeder Metering be done to monitor quality of power supplied to the consumers;
  - Installation of smaller capacity Transformers be undertaken at the respective load centers;
- 10.7.4 The Commission directs all DISCOMS to compute the AT&C loss figures considering differential analysis of technical losses, non-technical losses and collection efficiency.
- 10.7.5 The technical and commercial losses are to be monitored separately. In the first control period the MYT trajectory could give a combined target for technical and commercial losses. Further, the MYT trajectory shall be distribution licensee specific.
- 10.7.6 Distribution Loss Study and other benchmarking studies need to be undertaken for implementation of MYT framework. Based on the opening loss levels as derived from the above study long term and short term targets for loss reduction are to be determined to bring down the distribution losses (both technical and commercial) gradually within the acceptable norms of efficiency.
- 10.7.7 The Commission therefore directs all distribution licensees to undertake loss studies for proper segregation of technical and commercial losses on a sample basis for atleast 2 urban and 2 rural divisions of one / two circles. However, before conducting the studies, the DISCOMS are directed to submit within three months from the date of issue of this Tariff Order the Terms of Reference of the study for approval of the Commission.



10.7.8 Further the DISCOMS may also refer to the “REPORT ON LOSS REDUCTION STRATEGIES” of the Forum of Regulators issued in September, 2008 for detailed information and guidance.

**10.8 ENERGY ACCOUNTING OF OPEN ACCESS TRANSACTIONS:**

10.8.1 The Commission in an earlier order related to Intra – State ABT had decided that the existing “Power System” unit of UPPCL shall be recognised as the State Load Despatch Center (SLDC) in the State till the State Government decides otherwise.

10.8.2 The SLDC shall act in accordance with UPERC Open Access Regulations, UPERC SLDC Fee and Charges Regulations read with ABT orders dated 24/25.09.2007 and 28.05.2008 in respect of Energy Accounting and Settlement of Open Access Transactions.

10.8.3 For energy accounting and settlement of Open Access Transactions the SLDC is mandated inter alia to;

- a) formulate detailed procedures for scheduling and dispatch.
- b) prepare guidelines for collection and maintenance of data of the electricity transmitted through the State Grid.
- c) develop scheme for preparation of energy account including UI account.
- d) develop procedure for preparation of UI bills.

10.8.4 The Commission directs the SLDC to submit within one month from the date of issue of this Tariff Order the status of compliance on scheduling, energy accounting, balancing and settlement of Open Access Transactions.

**10.9 NOTIFICATION OF TRANSFER SCHEME FOR UPPTCL:**

10.9.1 The approval of the Transfer Scheme for UPPTCL is still awaited. This is a matter of concern.

10.9.2 The notification of transfer scheme will pave the way for accounting and other regulatory issues. The Commission directs UPPCL/UPPTCL to co-ordinate with GoUP and finalise the process of notification of transfer scheme for UPPTCL.

**10.10 SEPARATION OF SLDC FROM STU:**

10.10.1 The STU must separate its SLDC function and establish SLDC to function as an independent body. Keeping this in view, the Commission has evaluated in this Tariff Order separate monthly charges to be paid by STU to SLDC.



**10.11 CONCLUSION:**

- 10.11.1 The Commission, through this particular chapter, has touched upon some of the new developments taking place in the power sector. From this it can be seen that there are some areas where the utilities need to further focus their efforts. The Commission can act as a facilitator, but the actual efforts need to be put in by the utilities themselves to achieve the desired results.
- 10.11.2 As has always been the case, the utilities will no doubt rise to the challenge and look at new opportunities coming up in the sector and at the same time not lose focus on the reform initiatives. They must aim to carry out improvements in service and efficiency and thereby make Uttar Pradesh an attractive destination for investments in the power sector and in the larger economy of the State.
- 10.11.3 The power sector is the flag - bearer of development of any economy. The vibrant health of the power sector is often an accurate reflection of the State's economy. The power utilities in the State are vested with one of the most important social and economic responsibilities. Therefore they must take all necessary measures to ensure healthy growth of the power sector and propel the State forward towards economic success. Having said that, it is concluded:

***"Opportunities multiply as they are seized."***

**- Sun Tzu**





## Chapter 11. DIRECTIONS TO DISCOMS & TRANSCO:

### 11.1 DIRECTIVES FOR DISCOMS:

11.1.1 The Commission had issued several directives to the licensees in the Tariff Order for FY 2008 – 09. This chapter deliberates upon the status of compliance of those directives. The Licensees, in their ARR and Tariff petition for FY 2009 – 10, did not provide any status on compliance of the directives. Subsequently, through letter they submitted that the status is being compiled and would be submitted shortly. However, the same have not been submitted to the Commission till date. The Commission expresses deep annoyance over the lackadaisical attitude of the licensees in submitting the necessary information.

11.1.2 The Commission once again directs the licensees to comply with the balance directives issued in the Tariff Order for FY 2008 - 09 and submit to the Commission within one month from the date of issue of this Tariff Order the compliance report along with reasons for non - compliance, if any. The licensees' response / latest status of the directives issued in the last Tariff Order are given in **ANNEXURE – XVI**

11.1.3 Further, some of the directives issued by the Commission in the present Tariff Order are in continuation or similar to the directives issued in the Tariff Order for FY 2008 - 09. In case the licensees have not complied with the same earlier, it shall be necessary for them to provide reasons for non - compliance and further comply with the same as per the time-lines prescribed in the present Tariff Order.

11.1.4 The directives to the distribution licensees as issued under the present Tariff Order along with the time frame for compliance are given in **TABLE 11-1** below:

**TABLE 11-1: DIRECTIVES FOR DISCOMS**

S. N	Ref.	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order
1	1.4.2.5	Commission directs UPPCL and the four DISCOMS to take appropriate measures with regards to metering facilities in consumer's premises.	Immediate
2	2.2.5	The Commission directs DISCOMS / UPPTCL to expedite the process of finalization of audited accounts and submit the same for true-up exercise.	Next Filing



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S. N	Ref.	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order
3	4.7.7	Commission directs the DISCOMS to explore the innovative modes of payment and keep the Commission updated on a monthly basis.	3 months
4	4.10.3	The Commission directs the DISCOMS to initiate steps to procure more long term power at reasonable rates to mitigate the demand supply gap.	Immediate
5	4.12.6	The Commission directs the DISCOMS to adopt steps to create awareness & explore means to improve power factor in the State.	Immediate
6	4.14.3	The Commission directs DISCOMS to substantiate its stand on TOD rebate with more data for each DISCOM and consumers at various voltages of HV-2 rather adopt a general assumption across all voltage levels as has been done in its present filing.	Immediate
7	4.18.3	The Commission directs the DISCOMS to review the cases related to additional charges for LMV-2 category consumers and take necessary action in line with the provisions of the Tariff Order. Further the DISCOMS are directed to submit a status report on KVAH metering of LMV - 2 category consumers.	1 month
8	4.24.12	The Commission redirects the DISCOMS to submit voltage - wise cost of service study report.	3 months
9	4.27.3	The Commission re directs the DISCOMS to install electronic meters in the residential premises of the employees as well as in their offices.	Immediate
10	6.3.5	The Commission directs the DISCOMS to carry out the energy audit / estimation study with voltage wise break up of distribution losses into technical loss and commercial loss.	6 months
11	6.3.6	The Commission directs the DISCOMS to report the status of the metering at the mentioned interfaces along with the proposed plan to undertake the metering for the remaining points. The licensees shall also report the status of the progress on this front on a monthly basis along with reasons for deviation from the plan, if any.	1 month
12	6.12.6	The Commission directs the licensees to submit details of power procured below 49.2 Hz between 1st August 2009 and 31st March 2010 along with costs during the submission of next ARR/ Tariff petition.	Next ARR/ Tariff filing



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S. N	Ref.	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order
13	6.12.8	The Commission redirects the DISCOMS to adopt a transparent procedure based on competitive bidding for procuring power on short term basis.	Immediate
14	6.19.9.8	The Commission directs DISCOMS to suggest an appropriate policy on capitalization of salaries & wages.	3 month
15	6.19.9.9	The Commission directs DISCOMS to submit the Fresh Actuarial Valuation Study Report in respect to employee expenses.	3 month
16	6.19.10.3	The Commission directs DISCOMS to capitalise the expenditure based on the actual A&G expenses incurred/ projected to be incurred and based on the past audited accounts. Further DISCOMS should have proper accounting system to capture the expenses related to capital schemes rather than assuming a standard capitalisation % age.	Next Filing
17	6.21.5	The Commission reiterates its direction to the DISCOMS to ensure proper maintaining of detailed fixed assets registers to work out the depreciation expense as specified in the Distribution Tariff Regulations and directs the DISCOMS to submit a report to the Commission citing clearly as to how they are maintaining fixed assets registers.	2 months
18	6.22.4.2	The Commission directs DISCOMS to develop a system whereby the actual interest accrued/ incurred till the capital scheme is completed and put to use gets captured in separate account typically called as 'Interest during Construction' (IDC) rather than assuming a standard capitalisation %age.	Next Filing
19	6.23.4	The Commission directs the DISCOMS to submit DISCOM-wise 10 sample cases of LT consumers where orders have been issued for writing of bad debts clearly depicting the procedure adopted for writing off bad debts alongwith a policy framework for approval.	1 month
20	6.29.7	The Commission redirects the DISCOMS to submit for approval the methodology and formula to be adopted for automatic recovery of the Fuel Cost changes.	2 months
21	6.32.4	The Commission redirects the DISCOMS to submit the expenses with a proportionate allocation towards wheeling and retail supply business in the next ARR filing.	Next Filing



S. N	Ref.	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order
22	10.2.6	The Commission directs the UPPCL/ DISCOMS to submit the status on development of the Trading Desk.	2 months
23	10.5.10	The Commission directs the DISCOMS to forward the DPR of at least four or five DSM measures it intends to take up initially, for approval of the Commission.	2 months
24	10.6.5	The Commission directs DISCOMS to undertake benchmarking studies such as Incentive - disincentive mechanism for distribution utilities, energy audit, assessment of Cost of Supply, agricultural norms study, Load Forecasting Study, 400 / 765 kV Transmission line capital cost benchmarking, O&M expenditure study, Actuarial Valuation study for employee expenses etc. for determination of desired performance standards and submit the same to the Commission. Further, DISCOMS are directed to submit the Terms of Reference of study for approval of the Commission.	3 months
25	10.7.4	The Commission directs all DISCOMS to compute the AT&C loss figures considering differential analysis of technical losses, non-technical losses and collection efficiency.	Next filing
26	10.7.7	The Commission directs all DISCOMS to undertake loss studies for proper segregation of technical and commercial losses on a sample basis for atleast 2 urban and 2 rural divisions of one / two circles. Further, DISCOMS are directed to submit Terms of Reference of the study for approval of the Commission.	3 months

## 11.2 DIRECTIVES FOR TRANSCO:

11.2.1 The directives to the TRANSCO as issued under the present Tariff Order along with the time frame for compliance are given in **TABLE 11-2** below:



**TABLE 11-2: DIRECTIVES FOR TRANSCO**

S. N	Ref.	Description of Directive for TRANSCO	Time Period for compliance from the date of issue of the tariff order
1	1.4.2.3	The Commission directs UPPTCL to co-ordinate with GoUP and expedite the approval process of Transfer Scheme.	Immediately
2	1.4.2.4	The Commission directs UPPTCL to request State Government to constitute a separate SLDC body which shall have independent functioning.	3 months
3	5.2.8	The Commission directs UPPTCL to submit details of voltage-wise losses, method of assessment adopted and supporting data / information on the same.	3 months
4	5.5.6.8	The Commission directs UPPTCL to suggest an appropriate policy on capitalization of salaries & wages.	3 months
5	5.5.6.10	The Commission directs UPPTCL to submit the Fresh Actuarial Valuation Study Report in respect to employee expenses.	6 months
6	5.5.7.3	The Commission directs UPPTCL to capitalise the expenditure based on the actual A&G expenses incurred/ projected to be incurred. Further UPPTCL should have proper accounting system to capture the expenses related to capital schemes rather than assuming a standard capitalisation %age.	Next Filing
7	5.7.7	The Commission reiterates its direction to the UPPTCL to ensure proper maintaining of detailed fixed assets registers to work out the depreciation expense as specified in the Transmission Tariff Regulations and directs the UPPTCL to submit a report to the Commission citing clearly as to how they are maintaining fixed assets registers for the various assets.	1 month
8	5.8.4.1	The Commission directs UPPTCL to develop a system whereby the actual interest accrued/ incurred till the capital scheme is completed and put to use gets captured in separate account typically called as 'Interest during Construction' (IDC) rather than assuming a standard capitalisation % age.	Next Filing
9	5.13.4	The Commission hereby redirects the UPPTCL / SLDC that the ARR / budget for SLDC should be submitted separately along with the ARR submission of TRANSCO. The costs have to be separately identified and not embedded in the TRANSCO ARR.	Next Filing
10	5.14.5	The Commission directs UPPTCL to submit the detailed billing procedure of transmission charges for	1 month



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S. N	Ref.	Description of Directive for TRANSCO	Time Period for compliance from the date of issue of the tariff order
		approval of the same.	
11	10.2.4	The Commission directs UPPTCL to initiate the process of signing of BPTA with distribution licensees who are the existing long-term customers and submit the status on execution of BPTA of the same.	3 months
12	10.8.4	The Commission directs the SLDC/ UPPTCL to submit the status of compliance on scheduling, energy accounting, balancing and settlement of Open Access Transactions.	1 month

The Commission would like to mention here that the list given above may not be exhaustive and the licensee is directed adhere to all the directives given in the text of this Tariff Order.



## Chapter 12. APPLICABILITY OF THE ORDER:

- 12.1** The licensees, in accordance to section 139 of the Uttar Pradesh Electricity Regulatory Commission (Conduct of Business) Regulations 2004, shall arrange to get published within one week from the date of issue of this Tariff Order, the tariffs approved herein by the Commission. They shall ensure that the same is published in atleast two daily newspapers (one English and one Hindi) having circulation in their area of supply. The tariffs so published shall become the notified tariffs applicable in the areas of supply and shall come into force with effect from 15th. April, 2010, and shall, unless amended or revoked, continue to be in force till issuance of the next Tariff Order
- 12.2** The Retail Tariffs as determined under this Tariff Order shall also apply provisionally to the consumers in the area of operations of M/s. KESCO and M/s. NPCL till separate Tariff Orders for FY 2009–10 are issued in their case.

(Rajesh Awasthi)  
Chairman

Dated: 31<sup>st</sup> March, 2010  
Lucknow

***"I long to accomplish a great and noble task, but it is my chief duty to accomplish small tasks as if they were great and noble."***

***- Helen Keller (1880-1968)***



**ANNEXURE – I**

**DISCOM WISE SUMMARY OF ARR FY 2009-10 (IN RS CR):**

ARR Comparison For FY 2007-08 & FY 2008-09 - Lucknow Discom						
Particulars	FY 2007-08 Tariff Order	FY 2007-08 (Actual) (Unaudited)	Difference	FY 2008-09 Tariff Order	FY 2008-09 (Estimated)	Difference
Power Purchase Cost	2,229	1,994	235	2,392	2,471	(79)
Transmission Charges	180	107	73	209	100	109
Employee Costs	216	171	45	231	256	(25)
Admin & General Expenses	38	21	18	41	25	16
Repair & Maintenance Expense	57	62	(5)	61	89	(28)
Provision for Bad Debts	-	8	(8)	-	25	(25)
Depreciation Expense	226	124	102	258	180	77
Interest and Finance Charges	170	134	36	167	249	(82)
Less: Capitalised Expenses	56	38	18	63	56	7
<b>Total</b>	<b>3,061</b>	<b>2,583</b>	<b>478</b>	<b>3,296</b>	<b>3,339</b>	<b>(44)</b>

ARR Comparison For FY 2007-08 & FY 2008-09 - Meerut Discom						
Particulars	FY 2007-08 Tariff Order	FY 2007-08 (Actual) (Unaudited)	Difference	FY 2008-09 Tariff Order	FY 2008-09 (Estimated)	Difference
Power Purchase Cost	4,198	3,896	302	4,519	4,749	(230)
Transmission Charges	340	210	130	386	192	194
Employee Costs	206	190	16	219	222	(3)
Admin & General Expenses	25	24	1	27	29	(2)
Repair & Maintenance Expense	79	82	(3)	84	151	(67)
Provision for Bad Debts	-	1	(1)	-	20	(20)
Depreciation Expense	273	206	67	300	284	16
Interest and Finance Charges	199	210	(11)	200	377	(177)
Less: Capitalised Expenses	52	78	(26)	59	61	(2)
<b>Total</b>	<b>5,268</b>	<b>4,740</b>	<b>527</b>	<b>5,675</b>	<b>5,964</b>	<b>(288)</b>





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ARR Comparison For FY 2007-08 & FY 2008-09 - Varanasi Discom						
Particulars	FY 2007-08 Tariff Order	FY 2007-08 (Actual) (Unaudited)	Difference	FY 2008-09 Tariff Order	FY 2008-09 (Estimated)	Difference
Power Purchase Cost	2,927	2,663	264	3,142	3,365	(223)
Transmission Charges	237	143	93	274	136	138
Employee Costs	229	270	(41)	245	256	(11)
Admin & General Expenses	22	28	(6)	23	33	(9)
Repair & Maintenance Expense	61	101	(40)	65	104	(39)
Provision for Bad Debts	-	38	(38)	-	51	(51)
Depreciation Expense	241	162	80	274	206	68
Interest and Finance Charges	165	153	12	164	286	(123)
Less: Capitalised Expenses	54	65	(11)	62	64	(2)
<b>Total</b>	<b>3,827</b>	<b>3,493</b>	<b>334</b>	<b>4,126</b>	<b>4,373</b>	<b>(247)</b>

ARR Comparison For FY 2007-08 & FY 2008-09 - Agra Discom						
Particulars	FY 2007-08 Tariff Order	FY 2007-08 (Actual) (Unaudited)	Difference	FY 2008-09 Tariff Order	FY 2008-09 (Estimated)	Difference
Power Purchase Cost	3,323	3,271	52	3,634	3,975	(342)
Transmission Charges	269	176	93	258	161	97
Employee Costs	160	148	12	172	168	3
Admin & General Expenses	26	29	(2)	28	34	(6)
Repair & Maintenance Expense	51	95	(44)	55	98	(43)
Provision for Bad Debts	-	19	(19)	-	43	(43)
Depreciation Expense	202	154	47	230	190	40
Interest and Finance Charges	190	170	20	188	308	(120)
Less: Capitalised Expenses	45	74	(29)	52	58	(6)
<b>Total</b>	<b>4,177</b>	<b>3,988</b>	<b>188</b>	<b>4,514</b>	<b>4,920</b>	<b>(406)</b>



**ANNEXURE – II**

**LUCKNOW DISCOM - SALES ACTUAL, APPROVED & PROJECTED:**

Consolidated Discoms	Units Sold (MU)				
	FY 2007-08	FY 2007-08	FY 2008-09	FY 2008-09	FY 2009-10
	Tariff Order	Actual Unaudited	Tariff Order	Provisional	Projected
LMV 1:Domestic	3829	3,142	3948	3,168	3,349
LMV 2:Commercial	644	589	672	605	629
LMV 3:Public Lamps	167	169	168	226	239
LMV 4:Public Institutions	481	453	503	390	394
LMV 5:Private Tubewells	632	475	631	519	551
LMV 6:Small & Medium	358	354	374	371	391
LMV 7: Public Water Works	199	170	201	194	203
LMV 8:State Tubewells	484	391	476	441	440
LMV 9: Temporary Supply	24	10	24	10	10
LMV10:Employees &	38	43	39	109	111
HV 2:Large & Heavy Power	737	663	772	882	931
HV 3:Railway Traction	29	22	28	29	29
HV 4:Lift Irrigation Works	65	52	63	61	62
<b>Sub Total</b>	<b>7689</b>	<b>6,535</b>	<b>7899</b>	<b>7,005</b>	<b>7,340</b>
Extra State & Bulk	7	14	7	20	21
<b>Total</b>	<b>7696</b>	<b>6,548</b>	<b>7907</b>	<b>7,025</b>	<b>7,361</b>



**MEERUT DISCOM - SALES ACTUAL, APPROVED & PROJECTED:**

Consolidated Discoms	Units Sold (MU)				
	FY 2007-08	FY 2007-08	FY 2008-09	FY 2008-09	FY 2009-10
	Tariff Order	Actual Unaudited	Tariff Order	Provisional	Projected
LMV 1:Domestic	4850	3,974	5086	4,343	4,583
LMV 2:Commercial	848	715	856	673	716
LMV 3:Public Lamps	126	115	124	125	156
LMV 4:Public Institutions	307	223	305	193	195
LMV 5:Private Tubewells	1804	1,944	1775	1,917	1,720
LMV 6:Small & Medium	719	657	722	722	754
LMV 7: Public Water Works	198	164	205	184	195
LMV 8:State Tubewells	239	206	241	206	206
LMV 9: Temporary Supply	22	11	25	19	26
LMV10:Employees &	40	43	40	90	92
HV 2:Large & Heavy Power	3792	3,550	3972	4,013	4,235
HV 3:Railway Traction	0	0	0	0	0
HV 4:Lift Irrigation Works	0	0	1	0	0
<b>Sub Total</b>	<b>12946</b>	<b>11,602</b>	<b>13351</b>	<b>12,485</b>	<b>12,879</b>
Extra State & Bulk	<b>394</b>	346	<b>394</b>	348	349
<b>Total</b>	<b>13340</b>	<b>11,948</b>	<b>13745</b>	<b>12,834</b>	<b>13,228</b>



**VARANASI DISCOM - SALES ACTUAL, APPROVED & PROJECTED:**

Consolidated Discoms	Units Sold (MU)				
	FY 2007-08	FY 2007-08	FY 2008-09	FY 2008-09	FY 2009-10
	Tariff Order	Actual Unaudited	Tariff Order	Provisional	Projected
LMV 1:Domestic	3924	3,415	4055	3,779	3,911
LMV 2:Commercial	824	693	851	773	858
LMV 3:Public Lamps	62	68	61	79	88
LMV 4:Public Institutions	577	464	641	457	462
LMV 5:Private Tubewells	870	783	855	784	733
LMV 6:Small & Medium	383	332	384	405	427
LMV 7: Public Water Works	267	228	284	232	242
LMV 8:State Tubewells	688	467	694	562	558
LMV 9: Temporary Supply	3	9	3	1	1
LMV10:Employees &	33	32	34	51	52
HV 2:Large & Heavy Power	983	930	1011	1,043	1,089
HV 3:Railway Traction	449	331	441	388	401
HV 4:Lift Irrigation Works	494	419	508	458	467
<b>Sub Total</b>	<b>9555</b>	<b>8,173</b>	<b>9821</b>	<b>9,011</b>	<b>9,289</b>
Extra State & Bulk	1	3	1	0	0
<b>Total</b>	<b>9556</b>	<b>8,175</b>	<b>9822</b>	<b>9,011</b>	<b>9,289</b>



**AGRA DISCOM - SALES ACTUAL, APPROVED & PROJECTED:**

Consolidated Discoms	Units Sold (MU)				
	FY 2007-08	FY 2007-08	FY 2008-09	FY 2008-09	FY 2009-10
	Tariff Order	Actual Unaudited	Tariff Order	Provisional	Projected
LMV 1:Domestic	3247	2,917	3520	3,221	3,421
LMV 2:Commercial	728	604	765	599	671
LMV 3:Public Lamps	87	70	93	82	91
LMV 4:Public Institutions	430	321	463	308	311
LMV 5:Private Tubewells	1224	1,114	1235	1,434	1,835
LMV 6:Small & Medium	514	523	511	607	637
LMV 7: Public Water Works	209	178	213	176	183
LMV 8:State Tubewells	377	247	387	377	378
LMV 9: Temporary Supply	25	10	26	13	16
LMV10:Employees &	32	31	32	128	130
HV 2:Large & Heavy Power	1263	1,288	1294	1,521	1,599
HV 3:Railway Traction	276	301	265	198	204
HV 4:Lift Irrigation Works	106	87	111	83	84
<b>Sub Total</b>	<b>8518</b>	<b>7,691</b>	<b>8914</b>	<b>8,745</b>	<b>9,560</b>
Extra State & Bulk	<b>2635</b>	2,734	<b>2764</b>	2,642	2,776
<b>Total</b>	<b>11153</b>	<b>10,425</b>	<b>11678</b>	<b>11,387</b>	<b>12,336</b>



**ANNEXURE – III**

**DISCOM WISE DETAILS FOR CONSUMERS, CONNECTED LOAD & SALES – PETITION:**

No of Consumers, Connected Load and Consumption for Agra Discom - Tariff Filing FY 2007-08 to FY 2009-10									
DisCom: AGRA	FY 2007-08			FY 2008-09			FY 2009-10		
	No of Consumers	Connected Load (kW)	Sales (MU)	No of Consumers	Connected Load (kW)	Sales (MU)	No of Consumers	Connected Load (kW)	Sales (MU)
LMV-1: Domestic Light, Fan & Power	1,477,571	2,303,007	2,917	1,608,110	2,483,647	3,221	1,766,444	2,780,767	3,421
LMV-2: Non Domestic Light, Fan & Power	199,245	429,809	604	211,457	470,315	599	241,952	528,353	671
LMV-3: Public Lamps	1,204	18,851	70	1,243	21,859	82	1,396	21,718	91
LMV-4: Insitutions	10,395	101,197	321	11,794	104,188	308	10,456	101,795	311
LMV-5: Private Tube Wells	140,387	1,055,717	1,114	150,263	1,123,338	1,434	158,519	1,192,070	1,835
Power Loom (LMV-6A)	7,983	47,479	75	17,924	116,973	151	7,983	47,479	164
LMV 6: Small and Medium Power - 6B	33,829	333,425	448	26,041	265,789	456	38,087	375,390	472
LMV-7: Public Water Works	1,790	40,719	178	1,924	43,588	176	2,920	62,866	183
LMV-8: S T W and Pumped Canals	5,640	123,090	247	5,776	127,803	377	7,260	158,442	378
LMV-9: Temporary Supply	206	3,975	10	229	2,624	13	3,478	67,119	16
LMV-10: Deptt. Emp. and Pensioners	14,994	42,882	31	13,821	39,161	128	14,994	42,882	130
HV-1: Non Industrial Bulk Loads	-	-	-	-	-	-	-	-	-
HV-2: Large and Heavy Power	1,459	533,763	1,288	1,728	469,790	1,521	1,944	711,352	1,599
HV-3: Railway Traction	5	102,100	301	4	90,400	198	5	103,901	204
HV-4: Lift Irrigation Works	24	25,012	87	24	25,422	83	24	25,012	84
Extra State Consumers	4	6,100	6	3	6,000	10	4	6,100	10
Bulk Supply	1	1,249,459	2,728	1	1,418,497	2,632	1	1,526,590	2,766
<b>GRAND TOTAL</b>	<b>1,894,737</b>	<b>6,416,585</b>	<b>10,425</b>	<b>2,050,342</b>	<b>6,809,394</b>	<b>11,387</b>	<b>2,255,468</b>	<b>7,751,836</b>	<b>12,336</b>



Order on ARR and Tariff Petition for Transco and Discoms for FY 2009-10

No of Consumers, Connected Load and Consumption for Meerut Discom - Tariff Filing FY 2007-08 to FY 2009-10									
DisCom: MEERUT	FY 2007-08			FY 2008-09			FY 2009-10		
	No of Consumers	Connected Load (kW)	Sales (MU)	No of Consumers	Connected Load (kW)	Sales (MU)	No of Consumers	Connected Load (kW)	Sales (MU)
LMV-1: Domestic Light, Fan & Power	2,109,662	4,498,302	3,974	2,383,937	4,895,540	4,343	2,389,486	5,137,759	4,583
LMV-2: Non Domestic Light, Fan & Power	273,178	627,279	715	290,163	677,550	673	301,308	692,634	716
LMV-3: Public Lamps	677	29,574	115	657	32,116	125	727	31,757	156
LMV-4: Insitutions	5,932	77,855	223	7,707	77,591	193	5,932	77,855	195
LMV-5: Private Tube Wells	308,986	1,693,747	1,944	318,923	1,758,928	1,917	308,986	1,693,747	1,720
Power Loom (LMV-6A)	9,299	74,460	87	8,248	85,238	109	9,299	74,460	120
LMV 6: Small and Medium Power - 6B	27,617	372,312	570	31,001	401,200	613	29,754	401,122	634
LMV-7: Public Water Works	1,474	52,253	164	1,643	55,137	184	1,647	58,272	195
LMV-8: S T W and Pumped Canals	4,741	68,909	206	4,720	67,023	206	5,110	74,273	206
LMV-9: Temporary Supply	1,002	7,160	11	1,563	14,370	19	13,994	99,996	26
LMV-10: Deptt. Emp. and Pensioners	19,147	59,318	43	18,888	58,239	90	19,147	59,318	92
HV-1: Non Industrial Bulk Loads	-	-	-	-	-	-	-	-	-
HV-2: Large and Heavy Power	3,713	1,305,424	3,550	4,195	1,539,369	4,013	5,341	1,877,659	4,235
HV-3: Railway Traction	-	-	-	-	-	-	-	-	-
HV-4: Lift Irrigation Works	2	311	0	2	311	0	2	311	0
Extra State Consumers	-	-	-	-	-	-	-	-	-
Bulk Supply	1	45,000	346	1	45,000	348	1	45,000	349
<b>GRAND TOTAL</b>	<b>2,765,431</b>	<b>8,911,904</b>	<b>11,948</b>	<b>3,071,648</b>	<b>9,707,612</b>	<b>12,834</b>	<b>3,090,734</b>	<b>10,324,163</b>	<b>13,228</b>



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No of Consumers, Connected Load and Consumption for Lucknow Discom - Tariff Filing FY 2007-08 to FY 2009-10									
DisCom: LUCKNOW	FY 2007-08			FY 2008-09			FY 2009-10		
	No of Consumers	Connected Load (kW)	Sales (MU)	No of Consumers	Connected Load (kW)	Sales (MU)	No of Consumers	Connected Load (kW)	Sales (MU)
LMV-1: Domestic Light, Fan & Power	1,939,580	2,625,873	3,142	2,064,952	2,789,308	3,168	1,977,070	2,647,750	3,349
LMV-2: Non Domestic Light, Fan & Power	222,628	477,393	589	232,940	500,388	605	270,844	584,765	629
LMV-3: Public Lamps	3,512	45,489	169	5,162	54,032	226	3,988	51,653	239
LMV-4: Insitutions	9,292	136,810	453	8,237	130,624	390	10,920	160,781	394
LMV-5: Private Tube Wells	118,273	462,085	475	123,801	496,269	519	139,768	546,063	551
Power Loom (LMV-6A)	14,631	108,092	147	12,744	77,197	113	14,631	108,092	123
LMV 6: Small and Medium Power - 6B	16,534	157,851	207	17,131	177,309	257	32,249	307,878	268
LMV-7: Public Water Works	1,362	42,458	170	1,401	45,284	194	1,573	48,813	203
LMV-8: S T W and Pumped Canals	9,007	120,144	391	9,670	126,208	441	9,766	130,266	440
LMV-9: Temporary Supply	1,278	3,763	10	1,249	4,577	10	25,766	75,867	10
LMV-10: Deptt. Emp. and Pensioners	19,299	48,519	43	19,689	50,379	109	19,299	48,519	111
HV-1: Non Industrial Bulk Loads	-	-	-	-	-	-	-	-	-
HV-2: Large and Heavy Power	731	276,709	663	916	369,909	882	964	364,871	931
HV-3: Railway Traction	1	11,900	22	1	12,600	29	2	17,883	29
HV-4: Lift Irrigation Works	16	21,326	52	15	25,115	61	16	21,326	62
Extra State Consumers	1	5,000	14	1	500,494	20	1	5,000	21
Bulk Supply	-	-	-	-	-	-	-	-	-
<b>GRAND TOTAL</b>	<b>2,356,145</b>	<b>4,543,412</b>	<b>6,548</b>	<b>2,497,909</b>	<b>5,359,693</b>	<b>7,025</b>	<b>2,506,856</b>	<b>5,119,528</b>	<b>7,361</b>





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No of Consumers, Connected Load and Consumption for Varanasi Discom - Tariff Filing FY 2007-08 to FY 2009-10									
DisCom: VARANASI	FY 2007-08			FY 2008-09			FY 2009-10		
	No of Consumers	Connected Load (kW)	Sales (MU)	No of Consumers	Connected Load (kW)	Sales (MU)	No of Consumers	Connected Load (kW)	Sales (MU)
LMV-1: Domestic Light, Fan & Power	2,159,384	3,245,441	3,415	2,293,898	3,536,395	3,779	2,166,410	3,256,112	3,911
LMV-2: Non Domestic Light, Fan & Power	223,610	462,496	693	246,808	537,036	773	282,023	592,480	858
LMV-3: Public Lamps	325	15,729	68	387	21,420	79	325	15,729	88
LMV-4: Insitutions	8,374	134,912	464	8,779	143,173	457	9,838	158,498	462
LMV-5: Private Tube Wells	161,317	713,499	783	217,636	767,264	784	170,211	752,838	733
Power Loom (LMV-6A)	10,990	75,320	112	13,662	96,355	167	10,990	75,320	178
LMV 6: Small and Medium Power - 6B	21,280	195,367	220	22,290	197,302	238	36,719	337,111	250
LMV-7: Public Water Works	1,626	46,241	228	1,648	63,470	232	1,712	48,562	242
LMV-8: S T W and Pumped Canals	9,792	159,346	467	10,145	198,033	562	12,409	201,938	558
LMV-9: Temporary Supply	46	1,666	9	31	897	1	2,379	86,172	1
LMV-10: Deptt. Emp. and Pensioners	18,135	31,565	32	18,733	32,173	51	25,614	44,583	52
HV-1: Non Industrial Bulk Loads	-	-	-	-	-	-	-	-	-
HV-2: Large and Heavy Power	581	360,102	930	663	391,021	1,043	629	388,003	1,089
HV-3: Railway Traction	3	146,500	331	3	149,475	388	3	160,808	401
HV-4: Lift Irrigation Works	69	105,013	419	69	109,971	458	69	105,013	467
Extra State Consumers	2	3,000	3	3	3,113	0	2	3,000	0
Bulk Supply	-	-	-	-	-	-	-	-	-
<b>GRAND TOTAL</b>	<b>2,615,534</b>	<b>5,696,197</b>	<b>8,175</b>	<b>2,834,755</b>	<b>6,247,098</b>	<b>9,011</b>	<b>2,719,334</b>	<b>6,226,168</b>	<b>9,289</b>



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No of Consumers, Connected Load and Consumption for Consolidated Discom - Tariff Filing FY 2007-08 to FY 2009-10									
DisCom: CONSOLIDATED	FY 2007-08			FY 2008-09			FY 2009-10		
	No of Consumers	Connected Load (kW)	Sales (MU)	No of Consumers	Connected Load (kW)	Sales (MU)	No of Consumers	Connected Load (kW)	Sales (MU)
LMV-1: Domestic Light, Fan & Power	7,686,197	12,672,623	13,449	8,350,897	13,704,890	14,511	8,299,409	13,822,388	15,263
LMV-2: Non Domestic Light, Fan & Power	918,661	1,996,977	2,601	981,368	2,185,289	2,650	1,096,128	2,398,232	2,875
LMV-3: Public Lamps	5,718	109,643	422	7,449	129,427	512	6,436	120,857	574
LMV-4: Insitutions	33,993	450,774	1,461	36,517	455,576	1,349	37,147	498,930	1,362
LMV-5: Private Tube Wells	728,963	3,925,048	4,317	810,623	4,145,799	4,654	777,484	4,184,718	4,840
Power Loom (LMV-6A)	42,903	305,351	420	52,578	375,763	540	42,903	305,351	585
LMV 6: Small and Medium Power - 6B	99,260	1,058,955	1,446	96,463	1,041,600	1,564	136,808	1,421,501	1,624
LMV-7: Public Water Works	6,252	181,671	741	6,616	207,479	787	7,852	218,514	822
LMV-8: S T W and Pumped Canals	29,180	471,489	1,311	30,311	519,067	1,586	34,545	564,919	1,581
LMV-9: Temporary Supply	2,532	16,564	40	3,072	22,468	42	45,618	329,154	53
LMV-10: Deptt. Emp. and Pensioners	71,575	182,284	149	71,131	179,952	379	79,054	195,302	385
HV-1: Non Industrial Bulk Loads	-	-	-	-	-	-	-	-	-
HV-2: Large and Heavy Power	6,484	2,475,998	6,431	7,502	2,770,089	7,459	8,878	3,341,885	7,854
HV-3: Railway Traction	9	260,500	653	8	252,475	614	10	282,592	634
HV-4: Lift Irrigation Works	111	151,662	558	110	160,819	602	111	151,662	614
Extra State Consumers	7	14,100	22	7	509,607	30	7	14,100	31
Bulk Supply	2	1,294,459	3,074	2	1,463,497	2,981	2	1,571,590	3,115
<b>GRAND TOTAL</b>	<b>9,631,847</b>	<b>25,568,098</b>	<b>37,097</b>	<b>10,454,654</b>	<b>28,123,797</b>	<b>40,258</b>	<b>10,572,392</b>	<b>29,421,695</b>	<b>42,214</b>



## ANNEXURE – IV

### DISCOM WISE DETAILS FOR POWER PURCHASE (QUANTUM & COSTS):

Details	Power Purchase Cost and Projections - Agra Discom				
	FY 2007-08 (Actual) (Unaudited)	FY 2007-08 Tariff Order	FY 2008-09 (Provisional)	FY 2008-09 Tariff Order	FY 2009-10 (Projected)
Energy Procured: Net Generation (MUs)	15,217	14,792	15,391	15,485	13,516
Cost of Generation (Rs.Cr)	3,271	3,323	3,975	3,634	4,498
Energy Delivered by UPPTCL (MU)	14,246	14,052	14,409	14,711	12,709
Transmission Rate (Rs./kWh)	0.124	0.191	0.112	0.216	0.137
Cost of Transmission (Rs.Cr)	176	269	161	258	185
<b>Total Power Purchase Cost (Rs.Cr)</b>	<b>3,447</b>	<b>3,592</b>	<b>4,136</b>	<b>3,892</b>	<b>4,683</b>

Details	Power Purchase Cost and Projections - Meerut Discom				
	FY 2007-08 (Actual) (Unaudited)	FY 2007-08 Tariff Order	FY 2008-09 (Provisional)	FY 2008-09 Tariff Order	FY 2009-10 (Projected)
Energy Procured: Net Generation (MUs)	18,125	18,686	18,386	19,257	18,098
Cost of Generation (Rs.Cr)	3,896	4,198	4,749	4,519	5,047
Energy Delivered by UPPTCL (MU)	16,968	17,752	17,214	18,294	17,016
Transmission Rate (Rs./kWh)	0.124	0.191	0.112	0.216	0.137
Cost of Transmission (Rs.Cr)	210	340	192	386	248
<b>Total Power Purchase Cost (Rs.Cr)</b>	<b>4,106</b>	<b>4,537</b>	<b>4,941</b>	<b>4,905</b>	<b>5,295</b>

Details	Power Purchase Cost and Projections - Lucknow Discom				
	FY 2007-08 (Actual) (Unaudited)	FY 2007-08 Tariff Order	FY 2008-09 (Provisional)	FY 2008-09 Tariff Order	FY 2009-10 (Projected)
Energy Procured: Net Generation (MUs)	9,275	9,922	9,568	10,194	9,789
Cost of Generation (Rs.Cr)	1,994	2,229	2,471	2,392	2,675
Energy Delivered by UPPTCL (MU)	8,683	9,426	8,958	9,684	9,203
Transmission Rate (Rs./kWh)	0.124	0.191	0.112	0.216	0.137
Cost of Transmission (Rs.Cr)	107	180	100	209	134
<b>Total Power Purchase Cost (Rs.Cr)</b>	<b>2,101</b>	<b>2,409</b>	<b>2,571</b>	<b>2,601</b>	<b>2,809</b>



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Details	Power Purchase Cost and Projections - Varanasi Discom				
	FY 2007-08 (Actual) (Unaudited)	FY 2007-08 Tariff Order	FY 2008-09 (Provisional)	FY 2008-09 Tariff Order	FY 2009-10 (Projected)
Energy Procured: Net Generation (MUs)	12,386	13,028	13,029	13,391	13,084
Cost of Generation (Rs.Cr)	2,663	2,927	3,365	3,142	3,575
Energy Delivered by UPPTCL (MU)	11,596	12,377	12,198	12,722	12,301
Transmission Rate (Rs./kWh)	0.124	0.191	0.112	0.216	0.137
Cost of Transmission (Rs.Cr)	143	237	136	274	179
<b>Total Power Purchase Cost (Rs.Cr)</b>	<b>2,806</b>	<b>3,164</b>	<b>3,501</b>	<b>3,417</b>	<b>3,755</b>



**ANNEXURE –V**

**ENERGY BALANCE- DISCOM WISE (PETITION):**

<b>Licencee</b>	<b>FY 2007-08 (Actual) (Unaudited)</b>	<b>FY 2008-09 Provisional</b>	<b>FY 2009-10 (Projected)</b>
<b>Purchase Required (MU) - Transmission Periphery (Generation-Transmission Interface)</b>			
<b>UPPCL(Consolidated Discom)</b>	<b>53,708</b>	<b>55,049</b>	<b>56,609</b>
MEERUT (Incl. Bulk)	17,698	17,954	18,089
AGRA (Incl. Bulk)	14,858	15,029	16,120
LUCKNOW	9,057	9,343	9,587
VARANASI	12,095	12,723	12,814
<b>Energy Received by Discom. (MU) - (Transmission-Distribution Interface)</b>			
<b>UPPCL(Consolidated Discom)</b>	<b>51,493</b>	<b>52,779</b>	<b>54,345</b>
MEERUT (Incl. Bulk)	16,968	17,214	17,365
AGRA (Incl. Bulk)	14,246	14,409	15,475
LUCKNOW	8,683	8,958	9,203
VARANASI	11,596	12,198	12,301
<b>Sales (MU)</b>			
<b>UPPCL(Consolidated Discom)</b>	<b>37,097</b>	<b>40,258</b>	<b>42,214</b>
MEERUT (Incl. Bulk)	11,948	12,834	13,228
AGRA (Incl. Bulk)	10,425	11,387	12,336
LUCKNOW	6,548	7,025	7,361
VARANASI	8,175	9,011	9,289
<b>Distribution Losses (% of Energy Received)</b>			
<b>UPPCL(Consolidated Discom)</b>	<b>27.96%</b>	<b>23.72%</b>	<b>22.32%</b>
MEERUT (Incl. Bulk)	29.6%	25.45%	23.8%
AGRA (Incl. Bulk)	26.8%	20.97%	20.3%
LUCKNOW	24.6%	21.57%	20.0%
VARANASI	29.5%	26.12%	24.5%



**ANNEXURE – VI**

**DISCOM WISE ASSET CAPITALISATION FOR FY 2008-09- PETITION (IN Rs. Cr)**

Particulars	Balance 31-Mar-08	Investment s	Cap interest	Cap expenses	To GFA	Depreciation	Balance 31-Mar-09
	1	2	3	4	5	6	7
<b>Gross Fixed Assets</b>							
Agra	2,171				507		2,678
Lucknow	1,982				641		2,623
Meerut	3,364				519		3,882
Varanasi	2,307				638		2,945
<b>Total</b>	<b>9,824</b>	-	-	-	<b>2,304</b>	-	<b>12,128</b>
<b>Accumulated Depreciation</b>							
Agra	1,199					190	1,389
Lucknow	1,087					180	1,267
Meerut	1,892					284	2,176
Varanasi	1,020					206	1,225
<b>Total</b>	<b>5,197</b>	-	-	-	-	<b>861</b>	<b>6,058</b>
<b>Work in Progress</b>							
Agra	392	817	27	30	(507)		760
Lucknow	652	894	14	42	(641)		961
Meerut	294	941	23	38	(519)		778
Varanasi	558	973	20	43	(638)		956
<b>Total</b>	<b>1,896</b>	<b>3,625</b>	<b>85</b>	<b>153</b>	<b>(2,304)</b>	-	<b>3,455</b>

**DISCOM WISE ASSET CAPITALISATION FOR FY 2009-10- PETITION (IN Rs. Cr)**

Particulars	Balance 31-Mar-09	Investment s	Cap interest	Cap expenses	To GFA	Depreciation	Balance 31-Mar-10
	1	2	3	4	5	6	7
<b>Gross Fixed Assets</b>							
Agra	2,678				637		3,315
Lucknow	2,623				815		3,437
Meerut	3,882				723		4,606
Varanasi	2,945				896	333	3,841
<b>Total</b>	<b>12,128</b>	-	-	-	<b>3,071</b>	<b>333</b>	<b>15,199</b>
<b>Accumulated</b>							
Agra	1,389					235	1,624
Lucknow	1,267					238	1,505
Meerut	2,176					333	2,509
Varanasi	1,289					266	1,555
<b>Total</b>	<b>6,122</b>	-	-	-	-	<b>1,071</b>	<b>7,193</b>
<b>Work in Progress</b>							
Agra	760	764	28	41	(637)		956
Lucknow	961	1,002	16	57	(815)		1,222
Meerut	778	955	24	51	(723)		1,085
Varanasi	956	1,203	22	59	(896)		1,344
<b>Total</b>	<b>3,455</b>	<b>3,924</b>	<b>90</b>	<b>208</b>	<b>(3,071)</b>	-	<b>4,606</b>



**ANNEXURE – VII**

**DISCOM WISE ARR SUMMARY FY 2007-08 –PETITION (IN Rs. Cr)**

<b>Particulars</b>	<b>Agra</b>	<b>Lucknow</b>	<b>Meerut</b>	<b>Varanasi</b>	<b>Consolidated</b>
Power Purchase Expenses (incl PGCIL charges)	3,271	1,994	3,896	2,663	<b>11,824</b>
Transmission Charges - Intra state (incl SLDC Charges)	176	107	210	143	<b>636</b>
Employee cost	148	171	190	270	<b>778</b>
A&G expenses	29	21	24	28	<b>102</b>
R&M expenses	95	62	82	101	<b>340</b>
Interest & Finance charges	170	134	210	153	<b>668</b>
Depreciation	154	124	206	162	<b>646</b>
<b>Gross Expenditure</b>	<b>4,044</b>	<b>2,613</b>	<b>4,818</b>	<b>3,520</b>	<b>14,994</b>
<b>Expense capitalization</b>					<b>0</b>
<i>Employee cost capitalized</i>	50	26	62	39	<b>176</b>
<i>Interest capitalized</i>	22	12	9	17	<b>60</b>
<i>A&amp;G expenses capitalized</i>	2	1	7	9	<b>19</b>
<b>Net Expenditure</b>	<b>3,970</b>	<b>2,575</b>	<b>4,740</b>	<b>3,455</b>	<b>14,739</b>
<b>Special Appropriations</b>					<b>0</b>
<i>Provision for Bad &amp; Doubtful debts</i>	19	8	1	38	<b>66</b>
<i>Provision for Contingency Reserve</i>	0	0	0	0	<b>0</b>
<i>Prior Period Adjustments/Power Purchase Arrears</i>	0	0	0	0	<b>0</b>
<i>OTS Waivers</i>	0	0	0	0	<b>0</b>
<b>Total net expenditure with provisions</b>	<b>3,988</b>	<b>2,583</b>	<b>4,740</b>	<b>3,493</b>	<b>14,805</b>
Add: Return on Equity	0	0	0	0	<b>0</b>
Less: Non Tariff Income	38	70	12	29	<b>150</b>
					<b>0</b>
<b>Annual Revenue Requirement (ARR)</b>	<b>3,950</b>	<b>2,513</b>	<b>4,729</b>	<b>3,463</b>	<b>14,655</b>
Less: GoUP Subsidy	295	379	561	587	<b>1,822</b>
<b>Revenue From Existing Tariff</b>	<b>2,692</b>	<b>1,713</b>	<b>3,459</b>	<b>2,093</b>	<b>9,957</b>
<b>Net Revenue Gap</b>	<b>963</b>	<b>421</b>	<b>708</b>	<b>784</b>	<b>2,876</b>



**DISCOM WISE ARR SUMMARY FY 2008-09 –PETITION (IN Rs. Cr)**

Particulars	Agra	Lucknow	Meerut	Varanasi	Consolidated
Power Purchase Expenses (incl PGCIL charges)	3,975	2,471	4,749	3,365	14,560
Transmission Charges - Intra state (incl SLDC Charges)	161	100	192	136	590
Employee cost	168	256	222	256	902
A&G expenses	34	25	29	33	121
R&M expenses	98	89	151	104	442
Interest & Finance charges	308	249	377	286	1,221
Depreciation	190	180	284	206	861
<b>Gross Expenditure</b>	<b>4,935</b>	<b>3,371</b>	<b>6,005</b>	<b>4,386</b>	<b>18,696</b>
<b>Expense capitalization</b>					<b>0</b>
<i>Employee cost capitalized</i>	25	38	33	38	135
<i>Interest capitalized</i>	27	14	23	20	85
<i>A&amp;G expenses capitalized</i>	5	4	4	5	18
<b>Net Expenditure</b>	<b>4,877</b>	<b>3,314</b>	<b>5,944</b>	<b>4,323</b>	<b>18,458</b>
<b>Special Appropriations</b>					<b>0</b>
<i>Provision for Bad &amp; Doubtful debts</i>	43	25	20	51	138
<i>Provision for Contingency Reserve</i>	0	0	0	0	0
<i>Prior Period Adjustments/Power Purchase Arrears</i>	0	0	0	0	0
<i>OTS Waivers</i>	0	0	0	0	0
<b>Total net expenditure with provisions</b>	<b>4,920</b>	<b>3,339</b>	<b>5,964</b>	<b>4,373</b>	<b>18,596</b>
Add: Return on Equity	0	0	0	0	0
Less: Non Tariff Income	41	76	13	32	161
					<b>0</b>
<b>Annual Revenue Requirement (ARR)</b>	<b>4,878</b>	<b>3,264</b>	<b>5,951</b>	<b>4,341</b>	<b>18,435</b>
Less: GoUP Subsidy	304	293	410	525	1,532
<b>Revenue From Existing Tariff</b>	<b>3,058</b>	<b>1,999</b>	<b>4,220</b>	<b>2,177</b>	<b>11,454</b>
<b>Net Revenue Gap</b>	<b>1,516</b>	<b>972</b>	<b>1,322</b>	<b>1,639</b>	<b>5,449</b>





**DISCOM WISE ARR SUMMARY FY 2009-10 –PETITION (IN Rs. Cr)**

Particulars	Agra	Lucknow	Meerut	Varanasi	Consolidated
Power Purchase Expenses (incl PGCIL charges)	4,498	2,675	5,047	3,575	15,795
Transmission Charges - Intra state (incl SLDC Charges)	185	134	248	179	746
Employee cost	236	358	309	358	1,260
A&G expenses	37	27	31	35	130
R&M expenses	120	118	175	133	546
Interest & Finance charges	366	276	426	318	1,386
Depreciation	235	238	333	266	1,071
<b>Gross Expenditure</b>	<b>5,676</b>	<b>3,826</b>	<b>6,569</b>	<b>4,864</b>	<b>20,935</b>
<b>Expense capitalization</b>					<b>0</b>
<i>Employee cost capitalized</i>	35	54	46	54	189
<i>Interest capitalized</i>	28	16	24	22	90
<i>A&amp;G expenses capitalized</i>	5	4	5	5	19
<b>Net Expenditure</b>	<b>5,608</b>	<b>3,752</b>	<b>6,493</b>	<b>4,784</b>	<b>20,636</b>
<b>Special Appropriations</b>					<b>0</b>
<i>Provision for Bad &amp; Doubtful debts</i>	48	26	22	53	149
<i>Provision for Contingency Reserve</i>	0	0	0	0	0
<i>Prior Period Adjustments/Power Purchase Arrears</i>	364	226	434	308	1,332
<i>OTS Waivers</i>	20	6	12	17	54
<b>Total net expenditure with provisions</b>	<b>6,039</b>	<b>4,011</b>	<b>6,961</b>	<b>5,161</b>	<b>22,172</b>
Add: Return on Equity	0	0	0	0	0
Less: Non Tariff Income	45	81	13	34	173
					<b>0</b>
<b>Annual Revenue Requirement (ARR)</b>	<b>5,994</b>	<b>3,929</b>	<b>6,948</b>	<b>5,127</b>	<b>21,999</b>
Less: GoUP Subsidy	369	381	473	609	1,832
<b>Revenue From Existing Tariff</b>	<b>3,264</b>	<b>2,174</b>	<b>4,609</b>	<b>2,224</b>	<b>12,271</b>
<b>Net Revenue Gap</b>	<b>2,361</b>	<b>1,375</b>	<b>1,866</b>	<b>2,294</b>	<b>7,895</b>



**ANNEXURE – VIII**

**RATE SCHEDULE FY 2009-10 SUBMITTED BY UPPCL:**

PROPOSED ELECTRICITY TARIFF - UPPCL for FY 2009-10		
Supply Type	CONSUMER CATEGORY	PROPOSED TARIFF FY 2009-10
LMV-1	<b>DOMESTIC LIGHT, FAN &amp; POWER:</b>	<b>Proposed Tariff</b>
	(a) Consumers getting supply as per "Rural Schedule":	
	(i) <b>Un-Metered:</b>	
	Fixed Charge:	Rs.125/Connection/month
	(ii) <b>Metered:</b>	
	Fixed Charge:	Rs.15 /kW/month
	Energy Charge:	Rs.1.00 /kWh
	(b) <b>Supply at single point for bulk loads:</b>	
	Fixed Charge	Rs.35.00/kW/month
	Energy Charge	Rs.2.80 /kWh
	(c) <b>Other Metered Domestic Consumers:</b>	
	1. <b>Life Line Consumers: For consumers with contracted load of 1.00 kW and Energy consumption upto 100 kWh/Month &amp; above 100 kWh upto 150 kwh/month</b>	
	<b>Fixed Charge</b>	
	(for 0 to 100 & above 100 upto 150 Units)	Rs.50 /kW/month
	<b>Energy Charge</b>	
	Upto 100 Units/month	Rs.2.10 /kWh
	Above 100 & upto 150 Units/month	Rs.4.00 /kWh
2. <b>Others:(Urban Metered)</b>		
Fixed Charge	Rs.75 /kW/month	
Energy Charge		
Upto 200 Units/month	Rs.4.00 /kWh	
Above 200 Units/month	Rs.4.75 /kWh	
LMV-2	<b>NON-DOMESTIC LIGHT, FAN &amp; POWER:</b>	<b>Proposed Tariff</b>
	(a) Consumers getting supply as per "Rural Schedule"	
	(i) <b>Un-Metered</b>	
	Fixed Charge	Rs.200/Connection/month
	(ii) <b>Metered</b>	
	Fixed Charge	Rs.50 /kW/month
	Energy Charge	Rs.1.90 /kWh
	(b) <b>Private Advertising/Sign Post/Sign Board/Glow Signs/Flex:</b>	
	(i) <b>Metered</b>	
	Fixed Charge	Nil
	Energy Charge	Rs.10 /kWh
	Minimum Charge	Rs.1000 /kW/month
	(c) <b>Other Metered Consumers: (For All Loads)</b>	
	Fixed Charge	Rs. 125 /kW/month
	Energy Charge	Rs. 5.25/kWh
Minimum Charge	Rs. 400 /kW/month	



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PROPOSED ELECTRICITY TARIFF - UPPCL for FY 2009-10				
Supply Type	CONSUMER CATEGORY		PROPOSED TARIFF FY 2009-10	
LMV-3	<b>PUBLIC LAMPS:</b>		<b>Proposed Tariff</b>	
	(i)	<b>Un-Metered Supply:(Billed on total Connected Load of</b>		
		Gram Pachayat	Rs.1200 /kW or part thereof/ month	
		Nagar Palika and Nagar Panchayat	Rs.1400 /kW or part thereof / month	
		Nagar Nigam	Rs.1800 /kW or part thereof /month	
	(ii)	<b>Metered Supply:(Billed on the basis of MRI downloads at</b>		
		<b>Fixed Charge</b>	-	
		Gram Pachayat	Rs. 125.00 /kW/month	
		Nagar Palika and Nagar Panchayat	Rs. 150.00 /kW/month	
		Nagar Nigam	Rs. 200.00 /kW/month	
		<b>Energy Charge</b>	-	
		Gram Pachayat	Rs. 4.00 /kWh	
		Nagar Palika and Nagar Panchayat	Rs. 4.50 /kWh	
Nagar Nigam		Rs. 4.90 /kWh		
LMV-4	<b>LIGHT, FAN &amp; POWER FOR PUBLIC &amp; PRIVATE INSTITUTION:</b>		<b>Proposed Tariff</b>	
	4 (a)	<b>For Public Institutions:</b>		
		Fixed Charge	Rs.100.00 /kW/month	
		Energy Charge	Rs.5.00 /kWh/month	
		Minimum Charge	Nil	
		<b>For Private Institutions: (For all</b>		
	4 (b)	Fixed Charge	Rs. 110.00 /kW/month	
		Energy Charge	Rs.5.50 /kWh	
		Minimum Charge	Nil	
	LMV-5	<b>SMALL POWER FOR PTW/ PUMPING SETS FOR IRRIGATION PURPOSES:</b>		<b>Proposed Tariff</b>
(a)		<b>Consumers getting supply as per "Rural Schedule"</b>		
		(i)	<b>Un-Metered Supply</b>	
			Fixed Charge	Rs. 75 /BHP/month
			Maximum Lighting Load	30 Watts (2 CFL of 15W).
		(ii)	<b>Metered Supply</b>	
			Fixed Charge	Rs.15 /BHP/month
			Energy Charge	75 paise/kWh
			Minimum Charge	Rs. 65 /BHP/month
		(b)	<b>Consumers getting supply as per "Urban Schedule (Metered Supply)"</b>	
			Fixed Charge	Rs. 30 /BHP/month
			Energy Charge	Rs. 2.00/kWh
			Minimum Charge	Rs. 130 /BHP/month



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PROPOSED ELECTRICITY TARIFF - UPPCL for FY 2009-10		
Supply Type	CONSUMER CATEGORY	PROPOSED TARIFF FY 2009-10
<b>LMV-6</b>	<b>SMALL AND MEDIUM POWER:</b>	<b>Proposed Tariff</b>
	<b>(a) Consumers getting supply other than "Rural Schedule"</b>	
	<b>6(A) Power Loom:</b>	
	Fixed Charge	Nil
	Energy Charge	Nil
	Minimum Charge	Nil
	<b>Small &amp; Medium Power:</b>	
	Fixed Charge	Rs.125.00 /kW/month
	Energy Charge	Rs. 5.00 /kWh
	Minimum Charge	Rs. 500 /kW/month
	<b>(b) Consumers getting supply as per "Rural Schedule"</b>	
	Energy Charge	Consumers getting supply as per Rural Schedule shall be eligible a Rebate of 15% on "Rate of charge".
	Demand Charge	
	Minimum Charge	
<b>LMV-7</b>	<b>PUBLIC WATER WORKS:</b>	<b>Proposed Tariff</b>
	<b>(a) Consumers getting supply other than "Rural Schedule"</b>	
	Fixed Charge	Rs.90 /kW/month
	Energy Charge	Rs.4.0 /kWh
	Minimum Charges	
	Rural	Nil
	Urban	Nil
	<b>(b)</b>	
	Fixed Charge	Consumers getting supply as per Rural Schedule shall be eligible for a Rebate of 15% on fixed charge and energy charge.
	Energy Charge	
<b>LMV-8</b>	<b>STW, PANCHAYTI RAJ TUBE WELL &amp; P C</b>	<b>Proposed Tariff</b>
	<b>(i) Metered</b>	
	Fixed Charge	Rs.100 /BHP/month
	Energy Charge	Rs.4.50 /kWh
	<b>(ii) Un-Metered</b>	
	Fixed Charge	Rs1000 /BHP/month
<b>LMV-9</b>	<b>TEMPORARY SUPPLY:</b>	<b>Proposed Tariff</b>
	<b>(a) Un-Metered</b>	
	<b>(i)</b> Fixed Charges for Illumination/Public Address/ceremonies for loads upto 20 kW/connection plus Rs.100/kw/day for each additional kW	Rs.1500 per day
	<b>(ii)</b> Fixed charges for temporary shops set-up during festivals/melas and having load up to 2 KW	Rs.150 per day
	<b>(b) Metered</b>	
	Energy Charge	
	<b>(i)</b> Individual Residential Construction	Rs.4.00 /kWh
	<b>(ii)</b> Others	Rs.6.00 /kWh
	Minimum Charge:	Rs 150 /kW/week



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PROPOSED ELECTRICITY TARIFF - UPPCL for FY 2009-10				
Supply Type	CONSUMER CATEGORY		PROPOSED TARIFF FY 2009-10	
LMV-10	<b>DEPT. EMPLOYEES AND PENSIONERS:</b>		<b>Proposed Tariff</b>	
	<b>Un-Metered Supply</b>			
	<b>Category</b>		<i>Fixed Charge/month</i>	<i>Fixed Monthly Energy</i>
	Class IV employees/ Operating staff		Rs. 60.00	Rs. 70.00
	Class III employees		Rs. 60.00	Rs. 100.00
	J E & equivalent posts.		Rs.120.00	Rs.200.00
	A E & equivalent posts		Rs.120.00	Rs.300.00
	E E & equivalent posts		Rs.120.00	Rs.330.00
	D.G.M & equivalent posts		Rs.300.00	Rs.400.00
	General Manager and above		Rs.300.00	Rs.480.00
	Additional Charge for using A.C (April to Sept.)		Rs.400.00 per A.C/month.	
	Additional Charge for E D		20%	
	<b>Metered Supply</b>		50% rebate on the rate of charge applicable to other metered consumers under LMV-1 category	
	HV-1	<b>NON-INDUSTRIAL BULK LOAD</b>		<b>Proposed Tariff</b>
<b>Commercial Loads/Private Institutions/Non-Domestic Bulk Power with contracted Load 75 kW &amp; above and getting supply at single point on 11 kV &amp; above voltage level.</b>				
(a)		<b>Demand Charges</b>		
		For Supply at 11 kV	Rs.200 /kVA/month	
		For Supply at 33 kV & above	Rs.180 /kVA/month	
(b)		<b>Energy Charge</b>		
		For Supply at 11 kV	Rs.4.75 /kVAh	
		For Supply at 33 kV & above	Rs.4.50 /kVAh	
<b>Public Institutions with contracted Load 75 kW &amp; above and getting supply at single point on 11 kV &amp; above voltage level.</b>				
(a)		<b>Demand Charges</b>		
		For Supply at 11 kV	Rs.180 /kVA/month	
		For Supply at 33 kV & above	Rs.170 /kVA/month	
(b)		<b>Energy Charge</b>		
		For Supply at 11 kV	Rs.4.10 /kVAh	
	For Supply at 33 kV & above	Rs.4.00 /kVAh		



PROPOSED ELECTRICITY TARIFF - UPPCL for FY 2009-10					
Supply Type	CONSUMER CATEGORY		PROPOSED TARIFF FY 2009-10		
HV-2	<b>LARGE AND HEAVY POWER:</b>		<b>Proposed Tariff</b>		
	<b>(A) Urban Schedule</b>				
	<b>Consumers below 11 kV Supply :</b>				
		Demand Charges (Rs /kVA/Month)	(+ ) 15 % over the rate for consumers connected at 11kV		
		Energy Charge (Rs / kVAh)			
		Minimum Charge (Rs / kVA /Month)			
				<b>For Consumers at 11 kV</b>	
		<b>BASE RATE</b>			
		Demand Charges (Rs /kVA/Month)	210		
		Energy Charge (Rs / kVAh)	5.00		
		Minimum Charge (Rs / kVA /Month)	Nil		
		<b>TOD RATES</b>		<b>TOD RATES</b>	
		2200hrs-0600 hrs	(-) 7.50%		
		0600 hrs-1700 hrs	0.00		
		1700 hrs-2200hrs	(+) 15.0%		
		<b>(A) Rural Schedule</b>		Rural Rebate	
				This Schedule shall be applicable only to consumers getting supply upto 11 kV as per "Rural Schedule".The consumers under this category shall be entitled to a rebate of 15 % on BASE 'Rate of Charge" as given for 11kV consumers under urban schedule without TOD rates	
		<b>(C) Consumers above 11 kV Voltage:</b>			
		<b>BASE RATE</b>		<b>For supply at 33 kV and up to 66 kV</b>	<b>For supply at 132 kV and above voltages</b>
		Demand Charges (Rs /kVA/Month)	200.00	180.00	
		Energy Charge (Rs / kVAh)	4.25	4.00	
		Minimum Charge (Rs / kVA /Month)	-	-	
		<b>TOD Rates</b>			
	2200hrs-0600 hrs	(-) 7.5%	(-) 7.5%		
	0600 hrs-1700 hrs	0	0		
	1700 hrs-2200hrs	(+) 15%	(+) 15%		



PROPOSED ELECTRICITY TARIFF - UPPCL for FY 2009-10			
Supply Type	CONSUMER CATEGORY		PROPOSED TARIFF FY 2009-10
HV-3		<b>RAILWAY/ METRO TRACTION:</b>	<b>Proposed Tariff</b>
	(a)	<b>Demand Charge</b>	
		For supply at & above 132 kV	Rs.180 /kVA/month
		Below 132 kV	Rs.200 /kVA/month
	(b)	<b>Energy Charge</b>	
		For supply at & above 132 kV	Rs.4.50 /kVAh
		Below 132 kV	Rs.4.75 /kVAh
		<b>Minimum Charge</b>	Rs.425 /kVA/month
		<b>DELHI METRO RAIL CORPORATION</b>	<b>Proposed Tariff</b>
	(a)	<b>Demand Charge</b>	
		Supply at 132 kV	NIL
		(Penalty at 540/kVA if demand exceeds contracted load)	
	(b)	<b>Minimum Charge</b>	
	Supply at 132 kV	Rs.425 /kVA/month	
	(Penalty at 540/kVA if demand exceeds contracted load)	Rs.540 /kVA/month	
(b)	<b>Energy Charge</b>		
	Supply at 132 kV	Rs.3.80 /kVAh	
HV-4		<b>Lift Irrigation Works:</b>	<b>Proposed Tariff</b>
	(a)	<b>Demand Charge</b>	
		For Supply at 11 kV	Rs.250 /kVA/month
		For Supply above 11 kV & up to 66 kV	Rs.240 /kVA/month
		For Supply above 66 kV & up to 132 kV	Rs.220 /kVA/month
	(b)	<b>Energy Charge</b>	
		For Supply at 11 kV	Rs.4.80 /kVAh
		For Supply above 11 kV & up to 66 kV	Rs.4.00 /kVAh
		For Supply above 66 kV & up to 132 kV	Rs.3.90 /kVAh
		<b>Minimum Charge</b>	Rs.500 /kVA/month
	<b>Bulk &amp; Extra State :Rs/kWh</b>	<b>3.149</b>	



**ANNEXURE – IX**

**DISCOM WISE DETAILS FOR CONSUMERS & CONNECTED LOAD – APPROVED:**

No of Consumers & Connected Load Approved for FY 2009-10 (Discom-wise and Consolidated)										
Categories	Agra Discom		Meerut Discom		Lucknow Discom		Varanasi Discom		Total - UPPCL	
	No of Consumers	Connected Load (kW)	No of Consumers	Connected Load (kW)	No of Consumers	Connected Load (kW)	No of Consumers	Connected Load (kW)	No of Consumers	Connected Load (kW)
LMV-1: Domestic Light, Fan & Power	1,724,011	2,686,307	2,377,561	4,837,853	2,127,269	2,842,914	2,223,589	3,369,201	8,452,430	13,736,275
LMV-2: Non Domestic Light, Fan & Power	229,354	508,527	298,772	683,166	244,473	525,315	258,604	561,613	1,031,203	2,278,621
LMV-3: Public Lamps	1,399	21,902	708	31,297	3,713	49,273	363	17,731	6,183	120,203
LMV-4: Insitutions	10,456	101,795	5,932	77,855	8,237	130,624	8,779	143,173	33,404	453,447
LMV-5: Private Tube Wells	163,635	1,216,219	308,986	1,693,747	123,801	496,269	170,211	752,423	766,633	4,158,658
Power Loom (LMV-6A)	17,924	116,973	8,586	85,238	12,877	78,257	10,990	75,320	50,377	355,788
LMV 6: Small and Medium Power - 6B	26,165	271,592	29,754	400,871	32,249	307,878	23,268	253,285	111,436	1,233,626
LMV-7: Public Water Works	1,988	45,043	1,601	54,426	1,573	48,813	1,722	48,518	6,884	196,800
LMV-8: S T W and Pumped Canals	5,776	127,803	4,720	67,023	9,670	132,930	10,145	198,033	30,311	525,789
LMV-9: Temporary Supply	257.00	2,741	1,797.00	18,200	1,277.00	8,482	32.00	1,018	3,363	30,441
LMV-10: Deptt. Emp. and Pensioners	13,821	39,161	18,888	58,239	19,248	48,519	25,614	44,583	77,571	190,502
HV-1: Non Industrial Bulk Loads	221	56,148	485	240,256	266	116,870	144	174,256	1,116	587,530
HV-2: Large and Heavy Power	1,794	604,488	4,417	1,604,407	966	362,390	667	396,830	7,844	2,968,115
HV-3: Railway Traction	5	103,901	-	-	1	17,883	3	160,808	9	282,592
HV-4: Lift Irrigation Works	24	25,422	2	311	15	21,326	69	105,013	110	152,072
Extra State Consumers	4	8,000	-	-	1	5,000	3	3,000	8	16,000
Bulk Supply	1	1,525,241	1	45,000	-	-	-	-	2	1,570,241
<b>GRAND TOTAL</b>	<b>2,196,835</b>	<b>7,461,263</b>	<b>3,062,209</b>	<b>9,897,888</b>	<b>2,585,636</b>	<b>5,192,743</b>	<b>2,734,203</b>	<b>6,304,805</b>	<b>10,578,883</b>	<b>28,856,700</b>





**ANNEXURE – X**

**APPROVED MERIT ORDER DESPATCH FY 2009-10 :**

Rank	Power Station	Type	Variable Charge (Rs/kWh)	Power Procurement (MU)	Cumulative Procurement (MU)
1	Khara	UPJVNL-Hydro	Must Run	208	208
2	Matatila	UPJVNL-Hydro	Must Run	67	275
3	Obra (Hydel)	UPJVNL-Hydro	Must Run	175	450
4	Rihand	UPJVNL-Hydro	Must Run	417	866
5	UGC& EYC Power Stations	UPJVNL-Hydro	Must Run	25	891
6	Anpara B	UPRVNL-Thermal	0.95	6,402	7,293
7	Anpara A	UPRVNL-Thermal	0.99	4,026	11,320
8	Co-Generation	Non Conventional	Must Run	1,678	12,998
9	NAPP	NPC	Must Run	300	13,298
10	RAPP	NPC	Must Run	223	13,521
11	RAPP #5 & #6	NPC	Must Run	254	13,775
12	Chamera	NHPC	Must Run	452	14,227
13	Chamera-II	NHPC	Must Run	370	14,598
14	Dhauliganga	NHPC	Must Run	284	14,881
15	Salal I&II	NHPC	Must Run	240	15,121
16	Tanakpur	NHPC	Must Run	104	15,225
17	Uri	NHPC	Must Run	534	15,759
18	Dulhasti	NHPC	Must Run	466	16,225
19	Belka & Babail	UPJVNL-Hydro	Must Run	11	16,236
20	Sheetla	UPJVNL-Hydro	Must Run	10	16,246
21	Nathpa Jhakri	IPP/JV/Others	Must Run	1,244	17,490
22	VishnuPrayag	IPP/JV/Others	Must Run	1,774	19,265
23	Tala Power	IPP/JV/Others	Must Run	184	19,449
24	Tehri Hydro	IPP/JV/Others	Must Run	1,241	20,690
25	Singrauli	NTPC	1.03	5,533	26,223
26	Talchar	NTPC	1.30	83	26,306
27	Obra B	UPRVNL-Thermal	1.34	3,766	30,072
28	Rihand-I	NTPC	1.36	2,771	32,843
29	Rihand II	NTPC	1.42	2,367	35,210
30	Unchahar I	NTPC	1.53	1,951	37,161
31	Obra A	UPRVNL-Thermal	1.60	1,417	38,578
32	Unchahar III	NTPC	1.62	479	39,057
33	Unchahar II	NTPC	1.63	1,032	40,089
34	Kahalgaon St.II Ph.I	NTPC	1.85	1,127	41,216
35	Paricha Ext	UPRVNL-Thermal	1.92	2,526	43,742
36	Kahalgaon	NTPC	1.95	724	44,466
37	Farakka	NTPC	2.01	342	44,809
38	Panki	UPRVNL-Thermal	2.29	823	45,632
39	Paricha	UPRVNL-Thermal	2.38	805	46,436
40	Anta	NTPC	2.52	728	47,164
41	Auriya	NTPC	2.75	1,530	48,694
42	Dadri Thermal	NTPC	2.84	642	49,336
43	Harduaganj	UPRVNL-Thermal	2.98	796	50,131
44	Rosa Power	IPP/JV/Others	3.00	613	50,744
45	Dadri Gas	NTPC	3.03	1,782	52,526
46	Tanda	NTPC	3.14	2,644	55,170
47	Others	IPP/JV/Others	5.00	1,271	56,441



**ANNEXURE – XI**

**DISCOM-WISE SUMMARY OF ARR FOR FY 2009-10**

<b>Approved ARR for FY 2009-10 for Lucknow Discom</b>		
<b>Particulars</b>	<b>FY 2009-10 (Rs.Crores)</b>	
	<b>Petitioner</b>	<b>Commission</b>
Power Purchase Expenses (incl PGCIL charges)	2,675	2,407
Transmission Charges - Intra state	134	115
Employee cost	358	320
A&G expenses	27	27
R&M expenses	118	101
Interest charges	276	134
Depreciation	238	190
<b>Gross Expenditure</b>	<b>3,826</b>	<b>3,293</b>
<b>Expense capitalization</b>		
<i>Employee cost capitalized</i>	54	48
<i>Interest capitalized</i>	16	17
<i>A&amp;G expenses capitalized</i>	4	4
<b>Net Expenditure</b>	<b>3,752</b>	<b>3,224</b>
<b>Special Appropriations</b>		
<i>Provision for Bad &amp; Doubtful debts</i>	26	-
<i>Provision for Contingency Reserve</i>	-	-
<i>Prior Period Adjustments</i>	226	-
<i>OTS Waivers</i>	6	6
<b>Total net expenditure with provisions</b>	<b>4,011</b>	<b>3,230</b>
Add: Return on Equity	-	-
Less: Non Tariff Income	81	81
<b>Annual Revenue Requirement (ARR)</b>	<b>3,929</b>	<b>3,149</b>



<b>Approved ARR for FY 2009-10 for Meerut Discom</b>		
<b>Particulars</b>	<b>FY 2009-10 (Rs.Crores)</b>	
	<b>Petitioner</b>	<b>Commission</b>
Power Purchase Expenses (incl PGCIL charges)	5,047	4,715
Transmission Charges - Intra state	248	220
Employee cost	309	275
A&G expenses	31	31
R&M expenses	175	170
Interest charges	426	182
Depreciation	333	300
<b>Gross Expenditure</b>	<b>6,569</b>	<b>5,894</b>
<b>Expense capitalization</b>		
<i>Employee cost capitalized</i>	46	41
<i>Interest capitalized</i>	24	21
<i>A&amp;G expenses capitalized</i>	5	5
<b>Net Expenditure</b>	<b>6,493</b>	<b>5,826</b>
<b>Special Appropriations</b>		
<i>Provision for Bad &amp; Doubtful debts</i>	22	-
<i>Provision for Contingency Reserve</i>	-	-
<i>Prior Period Adjustments</i>	434	-
<i>OTS Waivers</i>	12	12
<b>Total net expenditure with provisions</b>	<b>6,961</b>	<b>5,838</b>
Add: Return on Equity	-	-
Less: Non Tariff Income	13	13
<b>Annual Revenue Requirement (ARR)</b>	<b>6,948</b>	<b>5,824</b>



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Approved ARR for FY 2009-10 for Varanasi Discom		
Particulars	FY 2009-10 (Rs.Crores)	
	Petitioner	Commission
Power Purchase Expenses (incl PGCIL charges)	3,575	3,211
Transmission Charges - Intra state	179	153
Employee cost	358	315
A&G expenses	35	35
R&M expenses	133	115
Interest charges	318	133
Depreciation	266	208
<b>Gross Expenditure</b>	<b>4,864</b>	<b>4,170</b>
<b>Expense capitalization</b>		
<i>Employee cost capitalized</i>	54	47
<i>Interest capitalized</i>	22	17
<i>A&amp;G expenses capitalized</i>	5	5
<b>Net Expenditure</b>	<b>4,784</b>	<b>4,100</b>
<b>Special Appropriations</b>		
<i>Provision for Bad &amp; Doubtful debts</i>	53	-
<i>Provision for Contingency Reserve</i>	-	-
<i>Prior Period Adjustments</i>	308	-
<i>OTS Waivers</i>	17	17
<b>Total net expenditure with provisions</b>	<b>5,161</b>	<b>4,118</b>
Add: Return on Equity	-	-
Less: Non Tariff Income	34	34
<b>Annual Revenue Requirement (ARR)</b>	<b>5,127</b>	<b>4,083</b>



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<b>Approved ARR for FY 2009-10 for Agra Discom</b>		
<b>Particulars</b>	<b>FY 2009-10 (Rs.Crores)</b>	
	<b>Petitioner</b>	<b>Commission</b>
Power Purchase Expenses (incl PGCIL charges)	4,498	3,949
Transmission Charges - Intra state	185	153
Employee cost	236	209
A&G expenses	37	37
R&M expenses	120	109
Interest charges	366	154
Depreciation	235	203
<b>Gross Expenditure</b>	<b>5,676</b>	<b>4,814</b>
<b>Expense capitalization</b>		
<i>Employee cost capitalized</i>	35	31
<i>Interest capitalized</i>	28	18
<i>A&amp;G expenses capitalized</i>	5	5
<b>Net Expenditure</b>	<b>5,608</b>	<b>4,759</b>
<b>Special Appropriations</b>		
<i>Provision for Bad &amp; Doubtful debts</i>	48	-
<i>Provision for Contingency Reserve</i>	-	-
<i>Prior Period Adjustments</i>	364	-
<i>OTS Waivers</i>	20	20
<b>Total net expenditure with provisions</b>	<b>6,039</b>	<b>4,778</b>
Add: Return on Equity	-	-
Less: Non Tariff Income	45	45
<b>Annual Revenue Requirement (ARR)</b>	<b>5,994</b>	<b>4,734</b>



**ANNEXURE – XII**

***RATE SCHEDULE FOR FY 2009-10***



## **RETAIL TARIFFS FOR FINANCIAL YEAR 2009-10:**

The Uttar Pradesh Electricity Regulatory Commission (UPERC), in exercise of power vested in it under Section 24 of the Electricity Reforms Act, 1999 and Section 61 & 62 of the Electricity Act, 2003 & vide its Order dated 31.3.2010 on the ARR / Tariff Petitions filed by four Govt. owned distribution companies viz. PaVVNL (Meerut), MVVNL (Lucknow), PVVNL (Varanasi), & DVVNL (Agra) for the FY 2009-10 has determined the retail supply tariffs that will be charged from the different category of consumers existing under these four DISCOMS. The Retail Tariffs as determined under this Tariff Order shall also apply provisionally to the consumers in the area of operations of M/s. KESCO and M/s. NPCL till separate Tariff Orders for FY 2009–10 are issued in their case.

### **GENERAL PROVISIONS:**

These provisions shall apply to all categories unless specified otherwise and are integral part of the Rate Schedule.

#### **1. NEW CONNECTIONS:**

- (i) All new connections shall be given as per the applicable provisions of Supply Code and shall be released in multiples of KW only. Further, for tariff application purposes fractional kW loads (if any) of already existing consumers shall be treated as next higher kW load;
- (ii) New connection of 25 kW & above loads for Light, Fan & Power and 25 BHP & above for Motive Power Loads shall be given with installation of demand recording Static Tri-vector Meter (TVM) or TOD meters as may be appropriate. Licensee shall ensure installation of Tri-vector Meter (TVM) or TOD meters (Demand Recording Meters), (as may be appropriate) on all existing consumers with load of 25 kW/ 25 BHP and above as the case may be.

#### **2. READING OF METERS:**

As per applicable provisions of Supply Code.

#### **3. BILLING WHEN METER IS NOT ACCESSIBLE OR NOT READ (NA / NR BILLS - PROVISIONAL PAYMENT):**



As per the provisions of applicable Supply Code with a provision of penalty of Rs. 300 / kW /month for the purposes of Clause 6.2(c) of applicable Supply Code.

**4. BILLING IN CASE OF DEFECTIVE METERS:**

As per the applicable provisions of Supply Code

**5. KVAH TARIFF:**

'kVAh based tariffs' shall be applicable on all consumers having contracted load of 25 kW & above for Light, Fan & Power and 25 BHP & above for Motive Power Loads, under different categories with static TVM / TOD meters installed (as appropriate).

The rates prescribed in different categories in terms of kW and kWh will be converted into appropriate kVA and kVAh by multiplying Fixed / Demand Charges, Energy Charges and Minimum Charges by an average power factor of 0.90. Similarly, the Fixed / Demand Charges and Minimum Charges expressed in BHP can be converted into respective kVA rates in accordance with formula given below:

**Demand Charges in kVA = (Demand Charges in BHP \* 0.90) / 0.746**

By applying the same formula Fixed Charges & Minimum Charges can also be calculated.

**Note:** If the power factor of a consumer is leading and is within the range of 0.95 -1.00, then for tariff application purposes such leading power factor shall be treated as unity. The bills of such consumers shall be prepared accordingly. However, if the leading power factor is below 0.95 (lead) then the consumer shall be billed as per the kVAh reading indicated by the meter. However, the aforesaid provision of treating power factor below 0.95 (lead) as the commensurate lagging power factor for the purposes of billing shall not be applicable on HV-3 category and shall be treated as unity. Hence, for HV-3, lag + lead logic of the meter should not be used and "lag only" logic of the meter should be provided which blocks leading kVARh thereby treating leading power factor as unity and registering instantaneous kWh as instantaneous kVAh in case of leading power factor.

**6. BILLABLE DEMAND:**





For all consumers having static Tri-vector Meter / TOD Meters (Demand Recording Meters) installed, the billed demand during a month shall be the actual maximum demand as indicated by TVM / TOD meter (can be in parts of kVA) or 75% of the contracted load, whichever is higher. The contracted load in kW shall be divided by a power factor of 0.90 to work out the equivalent contracted load in kVA and rounded off to nearest integer.

## **7. SURCHARGE/PENALTY:**

### **(i) DELAYED PAYMENT:**

If a consumer fails to pay his electricity bill by the due date specified therein, a late payment surcharge shall be levied at 1.25 % per month; up-to first three months and subsequently @ 1.5% per month. Late payment surcharge shall be calculated proportionately for the number of days for which the payment is delayed beyond the due date specified in the bill and levied on the unpaid amount of the bill excluding surcharge. Imposition of this surcharge is without prejudice to the right of the Licensee to disconnect the supply or take any other measure permissible under the law.

### **(ii) CHARGES FOR EXCEEDING CONTRACTED DEMAND:**

If the maximum demand in any month of a consumer having TVM / TOD / Demand recording meters does not exceed the Contracted Demand beyond 10% then such excess demand shall be levied at normal rate as charged for exceeding contracted demand apart from the demand charge recovery as per the maximum demand recorded by the meter.

However, if the demand exceeds the contracted demand by more than 10%; then such excess demand shall be levied at twice the normal rate apart from the demand charge on the maximum demand indicated by the meter.

This additional charge shall be without prejudice to the licensee's right to take such other appropriate action including disconnection of supply, as may be deemed necessary to restrain the consumer from exceeding his contracted load.

Any surcharge/penalty shall be over and above the minimum charge, if the consumption bill of the consumer is being prepared on the basis of minimum charge.



**8. POWER FACTOR SURCHARGE:**

- (i) It shall be obligatory for all consumers to maintain an average power factor of more than 0.85 during any billing period. No new connections of motive power loads / inductive loads above 3 kW, other than under LMV-1 and LMV-2 category, and / or of welding transformers above 1kVA shall be given, unless shunt capacitors having I.S.I specifications of appropriate ratings are installed, as **ANNEXURE – XIV**.
- (ii) In respect of the consumers with or without static TVMs, excluding consumers under LMV-1 category up to connected load of 10 kW and LMV-2 category up to connected load of 5 kW, if on inspection it is found that capacitors of appropriate rating are missing or in-operational and licensee can prove that the absence of capacitor is bringing down the power factor of the consumer below the obligatory norm of 0.85; then a surcharge of 15% of the amount of bill shall be levied on such consumers. Licensee may also initiate action under the relevant provisions of the Electricity Act, 2003, as amended from time to time.  
Notwithstanding above the licensee also has a right to disconnect the power supply, if the power factor falls below 0.75.
- (iii) Power factor surcharge shall however, not be levied during the period of disconnection on account of any reason whatsoever and where consumer is being billed on kVAh consumption basis.

**9. INCENTIVE SCHEME FOR REDUCING DISTRIBUTION LOSSES:**

These schemes shall be applicable for all consumers under LMV-1 (excluding bulk load consumers getting supply at single point covered under 3 (b) of LMV 1 Rate Schedule), LMV -2 & LMV-6 categories.

**(a) FOR INDIVIDUAL CONSUMERS:**

Individual consumers from LMV-1, LMV-2 & LMV-6 categories who give their consent for installation of check meter outside their premises on electricity pole or otherwise in a separate or collective meter housing created for the purpose, from which supply is extended to them, shall be provided a discount of 5% on energy charge applicable to them provided the variation in the reading of the consumer meter and the check meter is



less than 2%. The expenses incurred on installation of such pole with check meter outside the premises of the consumer or for creation of meter rooms (housing individual meters) with check meter shall be borne by the distribution licensee of the area and the Commission shall allow the expenses so incurred on this account by the licensee as pass through in the future ARR requirement. In case licensee is unable to make such arrangement after a consumer has given his consent because of financial constraint or otherwise, it may allow the consumer to procure a standard make meter and cable at standard price (as may be prescribed by the licensee for this purpose), and get the meter installed outside the premises. In all such cases, the expenses incurred by the consumer, i.e. cost of meter, cabling and other associated costs (standard costs as prescribed by the licensee), shall be adjusted in the 12 subsequent bills of the consumer.

**(b) ON DISTRIBUTION TRANSFORMER BASIS:**

If a group of consumers, either of same category or of mixed category, fed through a particular distribution transformer, on their own initiative, are able to show to the licensee that the distribution losses (energy supplied from LT side of the transformer – total energy recorded by individual consumer meters) on power supplied from their transformer is less than 8%, they shall be charged on the rate of charge given in their respective rate schedule with a rebate of 25 paise per unit on their energy charges. For consumers whose meters are defective the energy consumption shall be taken as average of past three billing cycle and the distribution losses shall be assessed accordingly.

**NOTE:**

1. For the purposes of implementation of above schemes, the licensee shall ensure installation of meters on the pole outside the premises of the consumer / distribution transformers within one month of such request in writing by the consumer/ representative of group of consumers. For applicability of the scheme (b) installation of meter at distribution transformer shall remain undivided responsibility of the licensee.
2. Consumers shall however note that they shall be entitled to rebate under any one of the incentive schemes detailed above at a time.



**10. PROTECTIVE LOAD:**

Consumers getting supply on independent feeder at 11kV & above voltage, emanating from sub-station, may opt for facility of protective load and avail supply during the period of scheduled rostering imposed by the licensee, except under emergency rostering. An additional charge @ 100% of base demand charges fixed per month shall be levied on the contracted protective load each month. During the period of scheduled rostering, the load shall not exceed the sanctioned protective load. In case the consumer exceeds the sanctioned protective load during scheduled rostering, he shall be liable to pay twice the prescribed charges for such excess load. The charges on account of protective load shall not be taken into account towards computation of minimum charge.

**11. ROUNDING OFF:**

All bills will be rounded off to the nearest rupee.

**12. OPTION OF MIGRATION TO HV2 CATEGORY:**

The consumer under LMV-1, LMV-2, LMV-4 and LMV-6 with contracted load above 50 kW and getting supply at 11 kV & above voltage shall continue to have an option to migrate to the HV-2 category. Furthermore, the consumers shall have an option of migrating back to the original category, if he so desires.

**13. PRE-PAID METERS / AUTOMATIC METER READING SYSTEM:**

In line with the directive given in the last tariff order, the Commission directs the licensees to expedite the process of introduction of pre-paid meters on all government connections and public institutions wanting to opt for with loads below 45 kW and installation of automatic meter reading systems for loads above 45 kW. The Commission directs the licensees to submit a bi-monthly progress report intimating the status in this regard.



**RATE SCHEDULE LMV – 1:**

**DOMESTIC LIGHT, FAN & POWER:**

**1. APPLICABILITY:**

This schedule shall apply to:

a) Residential premises for Light, Fan & Power and other domestic purposes, Janata Service Connections, Kutir Jyoti Connections, Places of Worship e.g. Temples, Mosques, Gurudwaras, Churches and Electric Crematoria.

b) Mixed Loads

**i. 50 kW and above**

a. Registered Societies, Residential Colonies / Townships, Residential Multi-Storied Buildings with mixed loads (getting supply at single point) with the condition that 70% of the total contracted load shall be exclusively for the purposes of domestic light, fan and power. The above mixed load, within 70%, shall also include the load required for lifts, water pumps and common lighting,

b. Cantonments (mixed load without any restriction) and any other defence installation outside cantonment with predominantly domestic load (domestic load more than 50%)

**ii. Less than 50 kW**

For mixed loads less than 50 kW, however, if some portion of the above load is utilized for conduct of business for non-domestic purposes then the entire energy consumed shall be charged under the rate schedule of higher charge.

**2. CHARACTER AND POINT OF SUPPLY:**

As per the applicable provisions of Supply Code.

**3. RATE OF CHARGE:**

Rate of charge gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

**(a) Consumers getting supply as per 'Rural Schedule'**

Description	Fixed charge	Energy charge)
i) Un-metered	Rs. 125 /connection/ month	Nil
ii) Metered	Rs. 15 /kW/ month	Rs. 1.00 / kWh



**(b) Supply at Single Point for bulk loads:**

Description	Fixed Charge	Energy Charge
For Townships, Registered Societies, Residential Colonies, multi-storied residential complexes (including lifts, water pumps and common lighting within the premises) with loads 50 kW and above with the restriction that at least 70% of the total contracted load is meant exclusively for the domestic light, fan and power purposes and for Cantonments (Mixed Loads without any load restriction), defence installation outside the cantonment with predominantly domestic load (domestic load more than 50%)	Rs. 40.00 / kW/ Month	Rs.3.20/kWh

The body seeking the supply at Single point for bulk loads under this category shall be considered as a deemed franchisee of the Licensee.

**(c) OTHER METERED DOMESTIC CONSUMERS:**

- 1. Lifeline consumers:** Consumers with contracted load of 1 kW, energy consumption upto 150 kWh/month.

Description	Fixed Charge	Energy Charge
Loads of 1 kW only and for consumption upto 100 kWh / month (0 to 100 kWh/Month)	Rs. 50.00 / kW/ Month	Rs. 1.90/ kWh
Loads of 1 kW only and for consumption above 100 kWh / month upto 150 kWh/month (101 to 150 kWh/Month)		Rs. 2.50/ kWh

- 2. Others:** Other than life line consumers (i.e. consumers who do not qualify under the criteria laid down for lifeline consumers.)



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Description	Consumption Range	Fixed Charge	Energy Charge
All loads	Upto 200 kWh / Month	Rs. 65.00 / kW/ Month	Rs. 3.45/kWh
	Above 200 kWh / Month (From 201 <sup>st</sup> unit onwards)		Rs. 3.80/kWh

**Note:**

1. For all consumers under this category the maximum demand during the month recorded by the meter has to be essentially indicated in their monthly bills. However, this condition would be mandatory only in case meter reading is done by the licensee. Accordingly, if the bill is being prepared on the basis of reading being submitted by the consumer then the consumer would not be liable to furnish maximum demand during the month and his bill would not be held back for lack of data on maximum demand. Recording of such maximum demand will be used for the purposes of system planning and consumer education in the current tariff year.



**RATE SCHEDULE LMV- 2:**

**NON DOMESTIC LIGHT, FAN AND POWER:**

**1. APPLICABILITY:**

This schedule shall apply to all consumers using electric energy for Light, Fan and Power loads for Non Domestic purposes, like all type of Shops, Hotels, Restaurants, Private Guest Houses, Private Transit Hostels, Private Students Hostels, Marriage Houses, Show-Rooms, Commercial / Trading Establishments, Cinema and Theatres, Banks, Cable T.V. Operator, Telephone Booths / PCO (STD / ISD), Fax Communication Centers, Photo Copiers, Cyber Café, Private Diagnostic Centers including X-Ray Plants, MRI centers, CAT Scan centers, Pathologies and Private Advertising / Sign Posts / Sign Boards, Commercial Institutions / Societies, Automobile Service Centers, Coaching Institutes, Private Museums, Power Looms with less than 5 kW load and for all companies registered under Companies Act-1956 with loads less than 75 kW and getting supply at low voltages.

This rate schedule shall also apply to consumers of Light, Fan and Power loads (i.e. excluding motive power loads), not covered under any other rate schedule or expressly excluded from any other LMV rate schedule.

**2. Character and Point of Supply:**

As per the applicable provisions of Supply Code.

**3. RATE OF CHARGE:**

Rate of charge gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

**(a) Consumers getting supply as per 'Rural Schedule':**

Description	Fixed Charge	Energy charge	Minimum Charge
(i) Un-metered	Rs. 200 / connection / month	Nil	--
(ii) Metered	Rs. 50 / kW / month	Rs. 1.90 / kWh	--

**(b) Private Advertising/Sign Posts/Sign Boards/Glow Signs/Flex:**





For all commercial (road side/roof tops of buildings) advertisement hoardings such as Private Advertising/Sign Posts/Sign Boards/Glow Signs/Flex, the rate of charge shall be as below:

Description	Fixed Charge	Energy charge	Minimum Charge
Metered	-	Rs. 10.00 /kWh	Rs. 1000/kW/Month

**Note:**

For application of these rates licensee shall ensure that such consumption is separately metered.

**(c) In all other cases**, including urban consumers and consumers getting supply through rural feeders but exempted from scheduled rostering / restrictions or through co-generating radial feeders in villages / towns.

Consumption Range	Fixed Charge	Energy Charge	Minimum Charge
For all units consumed	Rs. 115.00 / kW/ Month	Rs. 4.95/kWh	Rs. 345/kW/Month

**Note:**

1. For all consumers under this category the maximum demand during the month recorded by the meter has to be essentially indicated in their monthly bills. However, this condition would be mandatory only in case meter reading is done by the licensee. Accordingly, if the bill is being prepared on the basis of reading being submitted by the consumer then the consumer would not be liable to furnish maximum demand during the month and his bill would not be held back for lack of data on maximum demand. Recording of such maximum demand will be used for the purposes of system planning and consumer education in the current tariff year.

**4. REBATE TO POWER LOOMS:**

Rebate to Power Loom consumers shall be applicable in accordance with the Government order dated 14<sup>th</sup> June, 2006 and the Commission's order dated 11<sup>th</sup> July, 2006 subject to adherence of provision of advance subsidy.



**RATE SCHEDULE LMV -3:**

**PUBLIC LAMPS:**

**1. APPLICABILITY:**

This schedule shall apply to Public Lamps including Street Lighting System, Road Traffic Control Signals, Lighting of Public Parks etc. The street lighting in Harijan Basties and Rural Areas are also covered by this rate schedule.

**2. CHARACTER AND POINT OF SUPPLY:**

As per the applicable provisions of Supply Code.

**3. RATE OF CHARGE:**

Rate of charge, gives the fixed charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

**(a) Un-metered Supply:**

Description	Gram Panchayat	Nagar Palika and Nagar Panchayat	Nagar Nigam
To be billed on the basis of total connected load calculated as the summation of individual points	Rs. 1200 per kW or part thereof per month	Rs. 1500 per kW or part thereof per month	Rs. 1800 per kW or part thereof per month

**(b) Metered Supply:**

Description	Gram Panchayat		Nagar Palika and Nagar Panchayat		Nagar Nigam	
	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges	Energy Charges
All loads	Rs. 115 / kW / month	Rs. 4.00 / kWh	Rs. 120 / kW / month	Rs. 4.50/ kWh	Rs. 125/ kW/ Month	Rs. 4.90 / kWh

**3. For 'Maintenance Charges', 'Provision of Lamps' and 'Verification of Load' refer ANNEXURE - XII (B).**



**RATE SCHEDULE LMV- 4:**

**LIGHT, FAN & POWER FOR PUBLIC INSTITUTIONS AND PRIVATE INSTITUTIONS:**

**1. APPLICABILITY:**

**LMV- 4 (A) - PUBLIC INSTITUTIONS:**

This schedule shall apply to:

- (a) Government Hospitals / Government Research Institutions / Offices of the Government Organizations other than companies registered under Companies Act 1956.
- (b) Government & Government aided (i) Educational Institutions (ii) hostels (iii) libraries
- (c) Religious and charitable Institutions including orphanage homes, old age homes and those providing services free of cost or at the charges / structure of charges not exceeding those in similar Government operated institutions.
- (d) Any Defence Installation/organization/institution outside the boundary of cantonment excluding installations with loads above 50 kW getting supply at single point and having predominantly domestic load (domestic load more than 50%).
- (e) Railway Establishments (excluding railway traction, industrial premises & Metro) such as Booking Centers, Railway Stations & Railway Research and Development Organization, Railway rest houses, Railway holiday homes, Railway inspection houses.
- (f) All India Radio and Doordarshan.

**LMV-4 (B) - PRIVATE INSTITUTIONS:**

This schedule shall apply to non-Government hospitals, nursing homes / dispensaries / clinics, private research institutes, and schools / colleges / educational institutes & charitable institutions / trusts not covered under (A) above.



**2. CHARACTER AND POINT OF SUPPLY:**

As per the applicable provisions of Supply Code.

**3. RATE OF CHARGE:**

Rate of charge gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

Description	Fixed Charge	Energy Charge
<b>(A) For Public Institutions</b>	Rs. 100 /kW/ month	Rs. 4.60 / kWh
<b>(B) For Private Institutions</b>	Rs. 110 /kW/ month	Rs. 4.95 / kWh



**RATE SCHEDULE LMV- 5:**

**SMALL POWER FOR PRIVATE TUBE WELLS / PUMPING SETS FOR IRRIGATION PURPOSES:**

**1. APPLICABILITY:**

This schedule shall apply to all power consumers getting supply as per Rural/Urban Schedule for Private Tube-wells/Pumping Sets for irrigation purposes having a contracted load upto 25 BHP and for additional agricultural processes confined to Chaff-Cutter, Thresher, Cane Crusher and Rice Huller. All new connections under this category shall necessarily have the ISI marked energy efficient mono-bloc pump sets with power factor compensation capacitors of adequate rating to qualify for the supply. All existing pump sets shall be required to install power factor compensation capacitors.

**2. CHARACTER AND POINT OF SUPPLY:**

As per the applicable provisions of Supply Code.

**3. RATE OF CHARGE:**

Rate of charge, gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

**(A) For consumers getting supply as per Rural Schedule:**

**(i) Un-metered Supply**

Fixed Charge	Energy Charge	Minimum Charge
Rs. 75 / BHP / month	Nil	Nil
Consumer under this category will be allowed a maximum lighting load of 120 Watts.		

**(ii) Metered Supply**

Fixed Charge	Energy Charge	Minimum Charge
Rs. 15 / BHP / month	Rs. 0.75/ kWh	Rs. 65 / BHP / month

**NOTE:** Minimum bill payable by a consumer under Rural Schedule (Metered Supply) shall be Rs. 65 per BHP per month, till the installation of the meter.



(B) For consumers getting supply as per **Urban Schedule** (Metered Supply) including consumers getting supply through rural feeders exempted from scheduled rostering or through co-generating radial feeders in villages and towns.

Fixed Charge	Energy Charge	Minimum Charge
Rs. 30 / BHP / month	Rs. 2.00 / kWh	Rs. 130 / BHP / month

**NOTE:** Minimum bill payable by a consumer under Urban Schedule (Metered Supply) shall be Rs. 130 per BHP per month, till the installation of the meter.



**Rate Schedule LMV– 6:**

**SMALL AND MEDIUM POWER:**

**1. APPLICABILITY:**

This schedule shall apply to all consumers of electrical energy having a contracted load upto 100 HP (75 kW) for industrial / processing or agro-industrial purposes, power loom (load of 5 KW and above) and to other power consumers, not covered under any other rate schedule. Floriculture / Mushroom farming units having loads up-to 100 BHP (75kW) shall also be covered under this rate schedule. This schedule shall also apply to pumping sets above 25 BHP.

**2. CHARACTER AND POINT OF SUPPLY:**

As per the applicable provisions of Supply Code.

**3. RATE OF CHARGE:**

Rate of charge, gives the demand and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

**(A) Consumers getting supply other than Rural Schedule:**

Consumption Range	Fixed Charge	Energy Charge	Minimum Charge
For all Consumption	Rs. 115.00 / kW/ Month	Rs. 4.95/kWh	Rs. 500/kW/month

**(B) Consumers getting supply as per Rural Schedule:**

Consumer getting supply as per rural schedule shall be eligible for a rebate of 15% on Fixed Charge, Energy charges and Minimum Charges indicated above.

**4. PROVISIONS RELATED TO SEASONAL INDUSTRIES:**

Seasonal industries will be determined in accordance with the criteria laid down below. No exhaustive list can be provided but some examples of industries exhibiting such characteristics are sugar, ice, rice mill and cold storage. The industries which operate during certain period of the year, i.e. have seasonality of operation, can avail the benefits of seasonal industries provided:

- i) The load of such industry is above 25 BHP (for motive power loads) & 25 kW (other loads) and have Tri-vector Meters/TOD meters installed at their premises.



- ii) The continuous period of operation of such industries shall be at least 4 (four) months but not more than 9 (nine) months in a financial year.
- iii) Any prospective consumer, desirous of availing the seasonal benefit, shall specifically declare his season at the time of submission of declaration/execution of agreement mentioning the period of operation unambiguously.
- iv) The seasonal period once notified cannot be reduced during the next consecutive 12 months. The off-season tariff is not applicable to composite units having seasonal and other category loads.
- v) The off-season tariff is also not available to those units who have captive generation exclusively for process during season and who avail licensees supply for miscellaneous loads and other non-process loads.
- vi) The consumer opting for seasonal benefit has a flexibility to declare his off seasonal maximum demand subject to a maximum of 25% of the contracted demand. The tariff rates (demand charge per kW/ kVA and energy charge per kWh/ kVAh) for such industries during off-season period will be the same as for normal period but with no minimum charges. Further, during the off season fixed charges shall be levied on the basis of maximum demand recorded by the meter (not on normal billable demand or on percentage contracted demand). Rates for the energy charges shall however be the same as during the operational season. Further, first violation in the season would attract full billable demand charges and energy charges calculated at the unit rate 50% higher than the applicable tariff during normal period but only for the month in which the consumer has defaulted. However, on second default the consumer will forfeit the benefit of seasonal rates for the entire season.

**5. REBATE TO POWER LOOMS:**

Rebate to Power Loom consumers shall be applicable in accordance with the Government order dated 14<sup>th</sup> June, 2006 and the Commission's order dated 11<sup>th</sup> July, 2006 subject to adherence of provision of advance subsidy.

**6. FACTORY LIGHTING:**

The electrical energy supplied shall also be utilized 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, crèche, dispensary, staff welfare centers, compound lighting, etc. No separate connection for the same shall be provided.

#### 7. LOAD FACTOR REBATE:

For any excess consumption over the defined kVAh per KVA (of maximum demand recorded) as defined in the table below, a graded rebate is provided on the energy charges for such excess consumption. This rebate will be available on monthly basis and will be given to the consumer for each slab.

Description	Rebate on Energy charges
For all consumption over 288 kVAh per kVA up to 432 kVAh per kVA per month	7.5% on the consumption over 288 kVAh /kVA/month and up to 432 kVAh / kVA / month
For all consumption over 432 kVAh per kVA up to 504 kVAh per kVA per month	7.5% as applicable in first slab <i>plus</i> 10% on the consumption over 432 kVAh /kVA/month and up to 504 kVAh / kVA / month
For all consumption in excess of 504 kVAh per kVA per month	7.5% as applicable in first slab <i>plus</i> 10% as applicable in second slab <i>plus</i> 20% on the consumption over 504 kVAh /kVA/month

**Note:** Consumer with arrears shall not be eligible for above rebate. In case the consumer has obtained an order of stay from a court or any other statutory authority, the amount of load factor rebate for which the consumer is eligible in respect of the amount of the bill shall be calculated and the same shall accrue to the account of the consumer. However, the actual credit thereof shall not be given to the consumer in his monthly bill until the case relating to the dispute regarding arrear is finally decided by the competent court / statutory authority.



**RATE SCHEDULE LMV– 7:**

**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. CHARACTER AND POINT OF SUPPLY:**

As per the applicable provisions of Supply Code.

**3. RATE OF CHARGE:**

**(A) Consumers getting supply other than “Rural Schedule”:**

Rate of charge gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

<b>Fixed Charge</b>	<b>Energy Charge</b>
Rs. 90 /kW/Month	Rs. 4.40/kWh

**(B) Consumers getting supply as per “Rural Schedule”:**

Consumer getting supply as per rural schedule shall be eligible for a rebate of 15% on fixed charges and energy charges.



**Rate Schedule LMV – 8:**

**STATE TUBE WELLS / PANCHAYTI RAJ TUBE WELL & PUMPED CANALS:**

**1. APPLICABILITY:**

- (i) This schedule shall apply to supply of power for all State Tubewells, including Tubewells operated by Panchayti Raj, W.B Tubewells, Indo Dutch Tubewells, Pumped Canals and Lift Irrigation schemes having a load upto 100 BHP.
- (ii) Laghu Dal Nahar having load above 100 BHP.

**2. CHARACTER AND POINT OF SUPPLY:**

As per the applicable provisions of Supply Code.

**3. RATE OF CHARGE:**

Rate of charge gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

Description	Fixed charge	Energy Charge
Metered	Rs. 100/BHP/month	Rs. 4.40/kWh
Un-metered	Rs. 1000/BHP/month	-

4. For finding out net additional load during any quarter of the year for this category refer **ANNEXURE - XII (C)**.



**RATE SCHEDULE LMV – 9:**

**TEMPORARY SUPPLY:**

**1. APPLICABILITY:**

**A) Un-metered Supply for Illumination/ Public Address/ Temporary Shops in Melas:**

This schedule shall apply to temporary supply of light, fan & power up to 20 KW, Public address system and illumination loads during functions, ceremonies and festivities and temporary shops, not exceeding three months.

**B) Metered Supply for all other purposes:**

This schedule shall apply to all temporary supplies of light, fan and power load for the purpose other than mentioned in (A) above.

This schedule shall also apply for power taken for construction purposes not exceeding two years, including civil work by all consumers and Govt. Departments.

**2. CHARACTER AND POINT OF SUPPLY:**

As per the applicable provisions of Supply Code.

**3. RATE OF CHARGE (SEPARATELY FOR EACH POINT OF SUPPLY):**

Rate of charge gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

**A. Un-metered:**

(i) Fixed charges <b>for illumination / public address / ceremonies</b> for load up to 20 kW per connection plus Rs.100 per kW per day for each additional kW.	Rs. 1800 / day
(ii) Fixed charges for <b>temporary shops</b> set-up during festivals / melas or otherwise and having load up to 2KW	Rs. 120 / day/shop



**B. Metered:**

Description	Energy Charge	Minimum Charge
Individual Residential construction	Rs. 4.00 / kWh	Rs. 115/kW/week
Others	Rs. 5.75 / kWh	

**Note:**

1. Charge as specified at A, shall be paid by the consumer in advance.
2. A consumer under metered category may undertake any extension work, in the same premises, on his existing connection without taking any temporary connection as long as his demand does not exceed his contracted demand and the consumer shall be billed in accordance with the tariff applicable to that category of consumer.



### **RATE SCHEDULE LMV- 10:**

#### **DEPARTMENTAL EMPLOYEES AND PENSIONERS:**

##### **1. APPLICABILITY:**

This schedule shall apply only to such employees and pensioners (including the cases of voluntary or deemed retired) of Licensees/ successor entities of erstwhile UPSEB, who own electricity connection in their own name and opt for the same for their own use for light, fan and power for domestic appliances, where the energy is being fed directly from licensee mains. The Schedule shall also apply to family pensioners of licensees / successor entities of erstwhile UPSEB.

##### **2. RATE OF CHARGE:**

**Un-metered:** Rate of charge, gives the fixed and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

<b>Category</b>	<b>Fixed charge / month</b>	<b>Fixed Monthly Energy Charge</b>
Class IV employees / Operating staff	Rs. 65.00	Rs. 75.00
Class III employees	Rs. 65.00	Rs. 105.00
Junior Engineers & equivalent posts	Rs. 135.00	Rs. 220.00
Assistant Engineers & equivalent posts	Rs. 135.00	Rs. 345.00
Executive Engineers & equivalent posts	Rs. 135.00	Rs. 370.00
Superintending Engineers /Deputy General Managers & equivalent posts	Rs. 340.00	Rs. 450.00
Chief Engineers (I & II) / General Managers and above	Rs. 340.00	Rs. 550.00
Additional charge for employees using Air Conditioners. (April to September)	Rs. 450/- per month per Air conditioner	

**Metered:** Metered consumers under this category shall be given 50% rebate on rate of charge applicable to “other metered consumers” under LMV-1 category.

##### **3. ELECTRICITY DUTY:**

Electricity duty on the above shall be levied in addition at the rates as may be notified by the State Government from time to time.



**Note:** In case of pensioners, the rate of charge shall be the same as applicable to the post from which he/she has retired.

**4. For 'Other Provisions' and 'Mode of Payment' for Departmental Employees refer ANNEXURE – XII (A)**

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*Section 23(7) of Electricity Reforms Act 1999 provides "terms and condition of service of the personnel shall not be less favorable to the terms and condition which were applicable to them before the transfer. The same spirit has been echoed under first proviso of section 133(2) of the Electricity Act, 2003. The benefits for employees/pensioners as provided in section 12(b)(ii) of the Uttar Pradesh Reform Transfer Scheme, 2000 include "concessional rate of electricity", which means concession in rate of electricity to the extent it is not inferior to what was existing before 14<sup>th</sup> January, 2000. The rates and charges indicated above for this category are strictly in adherence of above statutory provisions.*



**RATE SCHEDULE HV- 1:**

**NON INDUSTRIAL BULK LOADS:**

**1. APPLICABILITY:**

This rate schedule shall apply to:

- (a) Commercial loads (as defined within the meaning of LMV-2) with contracted load of 75 kW & above and getting supply at single point on 11 kV & above voltage levels.
- (b) Private institutions (as defined within the meaning of LMV-4(b)) with contracted load of 75 kW & above and getting supply at single point on 11 kV & above voltage levels.
- (c) Non domestic bulk power consumer (other than industrial loads covered under HV-2) with contracted load 75 kW & above and getting supply at single point on 11 kV & above voltage levels and feeding multiple individuals (owners / occupiers / tenants of some area within the larger premises of the bulk power consumer) through its own network and also responsible for maintaining distribution network.
- (d) Public institutions (as defined within the meaning of LMV-4(a)) with contracted load of 75 kW & above and getting supply at single point on 11 kV & above voltage levels. The institution/consumer seeking the supply at Single point for non-industrial bulk loads under this category shall be considered as a deemed franchisee of the Licensee.
- (e) For UPPCL/ UPRVUNL/ UPJVNL Offices / Buildings / Guesthouses having loads above 75 kW and getting supply at 11 kV & above voltages.

**2. CHARACTER AND POINT OF SUPPLY:**

As per the applicable provisions of Supply Code.

**3. RATE OF CHARGE:**

- (a) **Commercial Loads/Private Institutions/ Non domestic bulk power consumer with contracted load 75 kW & above and getting supply at Single Point on 11 kV & above:**

	<b>For supply at 11kV</b>	<b>For supply at 33 kV &amp; above</b>
Demand Charges	Rs. 195/kVA/month	Rs. 185/kVA/month
Energy Charges	Rs. 4.30/kVAh	Rs. 4.20/kVAh





- (b) **Public Institutions with contracted load 75 kW & above and getting supply at Single Point on 11 kV & above voltage levels:**

	<b>For supply at 11kV</b>	<b>For supply at 33 kV &amp; above</b>
Demand Charges	Rs. 165/kVA/month	Rs. 155/kVA/month
Energy Charges	Rs. 4.05/kVAh	Rs. 3.95/kVAh



**RATE SCHEDULE HV- 2:**

**LARGE AND HEAVY POWER:**

**1. APPLICABILITY:**

This rate schedule shall apply to all consumers having contracted load above 75 kW (100 BHP) for industrial and / or processing purposes as well as to Arc/induction furnaces, rolling/re-rolling mills, mini-steel plants and floriculture & farming units and to any other HT consumer not covered under any other rate schedule.

Supply to Induction and Arc furnaces shall be made available only after ensuring that the loads sanctioned are corresponding to the load requirement of tonnage of furnaces. The minimum load of one-ton furnace shall in no case be less than 500 kVA and all loads will be determined on this basis. No supply will be given on loads below this norm.

For all HV-2 consumers, conditions of supply, apart from the rates, as agreed between the licensee and the consumer shall continue to prevail.

**2. CHARACTER AND POINT OF SUPPLY:**

As per the applicable provisions of Supply Code.

**3. RATE OF CHARGE:**

Rate of charge gives the demand and energy charges (including the TOD rates as applicable to the hour of operation) at which the consumer shall be billed for his consumption during the billing period applicable to the category:

**(A) Urban Schedule:**

	<b>For supply at 11Kv</b>	<b>For supply at 33 &amp; 66 kV</b>	<b>For supply at 132kV and above voltages</b>
<b>BASE RATE</b>			
Demand Charges	Rs. 230 / kVA/month	Rs. 220 / kVA/month	Rs. 200 / kVA/month
Energy Charges	Rs. 4.60/ kVAh	Rs. 3.85 / kVAh	Rs. 3.75 / kVAh
<b>Minimum Charges</b>	-	-	-
<b>TOD RATE</b>			
22 hrs – 06 hrs	(-) 7.5%	(-) 7.5%	(-) 7.5%
06 hrs – 17 hrs	0	0	0
17 hrs – 22 hrs	(+) 15%	(+) 15%	(+) 15%



**(B) Rural Schedule:**

This schedule shall be applicable only to consumers getting supply upto 11 kV as per 'Rural Schedule'. The consumer under this category shall be entitled to a rebate of 15% on 'Rate of Charge' as given for 11 kV consumers under urban schedule without ToD rates.

**(C) Consumers already existing under HV-2 category with metering arrangement at low voltage:**

Existing consumer under HV-2 with metering at 0.4 kV shall be required to pay an extra charge of 15% on the amount calculated at Rate of Charge applicable to 11 kV consumers under HV-2 category. The Commission redirects the licensees to shift the metering arrangement of such consumers to HV side within three months of issuance of this order.

**4. PROVISIONS RELATED TO SEASONAL INDUSTRIES:**

Seasonal industries will be determined in accordance with the criteria laid down below. No exhaustive list can be provided but some examples of industries exhibiting such characteristics are sugar, ice, rice mill and cold storage. The industries which operate during certain period of the year, i.e. have seasonality of operation, can avail the benefits of seasonal industries provided:

- i. The continuous period of operation of such industries shall be at least 4 (four) months but not more than 9 (nine) months in a financial year.
- ii. Any prospective consumer, desirous of availing the seasonal benefit, shall specifically declare his season at the time of submission of declaration/execution of agreement mentioning the period of operation unambiguously.
- iii. The seasonal period once notified cannot be reduced during the next consecutive 12 months. The off-season tariff is not applicable to composite units having seasonal and other category loads.
- iv. The off-season tariff is also not available to those units who have captive generation exclusively for process during season and who avail licensees supply for miscellaneous loads and other non-process loads.
- v. The consumer opting for seasonal benefit has a flexibility to declare his off seasonal maximum demand subject to a maximum of 25% of the contracted



demand. The tariff rates (demand charge per kW/ kVA and energy charge per kWh/ kVAh) for such industries during off-season period will be the same as for normal period but with no minimum charges. Further, during the off season fixed charges shall be levied on the basis of maximum demand recorded by the meter (not on normal billable demand or on percentage contracted demand). Rates for the energy charges shall however be the same as during the operational season. Further, first violation in the season would attract full billable demand charges and energy charges calculated at the unit rate 50% higher than the applicable tariff during normal period but only for the month in which the consumer has defaulted. However, on second default the consumer will forfeit the benefit of seasonal rates for the entire season.

#### 5. LOAD FACTOR REBATE:

For any excess consumption over the defined kVAh per KVA (of maximum demand recorded) as defined in the table below, a graded rebate is provided on the energy charges for such excess consumption. This rebate will be available on monthly basis and will be given to the consumer for each slab.

Description	Rebate on Energy charges
For all consumption over 396 kVAh per kVA up to 432 kVAh per kVA per month	7.5% on the consumption over 396 kVAh /kVA/month and up to 432 kVAh / kVA / month
For all consumption over 432 kVAh per kVA up to 504 kVAh per kVA per month	7.5% as applicable in first slab <i>plus</i> 10% on the consumption over 432 kVAh /kVA/month and up to 504 kVAh / kVA / month
For all consumption in excess of 504 kVAh per kVA per month	7.5% as applicable in first slab <i>plus</i> 10% as applicable in second slab <i>plus</i> 20% on the consumption over 504 kVAh /kVA/month

**Note:** Consumer with arrears shall not be eligible for above rebate. In case the consumer has obtained an order of stay from a court or any other statutory authority, the amount of load factor rebate for which the consumer is eligible in respect of the amount of the bill shall be calculated and the same shall accrue to



the account of the consumer. However, the actual credit thereof shall not be given to the consumer in his monthly bill until the case relating to the dispute regarding arrear is finally decided by the competent court / statutory authority.

**6. FACTORY LIGHTING:**

The electrical energy supplied shall also be utilized 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, crèche, dispensary, staff welfare centers, compound lighting, etc. No separate connection for the same shall be provided.



### **RATE SCHEDULE HV – 3:**

#### **A: RAILWAY TRACTION:**

##### **1. APPLICABILITY:**

This schedule shall apply to the Railways for Traction loads only.

##### **2. CHARACTER OF SERVICE AND POINT OF SUPPLY:**

Alternating Current, single phase, two phase or three phase, 50 cycles, 132 kV or below depending on the availability of voltage of supply and the sole discretion of the licensee. The supply at each sub-station shall be separately metered and charged.

##### **3. RATE OF CHARGE:**

Rate of charge, gives the demand and energy charges at which the consumer shall be billed for consumption during the billing period applicable to the category:

<b>Description</b>	<b>Charges</b>
<b>(a) Demand Charge</b> For supply at and above 132 kV Below 132 Kv	Rs. 180 / kVA / month Rs. 200 / kVA / month
<b>(b) Energy Charges (all consumption in a month)</b> For supply at and above 132 kV Below 132 kV	Rs. 3.75 / kVAh Rs. 3.85 / kVAh
<b>Minimum Charge</b>	Rs. 425/kVA/month

##### **4. LOAD FACTOR REBATE:**

For any excess consumption over the defined kVAh per KVA (of maximum demand recorded) as defined in the table below, a graded rebate is provided on the energy charges for such excess consumption. This rebate will be available on monthly basis and will be given to the consumer for each slab.



Description	Rebate on Energy charges
For all consumption over 396 kVAh per kVA up to 432 kVAh per kVA per month	7.5% on the consumption over 396 kVAh /kVA/month and up to 432 kVAh/kVA/month
For all consumption over 432 kVAh per kVA up to 504 kVAh per kVA per month	7.5% as applicable in first slab <i>plus</i> 10% on the consumption over 432 kVAh /kVA/month and up to 504 kVAh/kVA/month
For all consumption in excess of 504 kVAh per kVA per month	7.5% as applicable in first slab <i>plus</i> 10% as applicable in second slab <i>plus</i> 15% on the consumption over 504 kVAh /kVA/month

#### 5. DETERMINATION OF THE DEMAND:

Demand measurement at a particular time will be made on basis of simultaneous maximum demands recorded in summation kilovolt-ampere meter installed at contiguous substation serviced by same grid transformer.

The demand for any month shall be defined as the highest average load measured in Kilo Volt –amperes during any fifteen consecutive minutes period of the month.

#### B: DELHI METRO RAIL:

##### 1. APPLICABILITY:

This schedule shall apply to the DMRC (Delhi Metro Rail Corporation).

##### 2. CHARACTER OF SERVICE AND POINT OF SUPPLY:

Alternating Current, single phase, two phase or three phase, 50 cycles, 132 kV or below depending on the availability of voltage of supply and the sole discretion of the licensee. The supply at each sub-station shall be separately metered and charged.



### 3. RATE OF CHARGE:

Rate of charge, gives the demand and energy charges at which the consumer shall be billed for consumption during the billing period applicable to the category:

<b>Energy Charges</b>	Rs. 3.80 / kVAh
<b>Minimum Charges</b>	Rs. 425 / kVA

- Penalty @ Rs. 540 / kVA will be charged on excess demand, if demand exceeds contracted load.
- This category has been made as per the agreement between DMRC and NOIDA Administration.

### 4. DETERMINATION OF THE DEMAND:

Demand measurement shall be made by suitable kilovolt ampere indicator at the point of delivery. The demand for any month shall be defined as the highest average load measured in Kilo Volt-Amperes during any fifteen consecutive minutes period of the month.





**RATE SCHEDULE HV – 4:**

**LIFT IRRIGATION WORKS:**

**1. APPLICABILITY:**

This Rate Schedule shall apply to medium and large pumped canals having load of more than 100 BHP (75kW).

**2. CHARACTER OF SERVICE & POINT OF SUPPLY:**

As per applicable provisions of Supply Code.

**3. RATE OF CHARGE:**

Rate of charge, gives the demand and energy charges at which the consumer shall be billed for his consumption during the billing period applicable to the category:

**(a) Demand Charges:**

<b>Voltage Level</b>	<b>Rate of Charge</b>
For supply at 11 kV	Rs. 250 / kVA/ month
For supply at 33 kV and 66 kV	Rs. 240 / kVA/ month
For supply at 132 kV	Rs. 220 / kVA / month

**(b) Energy Charges :**

<b>Voltage Level</b>	<b>Rate of Charge</b>
For supply at 11 kV	Rs. 4.80 / kVAh
For supply at 33 kV and 66 kV	Rs. 4.00/ kVAh
For supply at 132 kV	Rs. 3.90 / kVAh

**(c) Minimum Charges:**

Rs. 500 / kVA / month irrespective of supply voltage.

**4. DETERMINATION OF THE DEMAND:**

Demand measurement shall be made by suitable kilovolt ampere indicator at the point of supply. In the absence of suitable demand indicator, the demand as assessed by the Licensee shall be final and binding. If, however, the number of



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circuits is more than one, demand and energy measurement will be done on the principle of current transformer summation metering.



## ANNEXURE – XII (A)

### DEPARTMENTAL EMPLOYEES:

#### 1. OTHER PROVISIONS:

- (i) For serving employees, pensioners and family pensioners, the supply will only be given at one place where Licensee's mains exist. The electric supply under this tariff to the pensioners / family pensioners will be given only at one place, within the area of erstwhile UPSEB / its successor companies.
- (ii) In the event of transfer of the employee, this tariff shall be applied at the new place of posting only when a certificate has been obtained from the concerned Executive Engineer of the previous place of posting, that the supply under this tariff has been withdrawn at previous place of posting. Further, the employee shall also be required to submit an affidavit that he is not availing the benefit of LMV-10 connection anywhere else in the state.
- (iii) Those who are not availing this tariff shall also give a declaration to this effect. This declaration shall be pasted / kept in his service book / personal file / Pensioners record. If the declaration is found wrong, necessary action against the employee shall be taken as per the provisions of service rules. If declaration has already been given at the present place of posting then further declaration is not necessary due to this revision. Pensioners shall also have to give a similar declaration for availing departmental tariff at only one place. In case this declaration is found wrong, this tariff shall be withdrawn forever.
- (iv) No other concession shall be admissible on this tariff.
- (v) The schedule of miscellaneous charges as appended with Licensee's General Tariff as amended from time to time and Electricity Supply (Consumers) Regulation, 1984 as enforced from time to time shall also be applicable on the employee / pensioner receiving supply under this schedule.
- (vi) Retired employees drawing pension from the Treasury / Bank will have to pay the monthly electricity charges as per the rates given in the rate schedule applicable to their category.



**2. MODE OF PAYMENT:**

- (i) The Disbursing Officer shall compulsorily and regularly deduct the amount due monthly from the salary bill of each and every employee / pensioners drawing pay / pension from his unit each month. The Drawing Officer shall ensure that each employee/pensioner has given the declaration about the connection in his name together with details of S.C. No. / Book No and name of the billing division, before the disbursement of pay/pension.
- (ii) The monthly amount due from a consumer of this category can also be deposited by the concerned officer / employee to the concerned division in case the said amount is not being deducted from his salary / pension.
- (iii) Revenue and Energy Statistics in respect of the category of employee/pensioner shall be regularly prepared by the Divisions in the same manner as for every other manually billed category.
- (iv) Recovery from the salary shall be sent to the billing units in accordance with the instructions contained in circular No. 362-CAO/C-177 (Misc.) dated 5.5.89 and No. 380-CAO dated 12.5.89 from Chief Accounts Officer of erstwhile UPSEB, Lucknow.
- (v) In case of metered consumption, the mode of payment shall be similar to the domestic consumer.



## ANNEXURE - XII (B)

### PUBLIC LAMPS :

#### 1. MAINTENANCE CHARGE:

In addition to the "Rate of Charge" mentioned above, a sum of Rs.10.00 per light point per month will be charged for operation and maintenance of street lights. This Maintenance Charge will cover only labour charges, where all required materials are supplied by the local bodies. However, the local bodies will have an option to operate and maintain the public lamps themselves and in such case, no maintenance charge shall be recovered. This charge shall not apply to the consumers with metered supply.

#### 2. PROVISION OF LAMPS:

Streets where distribution mains already exist, the Licensee will provide a separate single-phase, 2-wire system for the street lights including light fitting and incandescent lamps of rating not exceeding 100 Watts each. In case the above maintenance charge is being levied, the labour involved in replacements or renewal of lamps shall be provided by the licensee. However, all the required materials shall be provided by the local bodies. The cost of all other types of street light fittings shall be paid by the local bodies.

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.

#### 3. VERIFICATION OF LOAD:

The number of light points including that of traffic signals together with their wattage will be verified jointly by the representatives of Licensee and Town Area / Municipal Board / Corporation at least once in a year. However, additions will be intimated by the Town Area / Municipal Board / Corporation on monthly basis. The Licensee will carry out the checking of such statements to satisfy themselves of the correctness of the same. The monthly bills shall be issued on the basis of verified number of points at the beginning of the year and additions, if any, during the months as intimated above. The difference, if any, detected



during joint verification in the following year shall be reconciled and supplementary bills shall be issued.

Further, if the authorized representative of concerned local body does not participate in the work of verification of light points, a notice will be sent by concerned Executive Engineer in writing to such local bodies for deputing representative on specific date(s), failing which the verification of the light points shall be done by the concerned representative of Licensee which shall be final and binding upon such local body.



## **ANNEXURE - XII (C)**

### **STATE TUBE-WELLS:**

### **NET ADDITIONAL LOAD:**

- (i) Net additional load hereinafter shall mean the total additional load connected during the quarter less the load of failed and abandoned tube-wells accounted for during that quarter.
- (ii) The connected load as on 31<sup>st</sup> March of the preceding year will be worked out on the basis of 'Net additional load' reported by the Executive Engineers of concerned Divisions after joint inspection and verification of the same by the concerned officers of the State Government / Panchayat, joint meter reading shall also be taken during the inspection on quarterly basis. The monthly bills for three months of the first quarter will be issued on the connected load worked out as such at the above rates. The same process shall be repeated for subsequent quarters.



**ANNEXURE – XIII**

**SCHEDULE OF MISCELLANEOUS CHARGES:**

S. N	NATURE OF CHARGES	UNIT	RATES (Rs.)
1.	Testing of Metering System at Site		
	(1) Testing of LT Direct Meters through standard reference meter:		
	a. Single Phase	Per Job	50
	b. Three Phase	Per Job	75
	(2) Testing of CT Connected Metering System (including CTs, PTs) complete through standard reference metering system:		
	a. LT	Per Job	500
	b. 11 kV HT	Per Job	1000
	c. 33 kV HT	Per Job	2000
2.	Testing of Metering System through NABL accredited test laboratory		
	(1) LT Direct Meters (Single/ Three Phase)	Per Job	on actual
	(2) CT Connected Metering System (including CTs, PTs) complete (LT/ 11 kV HT/ 33 kV HT)	Per Job	expense - do -
3.	Replacement of Metering System		
	(1) By Higher Capacity Metering System or vice-versa		
	a. 1-P LT Direct Meter to 3-P LT Direct Meter	Per Job	75
	b. 3-P LT Direct Meter to CT Connected LT Metering System	Per Job	350
	c. CT Connected LT Metering System to 11 kV HT Metering System	Per Job	1250
	d. 11 kV HT Metering System to 33 kV HT Metering System	Per Job	1500
	(2) By Same Capacity Metering System (including shifting of position of Metering System)		
	a. Single Phase LT Direct Meter	Per Job	125
	b. Three Phase LT Direct Meter	Per Job	175
	c. CT Connected LT Metering System	Per Job	500
	d. 11 kV HT Metering System	Per Job	1000
	e. 33 kV HT Metering System	Per Job	2000





4.	Resealing of Metering System on account of any reason in addition to other charges payable in terms of other provision of charging of penalties, etc		
	a. LT Direct Meter	Per Job	25
	b. CT Connected LT Metering System	Per Job	50
	c. 11 kV HT Metering System	Per Job	75
	d. 33 kV HT Metering System	Per Job	100
5.	Disconnection/ Reconnection of Supply of Consumer, for any reason whatsoever, having Contracted load:		
	a. less than 5 kW	Per Job	150
	b. 5 kW or more and upto 50 kW /56 kVA	Per Job	275
	c. exceeding 56 kVA and upto 3000 kVA	Per Job	500
	d. exceeding 3000 kVA and upto 10000 kVA	Per Job	1000
	e. exceeding 10000 kVA	Per Job	2000
	Note: Disconnection and Reconnection shall be treated as separate job(s).		
6.	Service of Wireman :		
	a. Replacement of Fuse	Per Job	20
	b. Inserting and Removal of Fuse in respect of night loads.	Per Job	25
	c. Hiring of services by the consumer during temporary supply or otherwise.	Per wireman /day of 6 Hrs.	60
7.	Checking of Capacitors (other than initial checking) on consumer's request:		
	a. At 400 V / 230 V	Per Job	100
	b. At 11 kV and above.	Per Job	200

**CHARGES FOR TATKAL VIDYUT SANYOJAN (TATKAL CONNECTION):**

For urban consumers of LMV-1, LMV-2 and LMV-9 categories, desirous of getting connection within 24 hours of making the application, provided such release of



connection does not require extension of distribution mains or commissioning of sub-station or augmenting capacity of transformers, shall have to pay following additional charges apart from the regular connection charges:

**1. FOR PERMANENT ELECTRICITY CONNECTION:**

- |  |                           |
|--|---------------------------|
| a. Single Phase Domestic light and fan | : Rs. 500 per connection  |
| b. Three Phase Domestic light and fan  | : Rs. 750 per connection  |
| c. Single Phase Commercial             | : Rs. 750 per connection  |
| d. Three Phase Commercial              | : Rs. 1000 per connection |

**2. FOR TEMPORARY ELECTRICITY CONNECTION:**

- |                                     |                           |
|-------------------------------------|---------------------------|
| a. Single Phase (Upto 4 kW)         | : Rs. 750 per connection  |
| b. Three Phase (from 5 kW to 24 kW) | : Rs. 1000 per connection |



**ANNEXURE – XIV**

**LIST OF POWER FACTOR APPARATUS:**

**FOR MOTORS:**

Sl. No.	Rating of Individual Motor	KVAR Rating of Capacitor			
		750 RPM	1000 RPM	1500 RPM	3000 RPM
1.	Upto 3 HP	1	1	1	1
2.	5 HP	2	2	2	2
3.	7.5 HP	3	3	3	3
4.	10 HP	4	4	4	3
5.	15 HP	6	5	5	4
6.	20 HP	8	7	6	5
7.	25 HP	9	8	7	6
8.	30 HP	10	9	8	7
9.	40 HP	13	11	10	9
10.	50 HP	15	15	12	10
11.	60 HP	20	20	16	14
12.	75 HP	24	23	19	16
13.	100 HP	30	30	24	20
14.	125 HP	39	38	31	26
15.	150 HP	45	45	36	30
16.	200 HP	60	60	48	40

**FOR WELDING TRANSFORMERS:**

Sl. No.	Name Plate Rating in KVA of Individual Welding Transformer	Capacity of the Capacitors (KVAR)
1.	1	1
2.	2	2
3.	3	3
4.	4	3
5.	5	4
6.	6	5
7.	7	6



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Sl. No.	Name Plate Rating in KVA of Individual Welding Transformer	Capacity of the Capacitors (KVAR)
8.	8	6
9.	9	7
10.	10	8
11.	11	9
12.	12	9
13.	13	10
14.	14	11
15.	15	12
16.	16	12
17.	17	13
18.	18	14
19.	19	15
20.	20	15
21.	21	16
22.	22	17
23.	23	18
24.	24	19
25.	25	19
26.	26	20
27.	27	21
28.	28	22
29.	29	22
30.	30	23
31.	31	24
32.	32	25
33.	33	25
34.	34	26
35.	35	27



**ANNEXURE – XV**

**DISCOM-WISE REVENUE GAP FUNDING MECHANISM:**

<b>Discom-wise Funding Mechanism for FY 2009-10 (Rs.Cr)</b>				
<b>Particulars</b>	<b>Lucknow</b>	<b>Meerut</b>	<b>Varanasi</b>	<b>Agra</b>
Gross ARR	3,149	5,824	4,083	4,734
Revenue from Revised Tariff	2,558	4,782	2,893	3,637
<b>Net Revenue Gap</b>	<b>591</b>	<b>1,042</b>	<b>1,190</b>	<b>1,097</b>
<b>Funded Through:</b>				
<i>Tariff Increases</i>	364	642	408	419
<i>Government Subsidy *</i>	<b>1,832</b>			
<i>Loan Commitment from GoUP #</i>	<b>255</b>			
<b>Net Revenue Gap Carried Forward</b>	<b>NIL</b>			
# Additional subsidy from Government of UP/ Loan from Bank & Financial				

**Note (\*):**

The allocation of subsidy amongst the DISCOMS shall be done on the basis of actual number of consumers prevailing at the end of the FY 2009-10. The DISCOMS shall submit the information on subsidy allocation for FY 2009-10 in the next ARR filing. The balance revenue gap after GoUP subsidy and tariff increase may be met by DISCOMS through measures suggested by Commission in Clause 9.2.9 & Clause 9.2.10 of this tariff order.



**ANNEXURE – XVI**

**COMPLIANCES OF LAST TARIFF ORDER DIRECTIVES – DISCOMS:**

S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
1	1.2.7	The Commission directs the utilities to file the application for fresh licenses for newly formed entities.	1 Month	<p>Fresh Licenses were issued by UPERC on 20th Jan 2010.( 8/10/2009) UPPTCL has submitted that "Under EA-2003 part-IV(Licensing) which deal with application &amp; grant of license for Transmission ,Distribution &amp; Trading of Electricity, following provision has been made in Para 14:-  <i>“Provided further that the Central Transmission Utility or the State Transmission Utility shall be deemed to be a transmission licensee under this Act”</i></p> <p>It is to inform that Government of U P has already notified UPPTCL as STU vide GO No 122/U.N.N.P/24-07 dated 18 July 2007 and as per above mentioned provision of the act, UPPTCL is a deemed transmission licensee. So there seems to be no need for fresh license for UPPTCL."</p>
2	1.2.7	UPPCL had informed to the Commission that by March end the transfer scheme would be notified by Government of U.P. However in absence of any submission, Commission directs UPPTCL and UPPCL to get the issue resolved expeditiously through pro-active interaction with the State Government	Status report to be given with 1 month	UPPTCL will file license application after notification of Transfer Scheme. Action in this matter is in progress and transfer scheme will be notified soon (8/10/2009) The Draft Transfer Scheme has already been prepared and submitted to the GoUP for its approval.



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S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
3	1.2.7	The Commission directs UPPCL to provide status and also the timeframe within which the entire activity of allocation of the PPAs to DISCOMS would be completed.	1 month	Action is being taken to decide the criteria for allocation of PPA for all DISCOMS. (8/10/2009) The allocation of PPAs to different distribution companies has been submitted for the consideration of the GoUP. A response from GoUP is awaited and shall be communicated to the Commission. The power is being procured by UPPCL on behalf of all DISCOMS.
4	1.2.7	The Commission also directs UPPCL to submit the status of implementation of the Intra-State ABT system within the state in line with the directives of the Commission and the timeframe for implementing the same.	1 Month	Implementation of intrastate ABT system within the state in line with directive with the commission is under progress. Detail status report shall be submitted soon.
5	1.2.7	The utilities are directed to update the Commission on the status of the appeal filed against tariff order for FY 2006-07 before the Appellate Tribunal of India and expedite the resolution of the case.	Every Month	The matter is still pending in the Appellate Tribunal and has yet not decided.
6	2.4.9.1	The Commission directs the licensees to henceforth report the status of compliance for all the directives on a monthly basis to the Commission.	Every Month	Action has already been taken in this matter.
7	4.5.4	The Commission directs the licensee to explore the innovative modes of payment atleast in the cities having population of more than 10 lacs.	Every Quarter	<b>Agra:</b> Handheld billing has been implemented in AGRA and other cities of DVVNL. Results of this scheme are quite encouraging. Beside this, efforts are being made to deposit electricity bills through bank. An agreement has been signed for automatic meter reading. This work will be



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S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
		Further the licensee shall keep the Commission updated about the progress on a quarterly basis.		<p>completed in four months. Initial dialogues are in progress with the agencies for pre-paid meters and proposals are being studied. Facility of drop-boxes is being arranged for collecting payment through cheques. In addition to this agencies entrusted with hand held billing work have been authorized to collect the payment through cheque.</p> <p><b>Lucknow:</b> Franchisee System is being implemented. Two cities namely Agra &amp; Kanpur have already been given to franchisee and formalities are being completed to handover other 5 cities to qualified franchisees. The work of franchisee will be all distribution work including collection of payment with innovative modes.</p> <p><b>Varanasi:</b> Handheld billing has been implemented in Varanasi and Gorakhpur cities of PuVVNL. Results of this scheme are quite encouraging. Beside this, efforts are being made to deposit electricity bills through bank. An agreement has been signed for automatic meter reading. This work will be completed in four months. Initial dialogues are in progress with the agencies for pre-paid meters and proposals are being studied. Facility of drop-boxes is being arranged for collecting payment through cheques. In addition to this agencies entrusted with hand held billing work have been authorized to collect the payment through cheque.</p> <p><b>Meerut:</b> Adoption of online billing system which also includes innovative modes of payment is under process and shall be finalized within six month. Payment through credit card, debit card, internet banking, shall</p>





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S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
				<p>be accepted. ( 6/11/2009) Agra: Handheld billing has been implemented in AGRA and other cities of DVVNL. Results of this scheme are quite encouraging. Beside this, efforts are being made to deposit electricity bills through bank. An agreement has been signed for automatic meter reading. The work is in progress. M.R.I. based billing is being done for consumers of load 25 KVA and above. Initial dialogues are in progress with the agencies for pre-paid meters and proposals are being studied. Facility of drop boxes is being arranged for collecting payment through cheques. In addition to this agencies entrusted with hand held billing work have been authorized to collect the payment through cheque. On line billing in forty Nos. towns having population more than 30,000 is proposed to be started in Restructured A.P.D.R.P. project.</p>
8	4.7.8	The licensees are directed to submit the monthly progress report on implementation of the scheme devised in the tariff order of FY 2006-07 linked with reduction of losses at transformer level.	Every Month	<p><b>Agra:</b> D.T. Metering is being carried out in all distribution Zones of DVVNL and the work is in progress. Laying of 1615 KM AB Conductor is in progress. Capacity of overload distribution transformers is being increased.</p> <p><b>Lucknow:</b> All efforts are being made to reduce the losses which are being reflected in the current tariff order. The schemes as devised in the Tariff Order 2006-07 are being implemented. This includes D.T. metering, Double metering, installation of ABC conductor and conducting raids and regular checking in most theft prone areas. Action also being taken to reduce L.T. network by H.T. distribution system to reduce technical losses.</p> <p><b>Meerut:</b> Progress of DT Metering/Double Metering, laying of ABC conductor replacement of Electromechanical meter by Electronic meters</p>



S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
				& Input based Franchisee is being submitted monthly.  <b>Varanasi:</b> D.T. Metering is being carried out in all distribution Zones of PuVVNL and the work is in progress. Laying of 2500KM AB Conductor is in progress. Capacity of overload distribution transformers is being increased.
9	4.9.4	The Commission directs licensees to submit the amount of security deposit adjusted in April 2007 and April 2008 against each category and for each DISCOM/licensee within 3 months from the date of issue of this tariff order.	3 Months	<b>Agra/ Lucknow/ Varanasi:</b> All field units have already been instructed to implement with the directive in later and sprit and progress is being submitted as per directive.  <b>Meerut:</b> The category wise adjustment based on monthly account of security deposit in the month of April 2007 and April 2008 is given hereunder.
10	4.13.4	The Commission directs the licensees to submit the consumption history of off-peak and peak period for HV-2 category of consumers for FY 2006-07 and FY 2007-08 to assess the revenue impact of the application of TOD rates.	2 Months	<b>Agra/Varanasi:</b> To calculate the energy consumption, TOD metering for off peak and peak periods is being done for all HV-2 consumers and accordingly revenue is assessed and realized.  <b>Lucknow/Meerut:</b> Instruction for this has been issued to all field unit. Report shall be submitted soon.
11	4.17.2	The Commission directs the licensees to comply with the previous year tariff order directive and submit study report on load requirement per tonne in case of Arc & Induction furnace within one month from the date of the	1 Month	<b>Agra/ Varanasi:</b> Load to all Arc & Induction furnaces is being sanctioned and released @ 500KVA/Ton and according to the capacity of the furnace.  <b>Lucknow / Meerut:</b> Instruction for this has been issued to all field unit. Report shall be submitted soon.



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S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
		tariff order.		
12	4.17.8	The Commission directs the licensees to submit the report on cost of service as specified in section 6.3 of Distribution Tariff Regulations 2006 along within three months from the date of tariff order.	3 Months	Though level of accuracy vis-à-vis cost of service is still not up to the mark however proposed tariff is by and large reflective of cost of service for all categories except those who are being compensated by Govt. subsidy.
13	5.4.6	The Commission directs the licensees to carry out the energy audit / estimation study with voltage wise break up of distribution losses into technical loss and commercial loss. Further the Licensees should intimate the Commission within 2 months from the date of issue of the tariff order with regards to the progress on the study to be undertaken in terms of the finalised scope of work, whether the study is being undertaken departmentally or help of some experts in the field is being availed, the methodology being adopted for undertaking the study, etc.	6 Months Status Report within 2 Months	<b><u>Agra/ Varanasi:</u></b> Energy accounting work is in progress. Field officers have been asked to furnish all relevant information in this regard and will be submitted to the Commission.  <b><u>Meerut/ Lucknow:</u></b> Work of energy audit has already being taken up. However study of voltage wise distribution losses require more time. The status report in this matter shall be submitted separately study is being done departmentally. (8/10/2009): Under revised APDRP scheme process of energy audit /estimation of voltage wise losses will be started soon. For this tender has been invited/received and the same shall be finalize in due course.
14	5.4.7	The Licensees are directed to report the status of the metering along with the proposed plan to undertake the	Every Month	<b><u>Agra/ Varanasi:</u></b> Energy meters at all transmission sub-stations are in working order and energy sent to distribution is correctly measured from them. A detailed scheme for correct metering has been planned by



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S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
		metering for the remaining Transmission<>Distribution interface points as well as distribution transformers and feeders. The licensees shall also report the status of the progress on this front to the Commission on a monthly basis along with reasons for deviation from the plan, if any.		mounting outdoor CT/PT on double poles of 33KV incoming and 11KV outgoing feeders of distribution wing. Under this scheme, metering on 33 and 11 KV industrial feeders is almost complete.  <b><u>Lucknow / Meerut:</u></b> All inter phase of transmission, distribution as well as feeder have been provided with metering and reading is being taken regularly. Metering of DTs is being done and considerable progress has been achieved. However targeted 100% D.T. metering shall require more time and commission will be inform regularly about the progress.
15	5.10.5.7	The Commission directs the licensees to submit the study report on actuarial valuation for the purpose of estimating employer's contribution towards pension and gratuity. The licensees are also directed to intimate the Commission on the status of the study within a period of one month from the date of issue of Tariff Order.	6 Months Status Report within 1 Month	<b><u>Agra/ Varanasi:</u></b> Action is being taken by U.P. Power Corporation Ltd.  <b><u>Lucknow / Meerut:</u></b> Action has been taken and report shall be submitted in due course.
16	5.10.9.3	The Commission directs the Licensees to carry out a proper cost benefit analysis before taking up any new initiatives and submit the same for the approval to the Commission.	As and when required.	Action being taken as per commission directive.
17	5.11.18	The Commission directs the licensees to submit the investment plan for next year filing strictly in accordance with	Next Year Filing	<b><u>Agra/ Varanasi:</u></b> Proposal for Five year Business Plan (2008-09 to 2012-13) is submitted to UPPCL, and is under active consideration for acceptance. The commission will be informed after final decision on investment



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S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
		Distribution Tariff Regulation failing which no investments would be approved.		proposals is made. <b>Lucknow/ Meerut:</b> Being submitted as per commission directive
18	5.11.18	The Commission directs the licensees to submit the necessary information for investments approved for FY 2007-08 & FY 2008-09 as per the Distribution Tariff Regulations within two month from the issue of this tariff order,	2 Month	<b>Agra/ Varanasi:</b> As above. <b>Lucknow/ Meerut:</b> Approval is being taken as per directive.
19	5.12.7	The Commission directs the licensees to maintain proper and detailed fixed assets registers at field offices to work out the depreciation expense as specified in the UPERC (Terms and Conditions of Distribution Tariff) Regulations, 2006 and directs the Licensees to submit a report to the Commission citing clearly as to how they are maintaining fixed assets registers for the various assets.	2 Months	Instructions have already been issued to all field units and action as per commission directive is being taken.
20	5.14.7	The Commission directs the licensees to form a clear policy for writing off bad-debts as defined in UPERC (Terms and Conditions of Distribution Tariff) Regulations, 2006. (8/10/2009) as regards bad debts written off	Next Year Filing	<b>Agra/ Varanasi:</b> Scheme for Writing off the bad debt:- 1. Identify the consumers in all categories who have not paid their electricity dues/arrears for last 10 years. 2. Direct field officers to inspect the premises of such identified consumers in order to assess the actual position/consumption and take suitable action for realization/permanent disconnection.



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S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
		petitioner are directed to submit 10 sample cases of large and heavy consumers where orders have been issued for writing of bad debts clearly depicting the procedure adopted for writing off bad debts.		3. After serving notices under Section-3 and Section-5 to consumer of different categories, if the consumer shifts the premises, or goes somewhere else so that he is not traceable and notice is returned unserved, a list of all such consumers is prepared and amount of bad debt is calculated. Action for Writing off such bad debt should be initiated.  <b>Lucknow:</b> Action being taken as per directive.( 8/10/2009):  <b>Meerut:</b> A clear cut policy for writing off bad debts will be submitted to the Commission by the Licensee.
21	5.20.7	The Commission directs the licensees to submit the methodology and formula for automatic recovery of fuel cost changes for Commission's approval.	2 Month	Methodology and formula for automatic recovery of fuel cost variation shall be submitted shortly for commission's approval.
22	5.23.5	The commission directs the licensees to submit the expenses with a proportionate allocation towards wheeling and retail supply business for FY 2008-09	Next Year Filing	Expenses with proportionate allocation for wheeling and retail supply business are being submitted separately. (8/10/2009): Under the revised APDRP scheme voltage wise energy accounting and upkeep of related transactions are being undertaken with this exercise Licensee will be in a position to submit the segregation of cost into wheeling and related supply.
23	9 (b) Rate Schedule	The Commission has directed the licensees to submit a methodology for determination of losses on distribution transformer and billing of such	1 Month	<b>Agra:</b> D.T. Metering work is in progress and is expected to be completed soon. Scheme of Indexing of L.T. feeder wise consumers is being formulated. After completing the D.T. Metering and consumer indexing work, the difference in energy dispatched to the transformer energy



Order on ARR and Tariff Petition for Transco and Discoms for FY 2009-10

S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
		consumers to the Commission for approval within a period of one month from the date of issue of the tariff order.		<p>consumed by the consumers fed with the transformer will be calculated. Reasons of difference will be find out and the responsibility will be fixed to concerned officers and officials.</p> <p><b>Meerut:</b> Metering of distribution transformer is being done in phase manner and report is being submitted monthly. Loss study shall be carried out after three month.</p> <p><b>Varanasi:</b> D.T. Metering work is in progress and is expected to be completed soon. Scheme of Indexing of L.T. feeder wise consumers is being formulated. After completing the D.T. Metering and consumer indexing work, the difference in energy dispatched to the transformer energy consumed by the consumers fed with the transformer will be calculated. Reasons of difference will be find out and the responsibility will be fixed to concerned officers and officials.</p> <p><b>Lucknow:</b> Work of D.T. metering is under progress. Losses on D.T. is being calculated on the basis of D.T. metering consumption versus assessment of all consumer fed with this transformer.</p>
24	15 Rate Schedule	The Commission directs the licensees to introduce pre-paid meters on all government connections with loads below 45 kW and for loads above 45 kW, the licensees are directed to install automatic meter reading systems. Licensee would need to develop the	6 Months Bi-monthly progress report to be submitted.	<p><b>Agra:</b> Scheme of Installation of Pre Paid meters is under consideration with service providers/consultants. At present automatic meter reading work of consumers of 100 KVA and above is in progress and is expected to be completed in four months.</p> <p><b>Varanasi:</b> Scheme of Installation of Pre Paid meters is planned. Negotiations are being done with service providers/consultants. At</p>



Order on ARR and Tariff Petition for Transco and Discoms for FY 2009-10

S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
		<p>necessary infrastructure and introduce the pre-paid meters within a time frame of 6 months from the date of issue of this Tariff Order. The Commission directs the licensees to submit a bi-monthly progress report in this regards.</p>		<p>present automatic meter reading work of consumers of 100 KVA and above is in progress and is expected to be completed in four months. Agreement with M/S Analigic Ltd. Hyderabad has been done for the work.</p> <p><b>Meerut/ Lucknow:</b> Action being taken in this matter and work in this regard is also under progress. Status report shall be submitted soon. (6/11/2009) Agra: Scheme of installation of pre-paid meters is under consideration with service providers/consultants. Tenders were invited for procurement of prepaid meters, but exorbitantly high rates were quoted by the suppliers due to which Tenders were not finalized. At present automatic meter reading work of consumers of 50 KVA and above is in progress and is expected to be completed till March 2010.</p>
25	HV-2 Rate Schedule pt 3 (c )	<p>The Commission directs the licensees to shift the metering arrangement of HV-2 consumers with metering at 0.4 kV to HV side within three months of issuance of this order.</p>	3 Months	<p><b>Agra/ Varanasi:</b> Field officers have been directed to arrange metering of HV-2 category on 0.4KV. The work is in progress and expected to be completed by March, 09.</p> <p><b>Meerut/ Lucknow:</b> Instruction has been issued to all field units and actions are being taken as per the direction.(6/11/2009) Agra: Field officers have been directed to arrange metering of HV-2 category on 0.4 KV to HV side. The work is in progress and expected to be completed in 2009-10.</p>
26		<p>The Commission directs the licensee to establish and earmark funds for consumer education and awareness. The details about the scope of</p>	3 Months	<p><b>Agra/ Varanasi:</b> To increase the awareness of the consumers by publicity through different mediums and arranging special workshops once in three months, 1% of the revenue realized in each distribution circle is being allotted.</p>





Order on ARR and Tariff Petition for Transco and Discoms for FY 2009-10

S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for DISCOMS	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
		activities to be taken under this initiative may be submitted to the Commission within three months from the date of issue of the tariff order.		<b>Meerut/ Lucknow:</b> Action is being taking in this matter. Status report shall be submitted soon.



**Compliances of Last Tariff Order Directives - UPPTCL**

S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for TRANSCO	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
1	6.3.6	The Commission directs the transmission licensee to submit voltage wise transmission loss study report for last three years alongwith the estimation for current and ensuing year	3 Month	Voltage wise transmission losses are submitted in the Regulatory Format P1 along with the ARR. In this regard, UPPTCL was asked to submit the detailed report backing the format for understanding the figures given therein
3	6.6.5.5	The Commission directs the licensees to submit the study report on actuarial valuation for the purpose of estimating employer's contribution towards pension and gratuity. The licensees are also directed to intimate the Commission on the status of the study within a period of one month from the date of issue of Tariff Order.	6 Months Status report within 1 month	Action is being taken as per direction. Status report will be submitted to the Commission.
4	6.6.12.3	The Commission directs the Licensees to carry out a proper cost benefit analysis before taking up any new initiatives and submit the same for the approval to the Commission.	As and when required	Action is being taken as per the directives.



Order on ARR and Tariff Petition for Transco and Discoms for FY 2009-10

S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for TRANSCO	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
5	6.7.13	The Commission directs the licensee to submit the investment plan for next year filing strictly in accordance with Transmission Tariff Regulation 2006 failing which no investments would be approved.	Next Year Filing	TransCo Investment Plan are submitted with ARR.
6	6.7.13	As regards to the investments approved for FY 2007-08 and FY 2008-09, the Commission directs the licensee to submit the necessary information required under the Transmission Tariff Regulations approved by the Commission within two month from the issue of this tariff order	2 Months	Action is being taken as per directive.
7	6.8.6	The Commission directs the licensees to maintain proper and detailed fixed assets registers at field offices to work out the depreciation expense as specified in the UPERC (Terms and Conditions of Transmission Tariff) Regulations, 2006 and directs the Licensees to submit a report to the Commission citing clearly as to how they are maintaining fixed assets registers for the various assets.	2 Months	All units have been directed to take maintain fixed assets register to work out the depreciation expenses. The report will be submitted to the Commission. (8/10/2009) Transfer of assets from UPPCL to UPPTCL is still under consideration of GoUP; however the works register are being maintained at Circle & Division Levels.



S. N	Ref. given in TO for FY 2007-08 & FY 2008-09	Description of Directive for TRANSCO	Time Period for compliance from the date of issue of the tariff order	Status of Directives (as per FY2009-10 filing & data gaps submission)
8	6.11.3	The Commission directs the licensee to submit the information regarding the basis used for computation of the Opening Equity and the detailed working on a year to year basis and supporting financial statements used for the same.	1 Month	Draft Transfer scheme for notification has been submitted to GoUP. As per the draft notification presented on consultation with M/s PWC the opening equity as on 01.04.2007 is Rs.1843 Cr and in the year 2007-08 GoUP provided Rs. 365.3652 Cr as equity for transmission works through the budget of GoUP. During 2008-09 GoUP provided equity of Rs. 428.55 Cr for the transmission work through the budget. The total equity as on 01.04.2009 works out to Rs. 2637 Cr. (8/10/2009): The Draft Transfer Scheme has already been prepared and submitted to the GoUP for its approval.
9	6.13.1	The Commission hereby directs the SLDC that the ARR/budget for SLDC should be submitted separately along with the ARR submission of TRANSCO.	Next Tariff Filing	Budget for the SLDC is being submitted separately. (8/10/2009): In chapter 7 page 7.33 of ARR petitioner has already submitted estimated budget for SLDC based on certain assumption. As already been explained in chapter 7 of ARR SLDC is functioning as a integral part of UPPTCL and complete segregation of cost /account between UPPTCL & SLDC has not been completed yet. For SLDC only cash components i.e. Employee cost, A&G cost & R&M cost are available and other capital related cost are apportioned in the ratio of cash cost components. Transfer scheme for SLDC is yet to be formulated /notified then only complete segregation of cost between UPPTCL& SLDC is possible and shall be furnished to the commission.
10	6.14.7	The Commission directs the Transmission Licensee to formulate the billing procedure for transmission charges and submit the same for approval of the Commission.	1 Month	Actions have already been taken and billing is being done as per the directives of the Commission.



**ANNEXURE – XVII**

**LIST OF PERSONS WHO HAVE ATTENDED PUBLIC HEARING AT 7 PLACES FOR ARR & TARIFF DETERMINATION FOR FY 2009-10:**

List of Persons who attended Public Hearing in Jhansi on 23rd November, 2009		
S. N	Name	Designation
1	I.K. Kochar	President, Bundelkhand Chamber of Commerce
2	Sanjay Patwari	President, U.P. Vyapar Mandal
3	Vishnu Gupta	Secretary General, Chamber of Commerce Industry
4	Dheeraj Khullar	Director, Hankhul Packwell Pvt. Ltd
5	Pawan Jain	Managing Director, I.C.E.
6	Sanjay Gupta	General Manager
7	D. Kakkar	Dy. General Manager
8	A. K. Anandni	
9	V. Shukla	
10	V.K. Khandelwal	
11	Prakash Bansal	
12	T.C. Gupta	Sub Divisional Engineer
13	Prakash Gupta	District President, Vyapar Mandal
14	Om Prakash Agrawal	Vice President, Udyoug Vyapar Mandal
15	Mahesh Gautam	Member, Nagar Nigam
16	I.P. Bhalla	Director, J.M.K. Motors
17	Ram Prakash Sharma	State vice President, Udyoug Vyapar Mandal
18	Bal Swaroop Sahu	Member, Nagar Nigam
19	Mahesh Ram	Consumer
20	Ashok Jain	District President, Vyapar Mandal
21	Mukesh Agrawal	State Minister, Udyoug Vyapar Mandal
22	Mahendra Sharma	President, Bundelkhand Kisan Morcha
23	Lokesh Kumar	EE, EDD-II,
24	Vivek Kumar	Consumer
25	Atulesh Sharma	Amar Ujala
26	Dinesh Kumar	Manager, DMS, CSS Technology
27	Harbhajan Sahu	City President, UP Udyog Vyapar Madal
28	Dr. Mahendra Mohan Awasthi	Vyapar Mandal
29	C.S. Saxena	EO / Member, BCCI
30	Pitamber Plastic Pvt. Ltd.	
31	Pamdit Pakaging	
32	Ghanshyam Das	
33	Nisar Khan	
34	K.B. Chawla	
35	Puneet Kumar	Feedback Ventures Pvt. Limited
36	Sanjay Rana	
37	S.K. Gupta	
38	Basant Singh	Chief Engineer
39	S.C. Agrawal	Superintending Engineer
40	N. Gupta	Superintending Engineer



<b>List of Persons who attended Public Hearing in Allahabad on 26th November, 2009</b>		
<b>S. N</b>	<b>Name</b>	<b>Designation</b>
1	R.P. Bagel	President, DHFL
2	G.C. Karnal	Secretary, Janmangal Sewa Samiti
3	Shashi Bhusan Mishra	Secretary, Upbhokta Sanrakchan Kalyan Samiti
4	S.K. Pathak	Secretary, CEE, N. C. Railway.
5	D.K. Srivastava	Sr. Divisional E.E., NC, Railway
6	Navin Tandon	Chief Electrical Engineer, NCR
7	Charan Singh	CE
8	Sanjeev Kumar	Sr. Divisional Electrical Engineer, NCR
9	Ajay	
10	Kamlesh Singh	Ward Member
11	Kushum Lata Gupta	Ward Member
12	Anand Dildiyal	Ward Member
13	Chandra Prakash	Ward Member
14	Shivkumar	Advocate & ward member
15	Shiv Shewak Singh	Ward Member
16	Puneet Kumar	Consultant, UPERC
17	Atul Chaturvedi	Dy. Director (Admn)
18	Israr Anam	
19	Lal Ram Vijay Singh	Hindustan Dainik, Hindi
20	S.S. Pali	DRm, Officer
21	N. Upadhyay	Hindustan Samachar
22	Rinku	
23	Kamlesh	Genralist
24	Visambhar Narayen Sharma	Member, Cant
25	Naresh Kumar	Ward Member, Cant
26	Awdhesh	
27	Shiv Bhusan	
28	Gyanendra,	Dainik Jagran
29	Shailendra Kumar Agrahari	Nutan Siksha Samiti
30	S.K.Pradhan	Advocate
31	Chaturbhuj Prasad Pandey	Consumer
32	Ashish Asthana	SDO, EDC-I
33	A.K. Saxena	J.E., Civil Line
34	D.K. Dohare	S.E., EDC-I
35	S.K. Garg,	S.E., EDC-I
36	Ashwani Kumar	EE (R), EDD-I
37	Ashok Kumar	S.E., ED-I
38	A.V. Singh	E.E., (Attach), CE (D)
39	R.M. Srivastava	A.E. work shop
40	N.K. Singh	A.E, Workshop
41	Ranel	O.A-II
42	Surendra Verma	
43	Pradeep Kumar	



<b>List of Persons who attended Public Hearing in Greater Noida on 19th December, 2009</b>		
<b>S. N</b>	<b>Name</b>	<b>Designation</b>
1	A.A. Khan	C.E. (RAU), UPPCL
2	S.Kumar	C.E., Kumar Moters
3	Anil Khanna	Sun shine auto
4	G.P. Goswami	Astt. Manager
5	H. Shukla	
6	Shashank	Manager
7	Deepak Yadav	M.D., Arikan Textile
8	S.K. Sinha	Consumer
9	Sanjay Chaturvedi	Sr. Manager
10	Puneet Kumar,	Consultant, UPERC
11	Afzal Rizwi	Home owner
12	Birendra Chaodhry	Home owner
13	Akhil Garg	Rented Consumer
14	Kumar Anil	Domestic Consumer
15	Rajesh Mishra	Domestic Consumer
16	A.B. Sh.	Consumer
17	D.C. Verma	A.E., UPPCL
18	S. Ganguly	S.M., NPCL
19	Vijoy	
20	B. Singh	
21	Tarun Chaohan	
22	Vinay Khullar	Consumer
23	Swaroopa Chaterjee	
24	Bhavneet Kaur	M.T (NPCL)
25	Amit Sharma	A.M. (RA)
26	T.K. Chakrawarti	A.M.
27	Mukul Pandey	Consumer
28	Shashi Bhusan Mishra	Secretary Upbhokta Sanrakchan Samiti
29	G.C. K.	Secretary, Janmangal Sewa Samiti
30	V.K. Sharma	
31	V.K. Gupta	Sr. Manager, NPCL
32	V.K. Anand	NPCL
33	Harun Khan	Consumer
34	Mahkar	H.T.R.
35	Alok Kaushik	
36	C.S. Pundeer	
37	manoj	
38	Bimraj	
39	Dr. V.K. Diwaker	
40	Pankaj Ahuja	
41	Inderjeet	
42	Rosan	
43	Pranesh	



<b>List of Persons who attended Public Hearing in Noida on 20th December, 2009</b>		
<b>S. N</b>	<b>Name</b>	<b>Designation</b>
1	A.A. Khan	C.E. (RAU), UPPCL
2	Mr Agarwal,	RWA , NOIDA
3	Mr Randhir	Industrial Consumer, Ghaziabad
4	Mr Rakesh Katiyar	NOIDA Entrepreneur Association
5	Mr P.N. Singh	NOIDA Apparel Export Association
6	Mr Mishra	Industrial Consumer
7	Mr Mukesh	Industrial Consumer
8	Mr Kamaljeet Maheshwari	Rathi Industries
9	Mr Lalit Gupta	Indira Puram
10	Mr Subhash Java	NOIDA Entrepreneur Association
11	Mr Vinod Gupta,	Paschimanchal Vidyut Upbhokta Parishad, Modinagar
13	Puneet Kumar	Consultant, UPERC
15	G.K. Gupta	EE, EUDD-II
16	C.L. Gupta	EE, EUDD
17	A.P. Mishra	SE
18	Mukesh Goyal	IIA
19	Lal Singh	EE, EUDD-III
20	A.K. Singh	SDO
21	A.K. Choudhry	AE
22	D.K. Yogi	AE
23	Ravi Kumar Agrawal	AE (M) VII
24	B.L. Maurya	SDO
25	Ranjan Mathur	EE, CCCT
26	Mukesh Kumar	Manager, PVVNL
27	Manoj Jain	
28	Sanjay	Noida

<b>List of Persons who attended Public Hearing in Saharanpur on 20th December, 2009</b>		
<b>S. N</b>	<b>Name</b>	<b>Designation</b>
1	Narendra Singh	S.E., EDC.
2	Sanjeev Arora	Indian Industries Assiciation
3	R.P. Gupta	Vice President, IIAUP
4	S.C. Jain	IIA
5	Rajveer	Astt. Dir, IIA
6	Puneet Kumar	Consultant, UPERC
7	Qazi B. Ali	
8	Suresh Chandra	E.E., ETD
9	Satish Chandra	E.E.
10	Sudhir Bharti	A.E. Store Center





<b>List of Persons who attended Public Hearing in Saharanpur on 20th December, 2009</b>		
<b>S. N</b>	<b>Name</b>	<b>Designation</b>
11	M.C. Sharma	E.E., EUDD-II
12	Mahendra Pal	E.E., EUDD-I
13	Anil Kumar Verma	E.E., EUDD-II
14	Surendra Kumar	SDO, EUDD-I
15	Yogesh Kumar	SDO, EDD-I
16	R.K. Gupta	Member, CGRF
17	Kailash Chand	A.E.
18	Sushil Garg	A.E.
19	V.K. Rajput	SDO
20	R.P. Singh	SDO
21	Ajay Kumar	SDO-II, EUDD-II
22	R. J. Tiwari	JE, EUDD-II
23	Tejpal Singh	JE, EUDD-II
24	Bimal Kumar	JE (M), ETL-II
25	Shailendra Gautam	AE (M-II), UPPCL
26	A.K. Rohela	AE (M-III), UPPCL
27	Subodh Gupta	JE (Attach) EDC
28	Anurag Gupta	JE
29	Vinod Kumar	JE
30	Rampal Singh	SDO

<b>List of Persons who attended Public Hearing in Lucknow on 22nd December, 2009</b>		
<b>S. N</b>	<b>Name</b>	<b>Designation</b>
1	Piyush Verma	Cold Store Owner
2	Harish Chandra	Former
3	Ram Sanker Awasthi	Consumer
4	Avdhesh Kumar Verma	UP Rajya Vidyut Upbhokta Parisad
5	Om Prakash Rai	Information Officer
6	R.C. Verma	Executive Officer
7	Anil Kumar	
8	R. K. Agrawal	Ex. DGM, NTPC
9	Ashish Vikram	Executive Officer
10	J.P. Lal	Manager, Reliance Industries
11	Er. Mohan Chandra	
12	M.L. Agrawal	E.E., MVVNL
13	Mohit Arya,	E.E., MVVNL
14	Mohd. Firoz	
15	Sandeep Pandey	Sr. AE, MVVNL
16	V.K.S. Tomar	A.E., MVVNL
17	T.N. Kaul	



<b>List of Persons who attended Public Hearing in Lucknow on 22nd December, 2009</b>		
<b>S. N</b>	<b>Name</b>	<b>Designation</b>
18	M.S. Negi (Lt. Col. Retd)	
19	D.K. Sharma	
20	N.Kagrawal	President, Gomtinagar Jan Kalyan Mahasamiti
21	Brijeshwar Tiwari	Secretary, Gomtinagar Jan Kalyan Mahasamiti
22	A.P. Upadhyay	Vice president, Gomtinagar Jan Kalyan Mahasamiti
23	P.K. Johari	E.E., UPPCL
24	Mohd. Gufran	E.E., UPPCL
25	S.C. Jain	Executive Director, UPPCL
26	Rakesh Ji	
27	A.H. Agrawal	U.P. Hotel & Restorant Association
28	S.K. Jaiswal,	U.P. Hotel & Restorant Association
29	Navin Charan	U.P. Hotel & Restorant Association
30	Dr. M.L. S.	U.P. Hotel & Restorant Association
31	Hazi Iftikhar Ahmad Ansari	President, UP, Bunkar Sabha
32	Prasant Chaturvedi	Dy. Manager, NTPC
33	Sunil Chandra	
34	S.k. Srivastava	HOD (EAC), IIA
35	Puneet Kumar	Consultant, UPERC
36	Nand Lal	Director (Com), UPPCI
37	Shashi Bhusan Mishra	Secretary, Upbhokta Sanrakshan Kalyan Samiti
38	G. C. Chaturvedi	IIA, U.P
39	B.K. Parihar	Principal correspondent, Hindustan Times
40	Nilesh Anand	Advocate
41	Rajesh Verma	Reporter, Pioneer
42	Ajay Jaiswal	
43	Atul Khnna	
44	Vijay Acharya	Bharat Samiti

<b>List of Persons who attended Public Hearing in Kanpur on 23rd December, 2009</b>		
<b>S. N</b>	<b>Name</b>	<b>Designation</b>
1	Atul Chaturvedi	Dy. Director (Admn), UPERC
2	A.A., Khan	C.E. (RAU), UPPCL
3	P.K. Gupta	SE, EUDC-III
4	M. Gufran	E.E. (RAU), UPPCL
5	A.K. Gupta	SE, EUDC-II, KESCO
6	Puneet Kumar	Consultant, UPERC
7	U.S. Sharma	E.E., KESCO
8	Manoj Mehrotra	E.E., Kanpur



List of Persons who attended Public Hearing in Kanpur on 23rd December, 2009		
S. N	Name	Designation
9	S.K. Agrawal	E.E., KESCo
10	Rohit Kharey	
11	Rajendra Kumar	
12	Atul Seth	PMA
13	Rajesh Grover	Div., IIA
14	G.R. Anbwam	Electric Consultant
15	Sunil Vaish	Div. Chairman, IIA
16	O.N., Mishra	
17	Manmohan rajpal	Chairman, IIA
18	Roop Narayen	
19	Vikrant Agrawal	Sec. IIA
20	Arun Ji	
21	Ashok Juneja	
22	A.S. Kotwal	
23	D.P. Verma	E.E.
24	S.K. Verma	Ex. En. & PA Technical
25	A.K.S. Chauhan	E.E. (D)
26	Deep Narayen Dixit	
27	Sanjay Shukla	Indian Industries Association
28	Ashish Mishra	IIA
29	Shashi Bhusan Mishra	Secretary, U.P. Vidyut Upbhokta Sangathan
30	G.C. Khanna	Secretary, Jan Mangal Sewa Samiti
31	Padam Mohan Mishra	Upbhokta Kalyan Samiti
32	P.D. Dubey	
33	Manish Dubey	
34	Akhil Sharma	Builder
35	J.K. Pandey	Bhartiya Manvadhikar Association'
36	P.C. Shukla	
37	Anil Kumar Shukla	Advocate, Legal Advisor, KESCo
38	Raj Kumar	
39	Rajeev Mishra	
40	Surendra Maithani	
41	V.D. Ram	Media, BJP
42	Deepak Singh	Secretary, Kanpur Udyoug Vyapar Mandal
43	Dinkar Pratap	Advocate, KESCo
44	A.K. Srivastava	E.E.
45	S.B. Verma	AGM
46	B.K. Astha	A.E. (Civil)
47	Kuldeep Johari	E.E., (Civil)
48	V.S., Gangwar	A.E., Construction



<b>List of Persons who attended Public Hearing in Kanpur on 23rd December, 2009</b>		
<b>S. N</b>	<b>Name</b>	<b>Designation</b>
49	Om Prakash	E.E., KESCo
50	Om Prakash	Social worker
51	Ramji Tripathi	Jan Sewak
52	Shishir Divedi	Jan Sewak
53	Sugreev Pal	Chairman, Karmchari Sangh
54	Ajeet Rajput	Minister, Kanpur Bijli Majdoor, Sabha
55	Hasanullah	Kanpur Bijli Majdoor, Sabha
56	Jasbir Singh	Power Sel
57	Pramod Pandey	Gen. Secretary, Futkar Dawa Vyapar Mandal
58	Sanjay Kumar	Advocate
59	Harish Vaswani	
60	Ladli Prasad	Laghu Udyoug Bharti
61	S.R. Nagpal	Project Engineer
62	Praveen Agrawal	CEO
63	Harish Vaswani	Vyapar Mandal
64	S.P. Bhasker	AE
65	Gaya Singh	JE
66	Mahesh Maheswari	President
67	S.C. Tripathi	
68	Akhilesh Shukls	
69	V.P.C. Saxena	
70	Narendra Pal	Consumer
71	S.K. Srivastava	
72	Jagdesw Swaroop Verma	



**ANNEXURE – XVIII**

<b>List of Abbreviations</b>	
<b>Abbreviation</b>	<b>Description</b>
A & G	Administrative & General
A.C	Air Conditioner
ABC	Arial Bunch Conductor
ARR	Annual Revenue Requirement
A T & C	Aggregate Technical & Commercial
ATE	Apellate Tribunal Electricity
BEE	Bureau of Energy Efficiency
BHP/HP	British Horse Power
BPL	Below Poverty Line
CAGR	Compounded Average Growth Rate
CAPEX	Capital Expenditure
CoS	Cost of Supply
Cr.	Crores
CWIP	Capital Works In Progress
DA	Dearness Allowance
DISCOM	Distribution Company
DPS	Delayed Payment Surcharge
DSM	Demand Supply Management
EA 2003	The Electricity Act 2003
ECS	Electronic Clearing System
FAC	Fuel Adjustment Charges
FY	Financial Year
GFA	Gross Fixed Assets
GoUP	Government of Uttar Pradesh
HT	High Tension
IPP	Independent Power Producer
JV	Joint Venture
KV	Kilo Volt
KVA	Kilo Volt Ampere
kVAh	Kilo Volt Ampere Hour
kW	Kilo Watt
kWh	Kilo Watt Hours
KESCO	Kanpur Electricity Supply Company
LT	Low Tension
LTA	Leave Travel Allowance
MCG	Minimum Consumption Guarantee
MD	Maximum Demand
MES	Military Engineer Services



List of Abbreviations	
Abbreviation	Description
MU	Million Units
MVA	Mega Volt Ampere
MW	Megawatt
MYT	Multi Year Tariff
NA/NR/IDF/ADF	Not Accesible/ Not Readable/ Informed Defective/ Appears Defective
NAPP	Narora Atomic Power Plant
NHPC	National Hydro Power Corporation
NPCIL	Nuclear Power Corporation of India Limited
NPCL	Noida Power Corporation Limited
NRPC	Northern Region Power Committe
NTPC	National Thermal Power Corporation
O&M	Operation and Maintenance
OTS	One Time Settlement
PF	Power Factor
PGCIL	Power Grid Corporation of India Limited
PLR	Prime Lending Rate
PPA	Power Purchase Agreement
PTW	Private Tube Wells
R&M	Repairs and Maintenance
RAPP	Rajasthan Atomic Power Plant
RBI	Reserve Bank of India
RGVY	Rajeev Gandhi Grameen Vidyutikaran Yojana
RoE	Return on Equity
Rs.	Indian National Rupees
SBI	State Bank of India
SERC	State Electricity Regulatory Commission
SLDC	State Load Despatch Centre
SJVNL	Satluj Jal Vidyut Nigam Limited
STU	State Transmission Utility
T & D	Transmission & Distribution
TOD	Time Of the Day
TRANSCO	Transmission Company
TVM	Tri Vector Meters
UI	Unscheduled Interchange
UPPCL	Uttar Pradesh Power Company Limited
UPPTCL	Uttar Pradesh Power Transmission Company Limited
UPERC	Uttar Pradesh Electricity Regulatory Commission
UPJVNL	Uttar Pradesh Jal Vidyut Nigam Limited



<b>List of Abbreviations</b>	
<b>Abbreviation</b>	<b>Description</b>
UPRVNL	Uttar Pradesh Rajya Urja Vidyut Nigam Limited
UPSEB	Uttar Pradesh State Electricity Board
w.e.f	with effect from
CPI	Consumer Price Index
WIP	Work In Progress
WPI	Wholesale Price Index
YoY	Year-on-Year